



MESSAGE FROM THE CEO

Each year of the past 7, since I started Project Maji, I look back 12 months and reflect upon what we have achieved. Each year I am both amazed and humbled, and this time I am yet again.

When we began, it was constructing a single water kiosk, but with a vision to hit a grand target. Installation number 1 served about 1,000 people and I boldly told the small and early team that we have to reach and serve 1 million people by 2025 (10 years later). None of us had any idea how we would get there, but it was a line in the sand that we had to reach. It gave everyone clarity of vision and we all knew we were in this to make significant impact.

7 years down the road and we serve over 100,000 people with clean water every day. We are still only 10% of the way with 4 years to go, but we are starting to get clarity of the pathway.

We have reached our level today because of the dedication and drive of the individuals who work inside Project Maji and several other partners we work closely with in project execution. But our true strength is the way all these individuals come together as a team and a create a contagious energy that makes it seem like anything is possible.

Our path for the next 12 months is well defined as we will continue to build in Ghana, expand our presence in Kenya and begin working in at least one new country in the continent. We will continue to deploy our increasing range of solutions that allow us to make more impact per dollar donated. Having invested in substantial data collection, we are now also able to more accurately and scientifically define which geographies and communities to serve where, again, we can ensure maximum effectiveness of every dollar donation.

In terms of operation scale, people served and geographic spread, I can feel us transitioning from an agile start-up to an established but rapidly growing organisation. As we gain recognition and credibility with our scale, our donor base is increasing. New donors are coming on board and existing donors are increasing their contributions. We are immensely grateful for this key element of support that gives us the vital oxygen we need to operate, expand and thrive.

Scaling, however, also brings with it challenges. More work for an already hard working and lean team always adds pressure and bringing on new team members is a delicate process. We have engendered an excellent culture within Project Maji that we want to protect. Team members share a well-defined goal, operate with clear communication, no egos, and a willingness to share, learn and adapt on the journey. Speaking for myself, this only cumulative attitude only adds to my zest and energy to continue doing more and I thank each and every one of those working with me for that dedication. I also thank each of you, reading this report, for the support and encouragement you provide that vitally adds to our strength and motivation to drive forward.

Onwards and upwards as we strive for our 1 million target and the greater goal that lies beyond that.

Thank you and sincerely,

Sunil Lalvani Founder and CEO

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WHAT WE DO

Project Maji develops and deploys sustainable solar-powered water solutions in the world's most remote rural communities and rural growth centres. Through constant innovation we develop smart and sustainable drinking water systems, aiming to eliminate inefficiencies and bring down hardware costs, diminishing donor dependency and empowering rural communities towards a self-reliant and water secure future.

Sustainability is a core cross-cutting value in everything we do. Our solutions are powered by the steady renewable supply of sunshine year-round in the communities we serve, incurring zero energy costs nor producing harmful greenhouse gasses. Following a service delivery approach, we strive for the best possible user experience in the communities we work. With our e-payment system (MajiPay), communities can collect water at any time of the day. With a simple touch of a tap, villagers save time that would otherwise be spent waiting in long queues at a handpump or walking to distant and polluted, open water sources. In-built remote monitoring allows for daily evaluation of the performance of each kiosk and robust site-servicing results in maximum uptime at minimal cost.

OUR MISSION

To serve 1 million people in rural communities with sustainable access to safe water by 2025.







By the numbers

120+ Water access points

115,000

People served

99 Ghanaian sites

13 Kenyan sites

2,663 average litres per day served

IMPACT RIPPLED

Social return on donor dollars

344 Total number of hours saved per year per person

Water-borne illnesses nearly fully eliminated

Water collection time dropped by 90% in Maji communities

Water point satisfaction >95%

Uptime of our water access points >95%

IMPACT PORTRAIT

A representation of what impact looks like



Our solar-powered water points provide safe water in the heart of the communities, eliminating the need for long water walks.





their male counterparts.



