SORA TECHNOLOGY

Message

Did you know that mosquito-borne infectious diseases affect more than 200 million people and claim over 600,000 lives every year?
Malaria, dengue fever, Zika virus, chikungunya—these diseases continue to silently take away the health and future of people around the world.

In regions where access to healthcare is limited, mosquito-borne diseases have become a severe social challenge
that impacts children's development, workforce capacity, and even economic growth. Yet this is not an issue confined to distant places.

Japan itself once experienced outbreaks of malaria.
Today, due to climate change and increased human mobility, mosquito-borne diseases such as dengue, Zika, and chikungunya
are becoming realistic risks again—not only globally but here in Japan as well. This is a challenge that concerns all of us.

From the very beginning, we have acted with strong intentionality to "make invisible challenges visible",
and have committed ourselves to addressing healthcare issues through the use of drones and AI.

Our starting point is simple, yet essential: to identify mosquito breeding sites—such as pools of stagnant water
—more quickly, more accurately, and more efficiently than anyone else, and to take timely action.

Today, we are releasing our Impact Report 2025 (Beta Version), which summarizes our impact thesis and our hypotheses for business transformation.
We hope this report will serve as a foundation for open dialogue as we continue to refine and evolve our model.

We will continue to take on the *root* of social challenges through innovation, delivering value to society while pursuing sustainable growth.
Together with local communities, field partners, government agencies, researchers, and global collaborators,
we are fully committed to creating a future where we change the way people live—from the sky (SORA).

CEO at SORA Technology, Inc.
Yosuke Kaneko.

Contents

Who we are

A Japan-based startup aiming to eliminate malaria through drone technology and AI

Company Name	SORA Technology Co.,Ltd.
Establish-ment	19 June 2020
Board of Directors	Managing Director Yosuke Kaneko Director Masaki Umeda, Soki Ohmae
Office Location	Nagoya Head Office Nagono Campus, 2-14-1 Nagono, Nishi-ku, Nagoya City, Aichi 451-0042, Japan Tokyo Office Shibuya Bridge B, Block 1c, 2b, 1-29-3 Higashi, Shibuya-ku, Tokyo 150-0011, Japan

Key Partners

JICA, Unitaid SAVE LIVES FASTER, Triple I for Global Health, J-Startup, JST 独立行政法人 科学技術振興機構 Japan Science and Technology Agency, JETRO Japan External Trade Organization, Gavi INFUSE Innovation for uptake, scale and equity in immunisation, TOKYO METROPOLITAN GOVERNMENT, KING SALMON PROJECT, avpn, Fondation Pasteur Japon

Who we are

Mission, Vision, Value

Mission

Revolutionizing human lifestyles from the sky.

宙”SORA”から、人の生き方に変革を。

Vision

Realizing a sustainable society resilient to disasters and epidemics through the utilization of the sky.

宙”SORA”を活用した、災害・疫病に負けない持続可能な社会の実現。

Value

Global Perspective
Contributing to the world with a global perspective as a member of the global community

Reality and Speed
Valuing the field, facing reality, and taking swift action

Equal Opportunity
Respecting and embracing diverse statuses and values

Dreams and Ideas
Cherishing dreams, creating unique ideas, and delivering one-of-a-kind value

Challenges
Cherishing discoveries, challenging forward

SDGs

Who we are

Evolution of SORA Technology

2020

Company Established

Joined the initiative “ WELCO Lab for Global Health” aiming to address challenges in the global health field.

Joined as a founding member of the “ Business Leaders’ Coalition for Global Health Support”.

2021

Signed a MoU with UNICEF for drone-based medical delivery projects in Asia and Africa.

2022

Launched AI- and drone-based malaria control initiatives in Sierra Leone under a METI project.

Recognized by Bill Gates during a TICAD8 side event.

2023

Launched a malaria control project in Ghana under JICA’s Private-Sector Partnership Program.

Raised approx. JPY130 million in equity financing for the seed round.

Selected for the J-Startup program.

2024

Launched an AI-based project for dengue and other mosquito-borne disease control in Cambodia in collaboration with the Institut Pasteur du Cambodge (IPC).

Selected as one of top 10 East Asia Innovative Company in Gavi INFUSE program

2025

Launched a malaria control project in Mozambique with WHO, supported by UNITAID.

Raised approx. JPY400 million in equity financing for the Pre-Series A round.

Selected for Forbes JAPAN’s ‘NEXT IMPACT STARTUPS 30’.

