







MESSAGE FROM THE CEO

Five years ago, I ventured on a journey and never imagined it would have such a profound effect on my life.

When I came across two children drinking water from a puddle in the road in Ghana, I felt compelled to do something to help. As a CSR initiative within my family business, Project Maji was born ("Maji" meaning "water" in Swahili).

From a single site project, Project Maji now operates as an internationally recognised stand-alone entity that has transformed the lives of more than 50,000 people across Ghana and Kenya via sustainable delivery of safe water into their villages.

In the five years since our inception, I've had the pleasure to work with some exceptional people. I am surrounded by a select group of special individuals who make Project Maji tick with their enthusiasm, dedication and drive. We have all been privileged to encounter some incredible communities in rural Ghana and Kenya with some of the warmest people and fascinating characters.

We gain a deeper understanding each time we venture into the field and pride ourselves on being a learning organisation. We are constantly adapting our solutions to fit the needs of our beneficiaries while keeping costs efficient and the quality and reliability of our technology at the forefront of everything.

At the outset, Project Maji had a goal to positively impact 1 million people by 2025, and our work so far keeps us well in track to achieve that. We keep building our team and capacity so that we can manage the massive scale we aim to reach and we have been lucky enough to get some generous people and partners along the way who have donated time, services, and money to enable that. I am grateful to all of them.

As we enter the second half of our inaugural decade, I am so pleased with our progress and encouraged that we will not only reach our target, but am confident we will exceed it. The more we grow, the more I see greater potential. The more we iterate our technology, the more opportunity I see. With numerous awards now received to endorse our work, I truly believe that Project Maji is poised to be a clear driver in completely eradicating water poverty in micro communities across Africa, ready to measure the transformation that safe water brings to those populations.

We remain truly grateful for your encouragement and support.

We couldn't do this without you.

Thank you and sincerely,

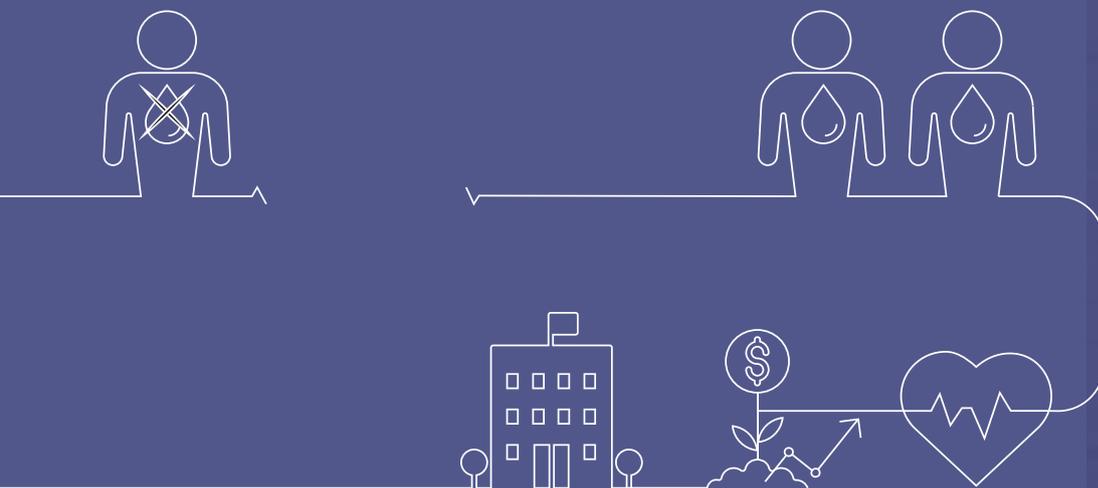
Sunil Lalvani
Founder and CEO

THE WATER CRISIS

1 in 3 people across the globe are living without access to safe water (UNICEF, WHO)

In today's modern world, safe water is often taken for granted. A vital life force for every human being on the planet, yet 785 million people lack even a basic drinking-water service, including 144 million people who are dependent on surface water; and with dire consequences.

Stifling rural economies and keeping communities trapped in a cycle of poverty, lack of safe water access negatively impacts the health, livelihoods, and educational opportunities of those left behind. At Project Maji, we exist to change this.