PROJECT MAJI'S OVERVIEW

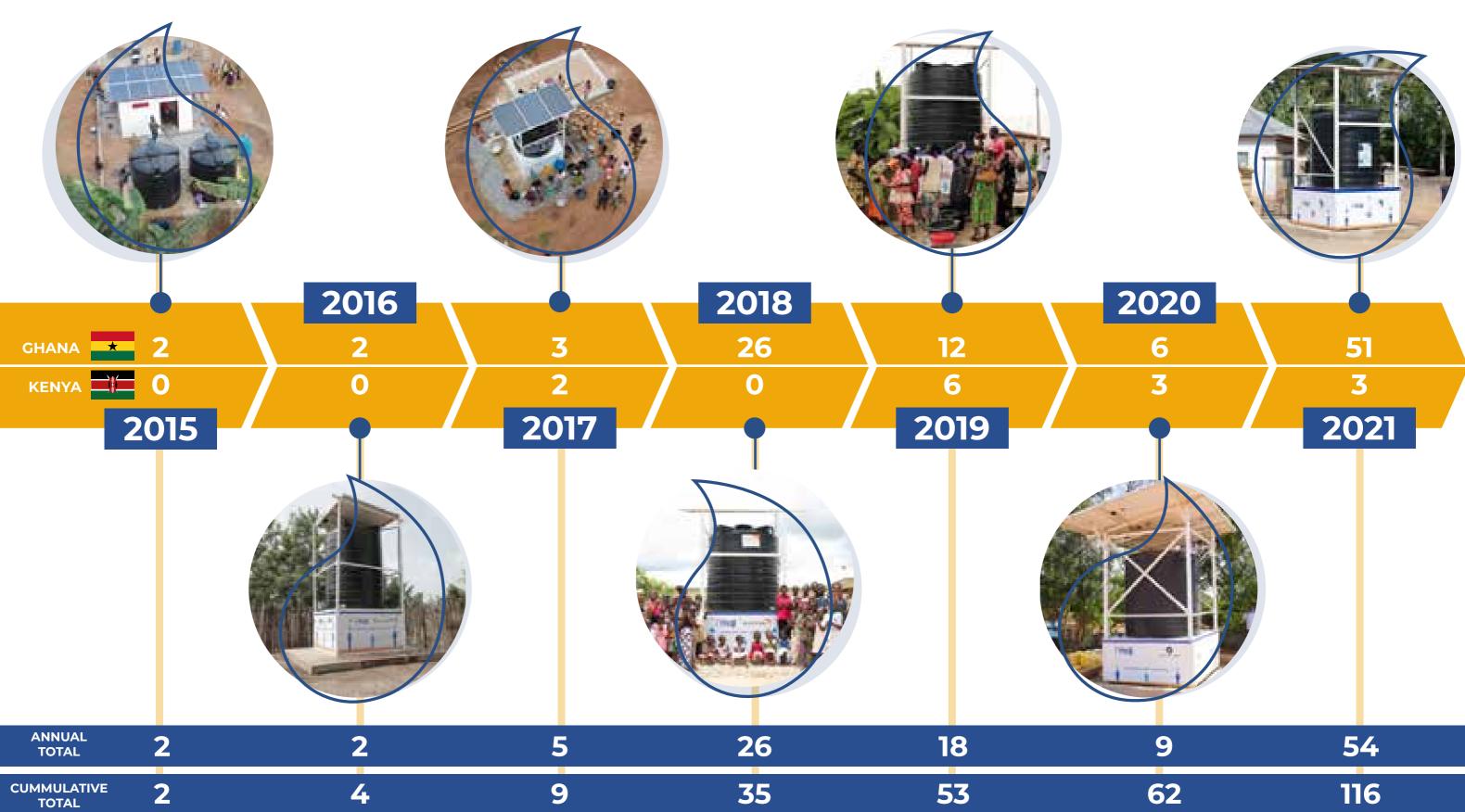
The cumulative effect of a rural water supply failure in Africa over the past 20 years represents a lost investment of 1.2 billion dollars. More importantly, this number is telling of a lifetime defined by water poverty for over 785 million people around the world.

Project Maji may be a small organisation, but our ambitions are anything but. We believe that easy access to safe water in the heart of communities should provide dignified collection of water, create jobs, save lives, and provide opportunities for a better life. This is why we won't rest until the status quo is disrupted and our peers begin thinking about cost-effective, sustainable water solutions that lead to life-changing outcomes and not just "ticked boxes" as outputs.

Critically, we are guided in this pursuit by hard data. We monitor (in real-time) the performance of each site, the distinct water needs of each community and the actual social impact we are creating on the ground to inform optimal highly-efficient Maji solutions. The success of this data-driven approach has led us from a single water access point in 2015 to more than 100 solar-powered water access points in 2022 serving over 100,000 people.

PROJECT MAJI'S JOURNEY

Visual Representation of Project Maji's Growth Since Inception





THEORY OF CHANGE

To realise sustainable access to safe water for all, we believe in drastically changing the approach for solving the global water crisis. As a safe water enterprise, we advocate for a shift from a hardware-construction approach towards a sustainable service delivery & sector development approach. Some call us disruptive, and we do not mind! As we focus on meeting today's water needs, we recognise that the real challenge is meeting the sustained water needs of the next generation. Therefore, our Theory of Change sets in motion structural change, attempting to improve the financial viability of our social enterprise model through innovation, cost reduction and growth.

The key tenets of our approach are value creation for improved willingness to pay, R&D investments to bring down hardware costs, achieving economies for scale & partnering for impact to build and deploy solutions that promote self-sufficiency over dependency, fully aligned with SDG 6. This four-pronged approach guides us in our planning, product development and deployment processes.