Featured in Weekly Toyo Keizai ‘Top Startups 100 (2025 Edition)’.

Who we are

SORA Technology – Business Overview

We provide a drone- and AI-powered service that enables highly effective Larval Source Management (LSM) for malaria control at a dramatically low cost.

LSM is a method that reduces mosquito larvae populations by applying larvicides to water bodies that can serve as breeding sites. The World Health Organization (WHO) recommends LSM alongside Long-Lasting Insecticide Nets (LLINs) and Indoor Residual Spraying (IRS) as one of the core strategies for malaria control.

Long-Lasting Insecticidal Nets (LLINs)

Indoor Residual Spraying (IRS)

Larval Source Management (LSM)

Challenges & Solutions

Challenges Posed by Malaria

In many countries across Africa and Asia, countless pools of stagnant water appear during every rainy season—along roadsides, behind houses, and in small agricultural channels. These become **"breeding factories"** for mosquito larvae that transmit malaria.

As a result, more than **200 million people** are infected with malaria each year, and over **600,000 lives** are lost worldwide. Approximately **95% of these cases occur in Africa**, of which children **under 5yo** being the most affected.

Although malaria is a disease that can be both prevented and treated, outbreaks continue because **the sources of mosquito breeding are often invisible**, making it difficult to identify **where interventions should be targeted**.

⚠ Social impact and losses

200 mil+	600k	95%
Annual number of malaria cases	Annual number of deaths	Proportion of deaths in Africa

Source: WHO World malaria report 2024

Manual identification of potential breeding sites

https://apps.who.int/iris/bitstream/handle/10665/85379/9789241505604_eng.pdf

Verification of larval presence

https://www.montcopa.org/563/Mosquito-Surveillance

＜Challenges of Conventional Methods＞

The invisibility of breeding sites：
Because mosquito larvae develop in small puddles and seasonally changing wetlands, it is difficult to identify where they are breeding using human observation alone.

Limited manpower and budget：
Health workers in the field must patrol vast areas on foot, making it impossible to cover all potential risk sites.

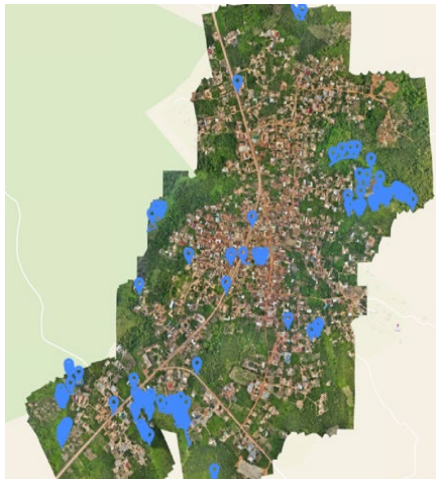
Cascading social and economic losses
Medical expenses and loss of labor due to illness, along with missed learning opportunities caused by children's absence from school, contribute to a cycle of poverty for households and communities.

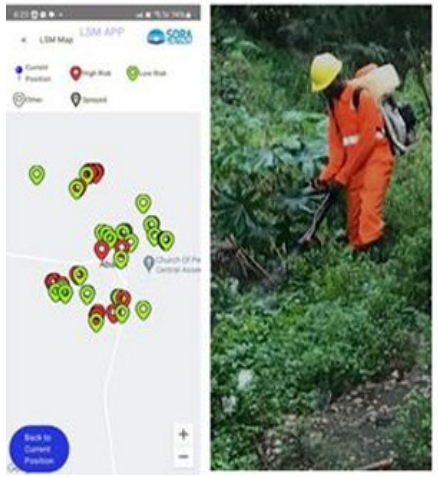
Challenges & Solutions

Our Drone x AI Approach

In many regions, health workers have traditionally patrolled villages on foot, visually searching for puddles and applying larvicide. By replacing these labor-intensive, experience-based surveys with “aerial observation” and “data-driven decision-making”, the goal is to enhance the efficiency and sustainability of malaria control efforts.