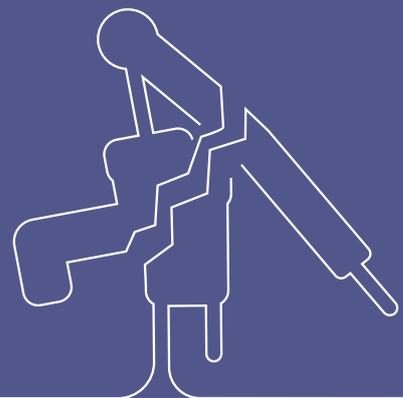


PROBLEM WITH HANDPUMPS

1 in 4 handpumps in sub-Saharan Africa break down within a year of installation (IRC)

Long considered a symbol of development aid, the handpump has been the default solution to the water crisis for many years. Built with good intentions, yet, without a secure source of funds for ongoing maintenance, when this humble technology malfunctions, communities are left with no means to repair it. For this reason, the African continent is littered with thousands of defunct, rusted and abandoned handpumps, leaving rural communities with no choice but to go back to long, arduous walks to collect drinking water from distant, unsafe, open water sources, putting their lives, once again, at great risk.

This is a senseless tragedy, and one which Project Maji is addressing through innovative technology and sustainable partnerships.





World Vision

project maji

World Vision

sustainable water partnership



THE PROJECT MAJI DIFFERENCE

WHO WE ARE

Project Maji is a not-for-profit Social Enterprise, working to bring sustainable access to safe water in rural communities across sub-Saharan Africa.

WHAT WE DO

Project Maji designs, develops and implements solar-powered water kiosks, powered by a proprietary system named the Project Maji Cube. Designed to be fit-for-purpose in the harsh and varied rural environments in which we work, our Cubes are modular, customisable, mobile-enabled, affordable, and durable. With a steady supply of sunshine year-round in the communities we serve, there is a constant power-supply to all our sites at zero cost; a key element in keeping our solution truly sustainable. Communities are able to collect water at any time, simply by turning on one of the Cube's multiple taps, saving time that would otherwise be spent waiting in long queues at the handpump or walking to distant and polluted, open water sources.

WHERE WE WORK

Since 2015, Project Maji has empowered more than 50,000 people across Kenya and Ghana, pumping more than 60 million litres of safe water per year. We partner with local governments, corporates, private donors, and NGOs such as World Vision and IFRC (International Federation of Red Cross and Red Crescent) all of whom share our vision for sustainable change.



We typically serve rural communities of 1,000 people or less.

Those so often overlooked by government and larger NGOs and left without agency. We operate using a social enterprise model, whereby each and every Project Maji site is self-sustaining.



HOW WE WORK



STEP 1

Identify Communities

We work with community stakeholders to identify smaller rural villages (<1000 populations) that have poor or no access to safe water.



STEP 2

Site Location & Sustainability

All our water is tested to WHO standards prior to installation. We work with identified community leaders to develop a sustainability plan for each installation, including mobile payment solutions to secure maintenance funds.



STEP 3

Project Maji Installation

We ship and deliver Project Maji Cubes within one month and work with local contractors to assemble our equipment and replace the broken handpump (or drill a fresh borehole should it be required). The Project Maji Cube assembly is completed within two days.



STEP 4

Mobile-Monitoring and Maintenance

Ensuring full functionality and sustainability, every Project Maji Cube incorporates built-in, remote monitoring; evaluating the efficiency and performance of all our sites on a daily basis. This ensures maximum uptime for the facility, notifying us of any anomalies, whereby we can send a technician to inspect and resolve the issue in a timely and cost-efficient manner.



OUR MISSION

To serve

1 million people

in rural communities with

sustainable access to safe water

by 2025.



A photograph of a rural village scene. In the foreground, there is a dirt path with several large, grey, sack-like objects lined up. In the middle ground, there is a traditional mud-brick building with a corrugated metal roof. The background is filled with lush green trees under a bright sky. The text 'THE PROJECT MAJI SOLUTION' is overlaid on the left side of the image.

THE PROJECT MAJI SOLUTION

Project Maji's unique modular solution provides both flexibility and scalability. Much like a giant Lego kit, multiple 'Cubes' can be attached together if required (sharing a single solar-power and water source), increasing the daily water available to a community from between 5,000 to 20,000 litres per day. Striving for sustainability and universal coverage in the regions we operate, we work in a 'cluster' approach, installing our Project Maji Cubes in adjacent villages. Whilst the UN standard for access to safe water is a 30-minute walk, our goal at Project Maji is provide safe water to communities within a few steps from their homes.