Value creation for improved willingness to pay

Simply put, we focus on creating value through reliable, functional water delivery utilising solar technology, pre-paid systems and remote data monitoring. This enhances willingness to pay and assists us in negotiating higher water tariffs – yet maintaining affordability and inclusivity. Water user payments will cover all the O&M costs of the systems we manage. To increase high levels of efficiency, Project Maji acts as a technical service provider.

R&D investments to bring down hardware costs

To immediately double the impact of every donor dollar invested, our aim is to bring down the cost of a solar-powered water kiosk by 50%. We are working towards this by investing in R&D to value-engineer the kiosks and the e-payment system. The next section lists the range of solutions we have already developed to achieve this objective.





Achieving economies of scale for scalable impact

To gear up for growth successfully and sustainably, we have developed a 'replication for impact' strategy. Our solar-powered water solutions are designed in a modular way that allows for quick and efficient implementation. This standardisation model supports consistent quality, reliability and is quick to deploy.

To facilitate the rapid deployment of water solutions, we have developed flatpack packaging for easy transportation and assembly. In addition, we apply a cluster strategy to improve efficiencies and reduce cost deploying our solutions in adjacent communities and counties. Taking a macro-level outlook at every stage of the operational model, we work towards accelerating the total number of sites, reducing overhead, increasing efficiencies and growing continuous revenue streams. Truly unlocking economies of scale.

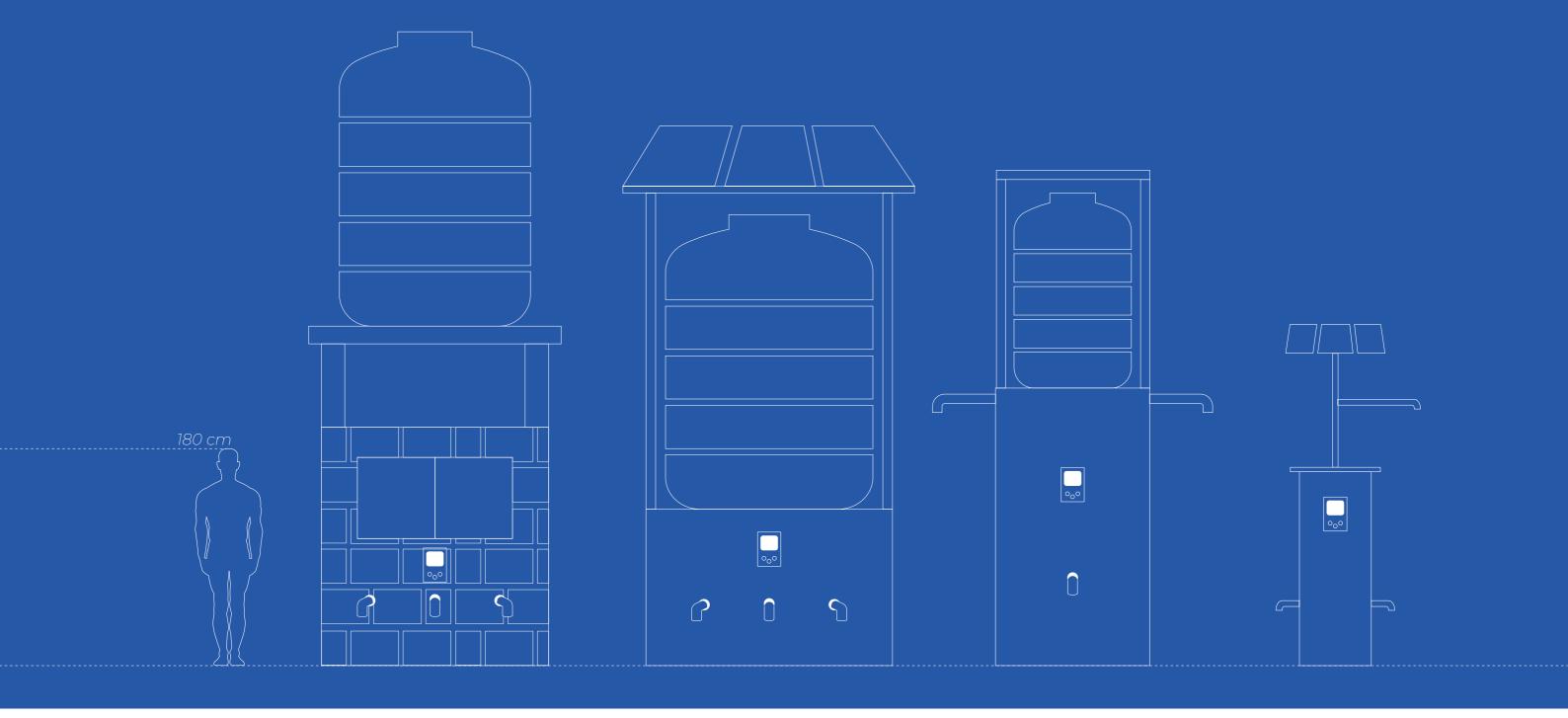


Partnering for Impact

Recognising that partnerships are crucial to our growth, we cultivate long-term donor relations and strategic partnerships in support of sustainable access to safe water. These collaborations range from academic partnerships to action-research projects, and collaboration on implementation with other Safe Water Enterprises and NGOs.