Drone flights → AI-based detection of only those puddles *where mosquito larvae are present* → Notification via the app and Execution of spraying





<Results of the Drone x AI Approach>

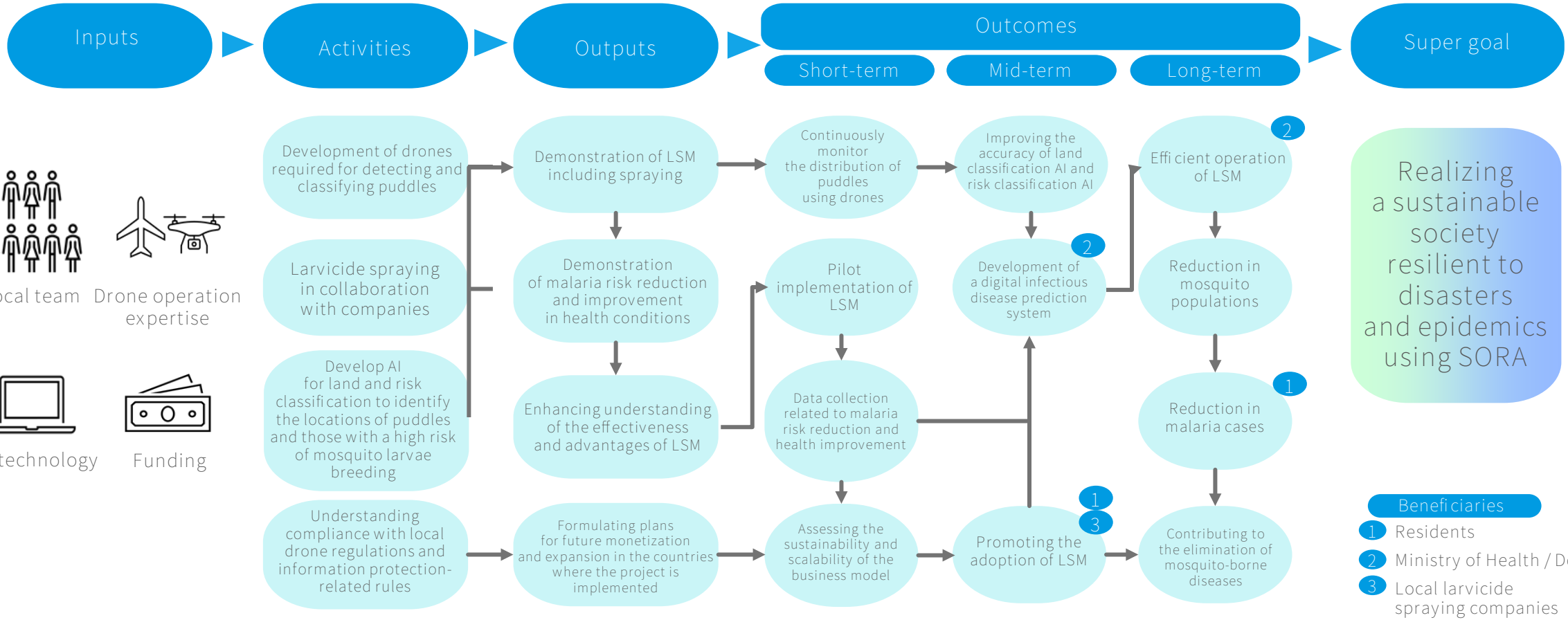
Rapid, wide-area visualization:
By scanning large regions in a short time and automatically identifying and mapping water bodies prone to mosquito breeding, we gain an aerial overview of where risks are concentrated.

Focusing resources on high-priority locations:
By narrowing down spraying sites based on the risk map, limited personnel and larvicide can be concentrated precisely where they are most needed.

Continuous improvement through digital data:
By accumulating aerial observation data alongside on-site response records, we can quantitatively understand which interventions were effective and to what extent, and apply these insights to planning in subsequent years.

Logic Model

Impact Creation Framework



Logic Model

Impact Creation Framework

1 ・・・Residents

Residents of African and Asian countries with a high risk of malaria infection. Currently, 200 million people are infected with malaria each year, resulting in 600,000 deaths, 95% of which occur in Africa. The widespread adoption of SORA Technology's solutions can accelerate improvements in sanitary conditions and saving lives.

2 ・・・Ministry of Health / Donors

Government agencies responsible for public health.
By adopting SORA Technology's solutions, they can significantly reduce insecticide usage and implementation costs, thereby improving the cost-efficiency of malaria control efforts.

3 ・・・Local larvicide spraying companies

Companies that apply larvicides to eliminate mosquito larvae. By adopting SORA Technology's LSM*, they can achieve larval control while reducing labor costs and minimizing environmental impact.

For background and supplementary information on the logic model, including the project overview and beneficiary interviews, please refer to the video below.

YouTube link：https://www.youtube.com/watch?v=lD0jPNDaRFo

*LSM: Abbreviation for Larval Source Management, which refers to the management of mosquito breeding sites.