POLY TANK
RAMBO

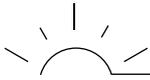
project maji

World Vision

sustainable water partnership

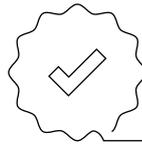






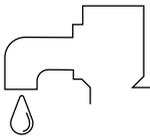
OUR SOLAR PANELS

We use IP67 rated solar panels which power our high-efficiency submersible pumps, coupled with a controller that runs at varying time intervals to ensure water pumping is possible even during low sunlight conditions. By using a clean, renewable energy source, our Maji Cubes have virtually zero running costs and are not dependent on any electrical grid.



WARRANTY AND LIFESPAN

Project Maji provides every community with a two-year guarantee on the Cube, although the average lifespan should exceed ten years when properly maintained. We have a trained and qualified technical support team available in all countries of operation, with all necessary tools and components on hand to repair any problem in the unlikely event of an issue.



OUR WATER PUMPS

The pumping system is controlled using advanced electronics with sensors placed in both the tank and the borehole, which switch off the pump when the tank is full in order to avoid overflow. The sensors also cut off the pump supply if the water in the well drops below a preset level, in order to protect it from running dry. The flow sensor records the pumped water volume and updates it on our remote server on a real-time basis using GPRS technology, so we can constantly monitor community water consumption and aquifer sustainability.



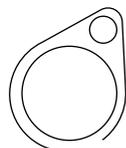
MODULAR STRUCTURE AND INSTALLATION

The communities that we serve are often remote and difficult to access by road. Our entire structure is flat-packed for easy transportation and assembly. Using minimal tools, it can be erected in just 3-4 hours. Additionally, all electrical wiring and the solar panel set-up is pre-assembled in our state-of-the-art factories, so require minimum connection on site (not only adding to speed of assembly, but a further assurance of long term reliability).



REMOTE MONITORING

With a remote monitoring unit incorporated into every site, the performance of each Cube can be monitored by our technical team from anywhere in the world. We evaluate and disaggregate the information sent from our sites on a daily basis allowing us to reduce unnecessary site visits by service engineers and ensures maximum uptime for the facilities at a very efficient cost.



CASHLESS PAYMENT SYSTEM

To ensure financial transparency and sustainability, we have implemented an RFID cashless payment system for use on our Cubes. All water dispensing transactions are executed, monitored, and recorded in the system, and further uploaded to a dedicated server. The locally appointed Project Maji water vendor is then able to manage the system through mobile banking.



3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	5 GENDER EQUALITY 
8 DECENT WORK AND ECONOMIC GROWTH 	6 CLEAN WATER AND SANITATION 	17 PARTNERSHIPS FOR THE GOALS 

OUR IMPACT

A robust impact measurement system enables our team to make informed decisions based on well-defined goals, quantifiable KPIs and measured against a comprehensive dataset. To adhere to the highest data standard, we have partnered with multiple local and global educational institutions and have prioritised this as a central pillar of our overall strategy. Our knowledge partners include London Business School's Social Impact Club, Princeton in Africa, University of Cape Coast and Middlesex University.

We embarked on a digitalisation journey using tech for good. Digital surveying and monitoring make our data actionable and easy to analyse. We use a purpose-

built data collection platform (mWater) to conduct our baseline surveys (community leaders, household, education, and health). This is followed by a post-intervention cycle of interviews, after one year, to quantifiably measure impact, our progress and map any barriers and challenges.

Moreover, we align our impact efforts with the UN Sustainable Development Goals (SDGs). Agenda 2030 provides a framework for action to end poverty and address global development issues; a blueprint to achieving a better and more sustainable future for all of humanity.

At Project Maji, our core area of focus is SDG6: Clean Water & Sanitation. That said, our work and interventions are also actively and positively contributing to SDG3: Good health & Wellbeing; SDG4: Quality Education; SDG5: Gender Equality; SDG8: Decent Work and Economic Growth; and SDG17: Sustainable Partnerships for the Goals.



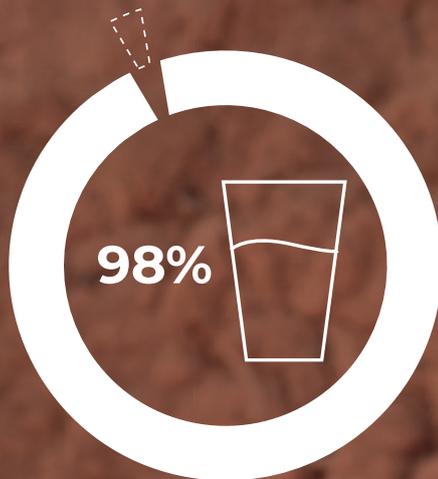
OUR IMPACT IN NUMBERS

In 2018 we completed pre and post intervention impact surveys to quantify the impact of our work on multiple communities in partnership with the Cape Coast University of Ghana. We measured the health and community satisfaction parameters of the end-users of our safe water. The findings from these impact studies showed that the vast majority of beneficiaries were deeply satisfied with the quality of potable water provided by Project Maji.