The end goal is to create win-win situations for all stakeholders in the rural water space, but most importantly, for those we serve. Prioritising our consumers, as we work with a variety of local and international partners helps us never lose sight of the specific water needs of our end users and deliver fit-for-purpose solutions.





THEORY OF CHANGE: OPERATIONALISED

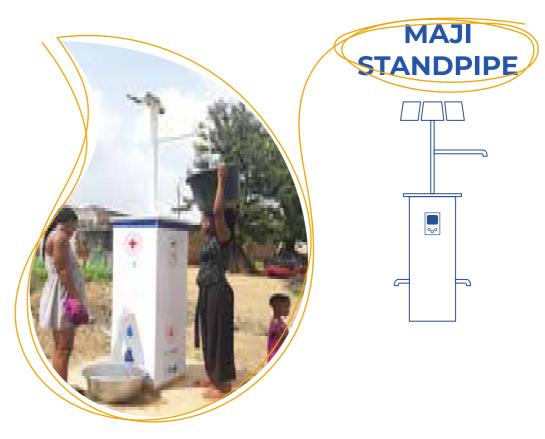
To realise the goals laid out by our Theory of Change, we have embarked on an innovation journey building a variety of fit-forpurpose sustainable water solutions. We are re-thinking rural water economics and challenging pre-conceived notions to eliminate inefficiencies. With our approach we are successfully bringing down costs and increasing revenues from each waterpoint to set rural communities on the path of self-reliance and water security.

This has culminated in a journey starting with our standard solarpowered water kiosk, called the Mini Maji (originally called the Project Maji cube in 2017), to adding MajiPlus – a solar-powered drinking water distribution network, Re-Maji and Maji Standpipes to our product portfolio in 2021.

PRODUCT PORTFOLIO









MINI MAJI

The Mini Maji represents a significant breakthrough and a sustainable alternative solution to the unreliable, unsustainable handpumps – the hitherto default solution in the rural water space. This is a first-ofits-kind solar-powered modular solution designed for increased efficiency and flexibility in the field. This means the structure can be flat-packed for easy transportation and fast assembly in the field using minimal tools. Serving as the blueprint for a sustainable water solution, the Mini Maji has been designed for easy replication and scalability of impact at low costs. The solution features a 5,000 litre tank dispensing safe water, targeting communities with a population of 1,000 people or less, typically those often left behind by larger NGOs and local government. In line with our sustainable service delivery approach, the kiosk features an e-payment system for secure water tariff collection and remote monitoring of each site. Thus, resulting in a reliable safe water source for off-grid rural communities.













MAJI PLUS SYSTEM

We never stop innovating. Having deployed 50+ Mini Maji's across Ghana and Kenya, making sure the local water crisis is sustainably crushed, we have continued the quest for even higher cost-efficiency, self-sufficiency and diminished donor dependency. The result: the development of MajiPlus – a sustainable safe drinking water distribution network.

Contrary to a standalone kiosk, the MajiPlus offers a small network of water kiosks, each one serving a catchment area up to 1.5 km, resulting in an elevated user experience. Each access points has a buffer capacity of a 1,000 litres but can deliver up to 4,000 litres per day, resulting in a total as high as 12,000 litres per day from a 3-point network. The MajiPlus system design allows us to reduce the capex of a single kiosk (3 kiosks in one system) by 33% by sharing a common set of solar panels and pumping equipment. Thus, enabling us to serve a wider geographical area at lower costs resulting in higher revenue potential. This is a game-changing solution that has eliminated inefficiencies, doubled the impact of every dollar donated, allowing for improved scalability. Truly operationalising our Theory of Change and realising self-sufficiency for rural communities in the long-run.



MAJI STANDPIPES

Ensuring the best possible user experience looks different in every community we enter. Which is why we need to consider the local socio-economic and geographical context. One size fits all solutions can often be fit-for-none. The Maji Standpipes reflect our approach of deploying optimised sustainable water solutions creating value and improving willingness to pay. We typically work in remote, widespread communities where distances between households can be vast. For those communities where long daily water walks are a reality, despite a communal water source, we have developed and started deploying sustainable standpipes to cut collection times and long queues to fetch water. In addition, the Maji Standpipes can be deployed at one-fifth of the cost of a standalone kiosk, reaching a wider geographical area and significantly improving revenue potential.