Key Figures

Impact in Numbers

Ghana pilot project confirmed improved cost-effectiveness through enhanced water body detection, larvicide usage, and reduced labor burden.

Results from the pilot project:

- Target area: Kwaebibirem District, Eastern Region of Ghana (8 areas including Asuom, Abaam)
- Composition: 4 areas with AI + drone adoption, 4 areas using conventional methods
- Implementation period: September–December 2024 (dry season to early rainy season)
- Objective: Comparative verification of the practicality, cost-efficiency, and infection-control effectiveness of efficient larval source management (LSM) using AI and drones
- Partner organizations: Ghana Ministry of Health, Regional Health Directorate, University of Ghana, Noguchi Memorial Institute for Medical Research

Improved detection accuracy

Number of detected water bodies

x 2.8～5.7 +183～+468%

*Relative value with the conventional value set as 1.0 (baseline)

Area of detected water bodies

Up to x 62

By leveraging drones and AI, it has become possible to detect puddles that could not be identified before.

Improved larvicide efficiency

Proportion of high-risk classifications (Asuom District)

59% 170/290 locations

→ Enabled targeted deployment

Amount of larvicide used

Reduced by 50 - 70%

→ Achieved roughly half the amount

Number of larvicide spraying targets (Asuom District)

Reduced by 53% only 136 locations

→ Shifted from blanket spraying to targeted spraying

Cost reduction

Spraying labor (person-days)

Reduced by

75% *Large-scale areas

50% *Small-scale areas

・By performing efficient detection and high-risk classification, targeted larvicide spraying is achieved.
・Significant reduction in labor enables lower personnel costs

▼

Cost-effectiveness

Reduced by 27%

→ Expected to achieve up to a 50% reduction in the future

Infection trends

Declining trend

→ Consistent with the impressions of local healthcare workers

・Reducing labor significantly improved cost-effectiveness.
・Feedback from healthcare workers indicated a declining trend in infections compared to previous years.

Key Figures

Impact Through Expected Social and Economic Spillover Effects

The implementation of LSM using AI and drones is expected to generate significant long-term social and economic spillover effects.

Economic Impact

Significantly reduces labor and drug costs, freeing up resources for local economic development.

By reducing labor hours and pesticide use, it enables the reallocation of government resources and, in the future, contributes to productivity improvements in adjacent sectors such as agriculture and disaster management.

Medical Impact

Visualizing infection risk to enable healthcare systems that protect people before outbreaks occur.

Improved detection accuracy enables better understanding of infection risks. Data utilization accelerates administrative decision-making, forming a foundation for future improvements in EWS* and DALY*.

Social Impact

Easing the burden on the ground and creating a "safe living environment" for the community.

Reduction in work-hours reduces patrol burden and danger, while enabling digital skill acquisition, laying the groundwork to change local lifestyles and working styles.

Environmental Impact

Minimizing chemical load on the environment by spraying only where necessary.

Reduced chemical use controls the environmental load. This prevents over-spraying, with the expectation of expanding into suppressing insecticide-resistant mosquitoes and wetland conservation.

*EWS (Early Warning System): A system that enables early response by identifying signs of infection risk in advance.
*DALY (Disability-Adjusted Life Years): An indicator representing the number of “healthy life years” lost due to illness, disability, or premature death.

Key Figures

Impact Through Global Partnerships

Centered on Africa, where the project is being deployed, we are expanding collaboration and partnerships with local government agencies, donor organizations including international bodies, universities and research institutions, and various initiatives.

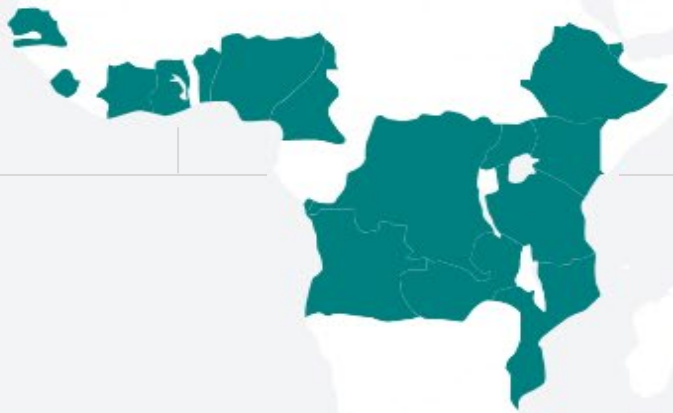
Triple I for Global Health

<Countries of operation>

Western Africa	Malaria cases estimated (2024)	GDP per capita (2024, USD)
Nigeria	68.5M	807
Cote d'Ivoire	8.6M	2,710
Cameroon	7.6M	1,762
Ghana	6.7M	2,406
Benin	5.1M	1,485
Sierra Leone	2.4M	873
Senegal	0.7M	1,744
Middle Africa		
DRC*	35.2M	647
Angola	9.8M	2,122