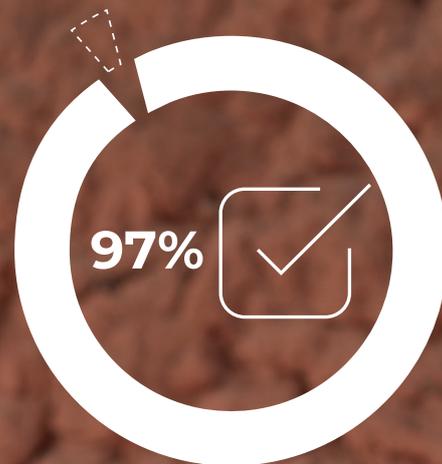
According to these same findings, there have been significant improvements in community health and socio-economic development after the accessibility of potable water from the Project Maji water cube.

Key findings include:

98% of villagers use the Maji Cube



97% are satisfied with the quality of the water

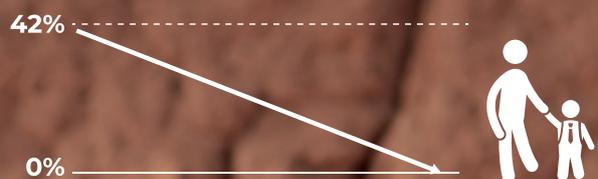


0% water related diseases.

Pre-intervention, 11% of the community members suffered from water-borne diseases such as diarrhoea, cholera, bilharzia (schistosomiasis), which has a direct effect on school absenteeism and economic productivity.



Post installation of the Cube, all kids and workers are now on time for school or work. This indicator dropped from 42% of community members that reported being late for work or school due to time spent previously on fetching water for the community.



For every \$1 invested in basic drinking water,
an average of nearly \$7 is returned in saved
medical costs and increased productivity

- Hutton et.al. 2015





3 GOOD HEALTH AND WELL-BEING



HEALTH

Communities living in water-deprived regions are forced to live off stagnant, unsafe water sources for drinking, cooking, and bathing. These water sources, often contaminated with industrial and livestock waste, carry parasites and diseases leading to life-threatening conditions. From cholera, diarrhoea, dysentery, hepatitis A, typhoid, malaria, and polio; contaminated drinking water alone is estimated to cause more than 480,000 diarrhoeal related deaths each year, with children under five years old accounting for more than 40% of these deaths. - UNICEF

An entirely preventable statistic, if only we could achieve universal, equitable and sustainable access to safe water.





EDUCATION

Education is critical to breaking the cycle of poverty, yet nearly half of schools in sub-Saharan Africa do not have a drinking water service. - UNICEF, WHO

The number of hours children spend in school is inversely proportionate to the number of hours spent collecting water for essential daily needs. It is for this reason that Project Maji works with community stakeholders to bring safe water access closer to schools, minimising sick days for students and contributing to their ability to participate in the classroom; simply put, less sick days + less time walking for water = more time for school.







5 GENDER
EQUALITY



WOMEN'S EMPOWERMENT

Women and girls are responsible for water collection in 8 out of 10 households with water off premises. - UNICEF, WHO

The United Nations estimates that people in sub-Saharan Africa alone lose 40 billion hours per year collecting water; the equivalent to an entire year's labour in all of France! The average 6-kilometre journey requires them to carry heavy buckets of water (often weighing over 20 KG) on their heads. Doing this over a prolonged period and over long distances, this can lead to skeletal deformation, stunted growth, arthritic disease, and miscarriage. As women and girls shoulder the majority of the world's water burden, they also stand the most to gain from nearby access to safe water. With this life changing benefit, women and girls can start to take charge of their own futures; attending school, starting businesses, and taking care of their families.



8 DECENT WORK AND
ECONOMIC GROWTH



ECONOMIC PROSPERITY

Access to safe water not only transforms health and sanitation, it also transforms the long hours spent collecting water to improved and productive livelihoods. Safe water gives families back those precious hours to pursue work opportunities, tend to their land, and positively impact their household income; while less risk of water-borne diseases mean that family health care expenses are significantly reduced. At a macro level, for every \$1 invested in water and sanitation, there is an economic return of \$7 from lower health costs, increased productivity, and decreased mortality rates.