RE:MAJI

In the Maji model, consistent consumption patterns of a highly valued service are critical for success, as they make up the revenue stream that provides O&M funds to keep each community self-reliant and truly water secure. For the supply side, this requires us to meet specific water needs of each community we serve, listening carefully to our consumers, responding effectively and immediately. The RE-Maji entails, whenever possible, the rehabilitation of existing water infrastructure. To this end, we equip the waterpoint with remote monitoring and e-payment technologies to ensure it becomes a sustainable safe water source for the community. Depending on which parts of the water point infrastructure we can rehabilitate, RE-Maji allows for significant cost-reduction and much lower hardware costs. Thus, it is not only cost-efficient, but also environmentally friendly as it allows reuse of existing materials.

OPERATIONALISATION

MAJI PLUS MINI STANDPIPE MINI MAJI RE:MAJI TENETS By making use of existing Maji Standpipes are infrastructure such, as a Consistent sales of 3 water points, between 500m supplied by a central water concrete kiosk or a buffer tank 2,500 litre of safe and 1 km away from the distribution systemusing that is still in good condition, 5,000 litre central storage water per day by central borewell. Each access a solar-driven pump. Our tank with the capacity to sell we reduce our overall Capex offering reliable and points has a buffer tank standpipes strategically are up to 7,000 liters a day to a investment. We combine high service levels capacity of a 1,000 litres, but positioned in the most remote community. usable elements with our in the heart of the can deliver up to 4,000 litres communities and typically e-pay system, and add our community. deliver between 500 and per day per access point. solar panels, pump and 1,000L per day. controller. We are currently on an Very cost effective tool at The savings differ per We can reduce the capex of Reducing price innovation trajectory to a single kiosk (3 kiosks in one approximately one fifth the community, based on kiosk to improve reduce the price of our kiosks system) by upto 33%. A hub cost of a standard Mini Maji. which parts of the water our business case. between 25-50%, by creating & spoke system allows us to The hub & spoke system point infrastructure we can This means that an even smarter, more simple reach a wider geographical allows us to reach a wider rehabilitate. Rehabilitation is every Donor \$ has design that still meets all area at a lower cost, increasing geographical area at a lower not only cost-efficient, but also more impact. the community needs and impact and water revenue cost, increasing impact and environmentally friendly by demands. potential. water revenue potential. reusing existing materials.

Our first financial milestone is that our water revenues are covering all our operations and maintenance costs, in other words our O&M expenses. This includes regular service visits to prevent future breakdowns, repairs in case of component failures, and periodic overhaul from key components such as panels and pumps.

A second, more ambitious target is bringing the hardware cost down significantly, so that we cannot only pay for all the O&M, but we can pay back the hardware cost. This journey to cost-recovery is not easy, but we are convinced we will be able to reach 50% cost-recovery in the near future. This outcome is only possible if we meet our water revenue targets, and we bring down the price of our hardware by redesigning our kiosks and systems. A task our engineers work on every single day!



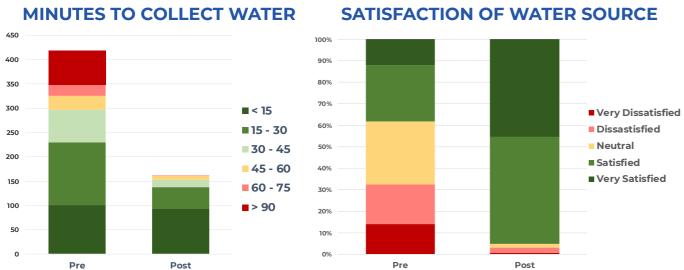
MEASURING & MANAGING IMPACT

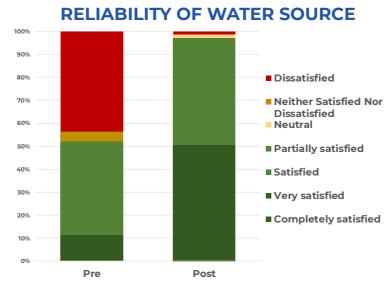
Ultimately, it is impact and social progress that counts. Every litre of safe water delivered from a Maji access point is time, energy and health preserved for a community to thrive. This is why, for us, real impact stands for value-creation through a consumer-centric sustainable rural water solution. Critically, this is reflected in the KPIs that we monitor on a real-time basis, using a purpose-built data collection and analysis platform called mWater. We monitor progress on all key consumer-centric indicators on a real-time basis through our live-impact dashboard that is automatically updated every time our survey teams go out to conduct interviews. The dashboard allows for evidence-based comparison of pre-and-post intervention data from Maji communities.

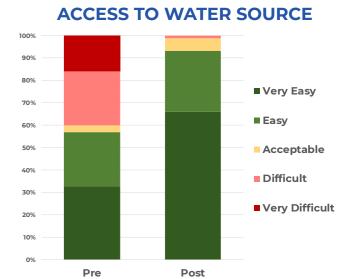
Scan the QR code to access our live impact dashboard.

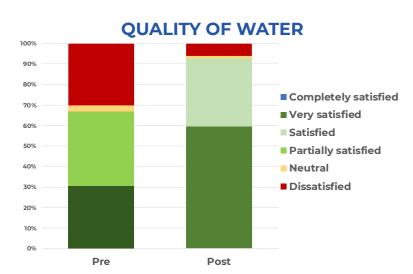




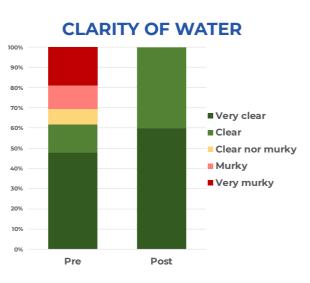


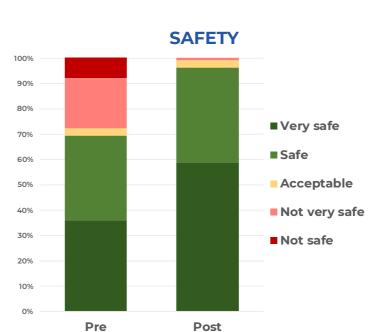


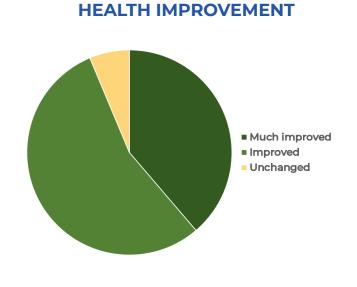




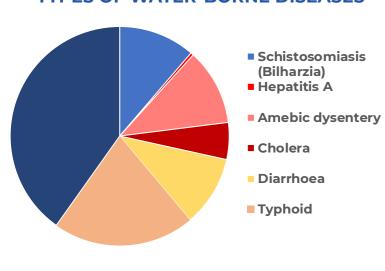
Project Maji | 2021/22 Impact Report



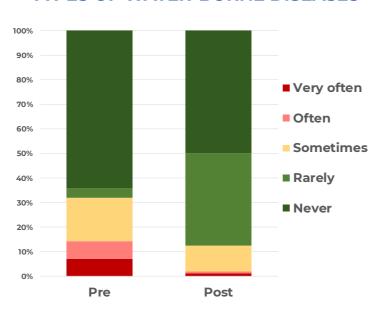




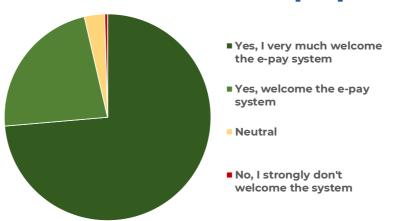
TYPES OF WATER-BORNE DISEASES



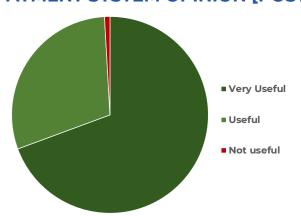
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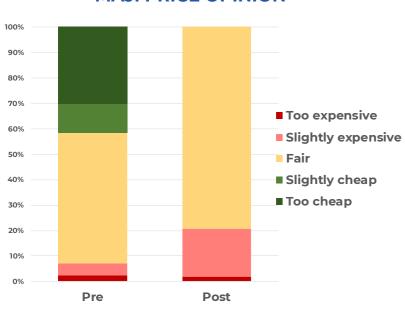
E-PAYMENT SYSTEM OPINION [PRE]

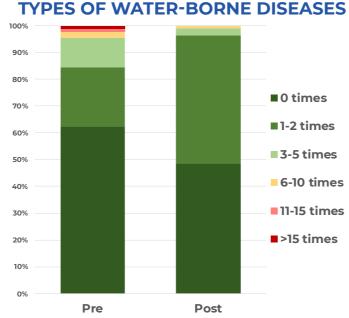


E-PAYMENT SYSTEM OPINION [POST]

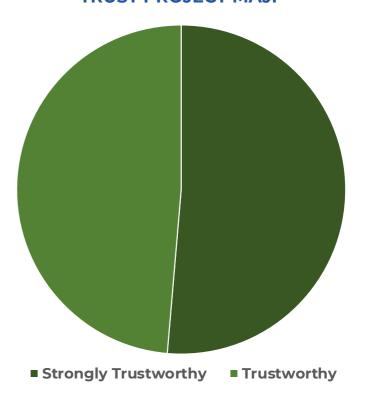


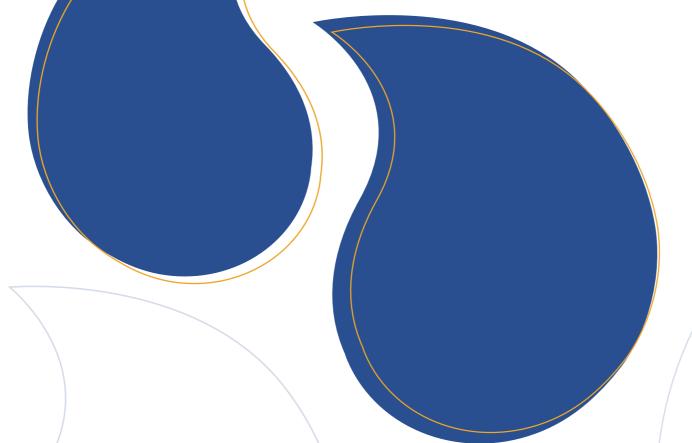
MAJI PRICE OPINION





TRUST PROJECT MAJI





If you want to go fast, go alone. If you want to go far, go together.