NEW CHALLENGES, NEW SOLUTIONS

As Project Maji grows as an organisation, so too does the need to iterate our technology and address the myriad of health and environmental challenges faced by rural communities living with water poverty. Partnering with socially like-minded organisations such as the Volta River Authority (VRA) and IFRC, along-side our dedicated Project Maji R&D team, we are constantly developing sustainable, innovative solutions that create tangible, life-changing impact for the communities we serve.

Our new Project Maji River Solution is now bringing a safe, sustainable, and cost-effective intervention to communities suffering from bilzharzia (schistosomiosis) across the banks of the Volta River. The same Project Maji solar-powered water Cube, which usually pumps from underground aquifers, has been adapted to pump water from a river. With the addition of an appropriate and proven rapid sand filtration unit, this solution eliminates the harmful larvae from the river water and thereby provides these communities with sustainable safe access to their preferred water source while eliminating direct contact with the infested river.



THE RIVER SOLUTION

“If we can prevent people from getting schistosomiasis, we will cease spending on drugs; so there is a win-win for the communities we serve, for the VRA, and for the environment. We feel this solution is a more sustainable one and is the reason why we partner with organisations like Project Maji, who offer a turn-key solution”

Samuel Fletcher
CSR Manager, VRA





E-PAYMENTS

FINANCIAL STABILITY

With sustainability at the very heart of our ethos, we work to ensure that our Project Maji Cubes provide rural communities with sustainable access to safe water for years to come. Paying a nominal fee for water collection from a handpump is commonplace throughout rural Africa. Until now, this has relied on a community nominated “water vendor” to be present at the site to collect cash. However, these vendors are usually only available at certain hours each day due to other responsibilities, leaving the village population with limited time to fetch water for their daily needs, often forming long queues in the early hours of the morning. Additionally, there is rarely any proper recording of sales and accountability for the cash collected over time, and this lack of transparency and accountability often results in insufficient funds being available for essential repairs when a handpump breaks down, crippling the village of their water supply.

The Project Maji e-Pay solution is a simple yet effective technology designed to overcome these issues; an automated, cash-free solution, with cloud server monitoring, ensuring that money is properly collected and that water is available 24/7, as the taps operate electronically and do not need to be manned.







E-PAYMENTS

COMPLETE ACCOUNTABILITY

Users are issued with a uniquely identifiable, robust plastic e-Pay token that digitally stores water credit and is topped up with mobile money (ubiquitous throughout sub-Saharan Africa). To operate, the user simply touches their token to our e-Pay enabled tap and water starts to pour. When their bucket is full, they remove their token, the water stops, and the correct amount of credit is deducted from their token automatically. The funds collected are digitally stored and held in an account to be available for each village to afford any repairs that may be necessary, ensuring the long term viability of their safe water supply. The system is fully transparent and easily auditable and has been well accepted in all the communities we have deployed it so far.

“Our partnership with Project Maji is bringing standardised, flexible, and tailor-made water-supply and management solutions to rural communities in need. It is transforming National Red Cross Societies into sustainable, well managed service providers to meet the UN Sustainable Development Goals, fulfilling their auxiliary role to public authorities in their respective countries”.

Abel Augustino
IFRC, Ghana

A group of people, including students and adults, are seated on a gymnasium floor. In the background, there are bleachers and a scoreboard. The scene is lit with bright overhead lights. A large blue semi-transparent box is overlaid on the left side of the image, containing text.

YOUTH ENGAGEMENT

The next generation of world leaders will have the power to create real impact on the global development stage. Now, more than ever, the private sector is critical to addressing some of the greatest social and environmental challenges of our time.

Ramping up our youth engagement, we have presented at numerous institutions such as Cambridge University, London Business School, as well as primary and high schools across our global community, spreading awareness on the issues of social entrepreneurship, water consumption practices, and water poverty.

As a result of this, forty students from the prestigious Sevenoaks School in the United Kingdom swam the equivalent distance from their school grounds to Ghana (3,172.80 miles), raising funds for a new Project Maji Cube, in the remote community of Ekoso. In the first of many Youth Impact trips to come, we gave 12 dedicated students an on the ground, immersive experience, where they learned about the critical link between education and safe water access in developing nations. A huge thank you to the students of Sevenoaks School for this inspirational achievement, and for being such active global citizens!