African Proverb

PARTNERSHIPS FOR SAFE WATER

For a rapidly scaling safe water enterprise like us, sustainable water partnerships are the lifeblood that keep water flowing in hundreds of communities and open doors for us to reach thousands more. This critical role falls on the shoulders of Project Maji's Director Partnerships & Development, Wieke De Vries. Wieke works closely with internal and external stakeholders, such as project engineers, fellow safe water enterprises, local governments, corporate and knowledge partners as well as other potential donors. In her role, Wieke bridges information from the field with technical knowledge from sector experts and academic researchers as we aim to develop the best possible user experience for those we serve. Since joining Project Maji in 2019, she has helped to secure valuable partnerships including with the renowned Dutch non-profit, Aqua for All, Ghana Red Cross Society, and Apparel Group in the UAE, to name just a few. This year some of our notable partnerships include the following:



Partnership Spotlight

PRACTICA FOUNDATION NETHERLANDS

We launched an action-research partnership with **Practica Foundation** - a non-profit consultancy with the aim to optimise access to safe water in water-poor communities. The partnership was geared towards the development, deployment and roll-out of a sustainable safe drinking water distribution network for rural, water-poor communities in Sub-Saharan African countries. After the successful pilot of this distribution network in one of the Maji communities, it was named MajiPlus, taking inspiration from the maximised value the solution offers. Read more on this gamechanging innovation **here**.







#SWEAT4SOAP GLOBAL VIRTUAL CAMPAIGN

A virtual running campaign that attracted participants from 130+ countries, a brainchild of water warrior Mina Guli and spearheaded by athlete & Nike Ambassador Manal Rostom, in the UAE. As a #Sweat4Soap partner, we mobilised our donor base to match every 100,000 kilometres with one solar-powered water kiosk. The campaign amassed a total of 282,545 kilometres, raising funds for two solar-powered water kiosks for remote rural communities in Ghana. Read more on #Sweat4Soap impact here.



Partnership Spotlight DUNECREST AMERICAN SCHOOL DUBAI

We partnered with Dunecrest American School (Dubai) to roll out a one of its kind 6x6 Water Warrior Challenge. Dunecrest students completed **6 water challenges** in 6 days raising AED 60 each at the end of the week. Why 6? Because women in Sub-Saharan Africa walk an average of 6 kilometres each, looking for water. The 6-day activation brought clean water and a handwashing station on premises of Wendano Primary School, Machakos County, Kenya.





ALDO ALDO Accessories

Partnership Spotlight ALDO & ALDO ACCESSORIES DUBAI

On World Water Day 2021, we re-launched **our safe water partnership** with Aldo & Aldo Accessories. The partnership raises AED 1 for every shoe-care item sold across Aldo stores in Dubai for safe water in Maji communities. Till date, this partnership has delivered solar-powered water kiosks in two rural Chanaian communities, transforming 2,000 lives with clean water.

MARIE-STELLA-MARIS

CARE FOR WATER





Delft University of Technology







What does an average workday look like?

I start the day by looking at the water dispensing volumes per water point. I look for anomalies, such as very low – or even zero water sales – positive outliers and trends, such as seasonality and growth patterns. Then I check my agenda to see which meetings are planned for the day, so I can attend to urgent matters and prepare ahead. This can range from an Operations meeting, where we discuss the installation and maintenance of our kiosks, to meetings with (potential) donors to build support for our organisation.

If I am lucky, a day means going to the field in Ghana or Kenya to scout for new communities, discuss partnerships in country and venture out on data collection trips. Lastly, I spend quite some time on (donor) reporting, contracts, strategic planning, and data analysis. We have teams in the field who collect essential social and economic insights about how our water access points change daily life. All the data is collected via the digital platform mWater, an essential channel for us to record impact mapping, site selection, asset management and donor communications.

Working globally is a key part of your role. How do you maintain and develop remote relationships?

This is an interesting question, because you can approach this from two sides. I work with colleagues from all over the world, and some haven't even met face to face! Yet, I feel we know each other really well and connect on so many levels. On the other hand, nothing can compare interactions with the end-users of our water services, and the same counts for the field researchers I work with.

Building up new partnerships remotely is actually going surprisingly well - we have recently completed a research pilot with contributors from five countries and it was plain sailing. As long as you share a mutual desire to co-create and have clear goals, you can achieve great things by meeting virtually.