EVENTS AND ACCOLADES

🏆 Winner of the Mohammed bin Rashid Al Maktoum Global Water Award – UAE

🏆 Winner of the YPO Global Impact Award - Regional Honoree (MENA)

🏆 Named one of Global Giving's Top Ranked Organisations, Project of the Month (August 2019), and Staff Favourite

🏆 Appeared on CNBC's 'Entrepreneurship the Entrepreneurial Edge' – UAE

🏆 Appeared on 7Day News – UAE

🏆 Selected as Kyrie Irving & his Hermetic Family Foundation's chosen cause for Day 6 of his 11 Days of Giving Campaign

🏆 Presented at the 6th Annual Knowledge Summit: The Path to Sustainable Development – UAE

🏆 Presented with Ultra-Marathon Runner and Water Advocate Mina Guli, at the Changemakers Breakfast – Ghana

🏆 Presented at Sustainability Talks, Capital Club – UAE

🏆 Spoke on Dubai Eye Business Breakfast Radio Show – UAE

🏆 Spoke on the panel of Safe Water Network's 'Beyond the Pipe' Forum – Ghana

🏆 Spoke on social entrepreneurship & impact investment on 'A Force for Good' podcast – UAE

🏆 Hosted our World Water Day event – Ghana

🏆 Attended the annual World Water Week conference organised by the Stockholm International Water Institute (SIWI) – Sweden

🏆 Participated in the London Business School Impact-athon – UK

🏆 Hosted our first social impact trip in Ghana, in partnership with students from Sevenoaks School – UK / Ghana





A FORCE FOR GOOD
stories that inspire



In conversation with
Sunil Lalvani
 "Improving health and empowering communities by providing access to clean water"



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Sunil Lalvani
 Founder and CEO, Project Maji



THE
 ENTREPRENEURIAL
 EDGE



Sunil Lalvani
 YPO member
 Founder & CEO,
 Project Maji

IMPACT PEOPLE

OUR PARTNERS



We are truly grateful to work with partners who, like us, are committed to solving the water crisis. We work with private donors, fellow NGOs, governments, commercial enterprises and private institutions; all of whom share our vision for sustainable change.

We also collaborate with artists, influencers and content creators, who bring passion and creativity to this cause, raising awareness and engaging the global community.

COMMERCIAL PARTNERSHIPS



NON-PROFIT PARTNERSHIPS



INTERNATIONAL



FEDERATION



www.buildmyafrica.com



KNOWLEDGE PARTNERSHIPS



PROJECT MAJI TEAM

Headquartered in Ghana, with staff in South Africa, Kenya, UAE, and Hong Kong, our passionate team of professionals bring over 80 years of collective experience, working in sustainable development, business, engineering, and product design.



Sunil **Lalvani**
Founder & CEO
(UAE)



Muneeza **Aftab**
Communication &
Advocacy Officer
(UAE)



Amol **Parker**
Project Director (Ghana)



Venu **Babu**
Country Director
(Ghana)



Albert Ansah **Ofosu**
Technician
(Ghana)



Wieke **de Vries**
Director of Development
& Partnerships
(UAE)



John **Otieno**
Project Manager
(Kenya)



John **Hutchinson**
Technical Consultant
(South Africa)



Joan Marie **Tinoyan**
Graphic Designer
(UAE)



Tejinder Singh **Lamba**
Director of R&D &
Production
(China)



Ama **Wilson**
Administrative Assistant
(Ghana)

BOARD OF TRUSTEES

Our governance structure includes leading academics and top professionals in the fields of water, international development, business, and philanthropy; driving value and ensuring our mission is on the path to being realised.



SUNIL **LALVANI**



MUNA **AL GURG**



GORDON **MUMBO**



NICOLE **MALICK**





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END NOTE:

A special thanks to everyone who helped make 2019 our most impactful year to date. We hope that you will continue to follow us on this rewarding journey, bringing sustainable access to safe water to rural populations throughout sub-Saharan Africa. We look forward to your support as we look to double our impact in 2020.

HOW TO GET INVOLVED:

Project Maji is always on the lookout for our artists, ambassadors, interns, content creators and skill-based volunteers.

If you or your organisation would like to partner with us on our mission to provide clean, sustainable water to those in need, then please get in touch via any of the below channels, or donate directly by visiting

www.globalgiving.org/projects/projectmaji/



www.projectmaji.org



Scan code or visit
[www.globalgiving.org/
projects/projectmaji/](http://www.globalgiving.org/projects/projectmaji/)