That said, the post-Corona hybrid way of working suits me very well, knowing that ultimately, we jointly work towards one goal: Driving change through sustainable access to water. Every day, every litre counts to us.

What does sustainability mean to you?

Sustainability, or sustainable development, is deeply rooted in meeting the needs of the present without compromising the ability of future generations to meet their own needs. Having studied Global Governance and Sustainable Development, I always go back to basics - does it support, people, planet, and prosperity for all - in an inclusive way? Project Maji is a safe water enterprise, which means we strive to achieve social progress. We are not-for-profit, yet we apply a business mindset. Therefore, sustainability in my rural water dictionary relates to not only to long-term functionality of water sources, but financial sustainability of our model and

A chat with

Maji Partnerships



financing mechanism is equally important. And by default, we do this in an environmentally friendly way by harnessing the power of the sun as our energy source.

What do you like most about your role?

Developing new, long-term partnerships that enables what I call 'business development'. Through sustainable growth, we impact lives and open more and more taps. We work with fantastic partners, supporters and ambassadors who make this happen – and building a transparent relation with our donor base is the key to success. Sharing success is easy, but in strong relationships we also share our challenges and ask for help if we need it. Working in very remote, and marginalised communities is not straightforward. We are still a learning organisation, value true feedback and ultimately scale up together.

And yes, meeting people on the ground benefitting from safe water in Ghana and Kenya is very meaningful and humbling. This is what triggers me every day to make it a good one.

We crossed the 100-sites milestone this year, what else do you think was our biggest achievement?

In COVID times, being able to build a very healthy pipeline of new communities that we will transform through water. This means we will double our impact in 2022, and I am very excited to accelerate our growth with new partners coming on board – supporting that sustainability journey.

What would be your top priority in terms of Project Maji's partnerships and development for 2022?

Expanding to a new country. Stay tuned.....

Any learnings you would like to share for your peers in the rural water space?

Never underestimate community dynamics. And truly listen and understand the real needs of the villages and villagers we engage with. We can put in all the smart technologies and latest hardware solutions, but it will fail if there is no community consensus on our way of working. We charge for water – a very nominal price as agreed by the community – but even the slightest resistance to our arrival can undermine all our efforts. And this means that sometimes you must make hard decisions, by walking away from villages that are not ready to value water yet. Most rural water peers know this very well. Therefore, we focus a lot on site selection and deep engagement with the community leaders – both women and men – to a successful, sustainable intervention.



EVENTS AND ACCOLADES

Iln addition to game-changing partnerships and disruptive innovation, the year 2021 has also been one of global recognition for our work. The most notable of these is the selection of **Maji Buckets as a Global Best Practice Programme** by Expo 2020.

Being hailed as a simple yet highly-effective COVID-19 solution, the Maji Buckets have been recognised for truly localising agenda 2030 – ensuring no one is left behind. Earlier this year, our Dubai Team was invited to attend the Global Best Practice Assembly with a special exhibition of the Maji Buckets as one of the selected programmes.





EVENTS AND ACCOLADES















PROJECT MAJI TEAM

Meet the team

Management



Sunil Lalvani Founder & CEO | UAE



Wieke de Vries Director of Development & Partnerships UAE



Tejinder Singh LambaDirector of R&D &
Production
China



Alberto Gimeno Sanz Chief Financial Officer



Amol Parker Project Director Ghana



John Hutchinson Technical Consultant (Energy & PAYG) South Africa

Operations



Muneeza Aftab Communication & Advocacy Officer UAE



Joan Marie Tinoyan Graphic Designer UAE



Ama Wilson Administrative Assistant Ghana



Maggie Kithimba Administrative Assistant Kenya



Albert Ansah Ofosu Technician Ghana



Emmanuel Mensah Technician Ghana

Board of Trustees



SUNIL LALVANI



MUNA AL GURG



NICOLE MALICK



VENU BABU

PARTNERSHIPS

Commercial Partnerships





















































Non-Profit Partnerships





































Knowledge Partnerships



























The water crisis won't be ended by a few big names, but by thousands of passionate individuals who aren't satisfied with 785 million people living without safe water. Individuals like you, who have supported us, cheered for us and chosen us to be your 'boots on the ground'. For that, we say Thank You to each and every one of you! Thank you for standing by our side since 2015 when we opened our first water access point to this point where we have crossed the 100+ water access point milestone. We could not have done this without you.

Get Involved:

If you or your organisation would like to join us in our mission to end water poverty, there are several ways you can partner to help us both achieve our goals. Our dedicated team can work with you to create a programme that supports your mission and maximises impact, proving that doing good is good for business!

If you want to get Involved, please send an email to:



Sunil Lalvani Founder & CEO Email: sunil@projectmaji.org



Wieke De Vries **Director Development** & Partnerships

Email: wieke@projectmaji.org