Fondation Pasteur Japon

Unitaid SAVE LIVES FASTER



<Countries of operation>

Eastern Africa	Malaria cases estimated (2024)	GDP per capita (2024, USD)
Uganda	13.2M	1,073
Ethiopia	12.4M	994
Mozambique	10.2M	647
Tanzania	9.4M	1,186
Malawi	6.4M	508
Zambia	5.4M	1,235
Kenya	4.2M	2,206
Djibouti	40K	3,496

JICA

avpn

参照：WHO World malaria report 2025, World Bank
*DRC: Democratic Republic of the Congo

Voices from the Field

Changes Observed on the Ground (Sprayers)

Sprayers

“The amount of larvicide used actually decreased, although we found more water bodies."

— Ghana Intervention Area Spray Team

This recognition of efficiency's value is also prompting a re-evaluation of institutional practices and environmental considerations.

Sprayers

“Reduced work time and distance have significantly decreased the burden on the workers."

— Ghana Intervention Area Spray Team

Reduced travel distance and spraying hours have eased the physical and temporal burden.

Sprayers

"We were concerned about our jobs being taken, but this was managed through role reallocation."

— Ghana Intervention Area Spray Team

Early communication with relevant stakeholders ensured the ethical consideration of technological innovation.

Voices from the Field

Changes Observed on the Ground (Ghana Health Bureau)

Administration

"We have tried many things but haven't achieved the expected results until now. This initiative is excellent because it saves time and cost and is environmentally friendly."

— Health Bureau Chief Executive

Unprecedented results and environmental value are beginning to be recognized.

Administration

"I believe SORA Technology will be a game-changer, and I am confident it will have a strong impact on the National Malaria Elimination Program (NMEP)."

— Health Bureau Official

Expectations for a transformative impact on national malaria control measures are rising.

Voices from the Field

Changes Observed on the Ground (Community)

Healthcare

"Malaria cases decreased earlier this dry season than usual."

— Ghana Intervention Area Healthcare Worker

Although it coincides with seasonal decreases, a downward trend is confirmed in OPD (Outpatient Department) data, aligning with observations from the field.

Community

"Drone data allows for precise explanations to residents, making it easier to gain understanding and cooperation."

— Local Representative

AI-based risk classification clarifies the focus of public health education, improving the quality of community engagement.

Voices from the Stakeholders

Messages from Leaders Supporting Global Health

Global health leaders

The world's deadliest animal is the mosquito.SORA rises to challenge it.

The animal responsible for the most human deaths each year is not another human being, but the mosquito. By harnessing technology and innovation to address the challenge of mosquitoes as vectors of life-threatening diseases, SORA is taking flight from Japan to the world, and we look forward to its continued growth.

Shibusawa and Company, Inc. CEO
Ken Shibusawa

We are proud to support in using cutting-edge technology to protect lives.

This initiative shows how innovation can help us move closer to eliminating malaria. We are proud to support the Government of Mozambique in using cutting-edge technology to protect lives.

WHO Representative in Mozambique
Dr Severin von Xylander

Beyond saving lives, it is innovative effort to strengthen social infra and sustainable growth.

SORA's initiative to tackle Africa's long-standing challenges through technology and innovation goes beyond saving lives—it strengthens social foundations and supports sustainable growth. We hold high expectations for the impact it will create.

African Development Bank Group Executive Director
Tomoki Nakai

Impact investment leaders

We expect advanced technologies to deliver a significant impact on global health.

We wholeheartedly support SORA Technology in its efforts to tackle serious social challenges such as malaria and other mosquito-borne diseases. Through its advanced drone and AI–based approach, we expect SORA to make a significant impact on global health.

NISSAY CAPITAL CO.,LTD. CEO
Naoki Akiyama

A company that can become a global role model from Japan.

The depth of an entrepreneur's founding intentionality is the true source of impact-driven organizations and businesses. I believe this is one company that can become a global role model from Japan, and I genuinely look forward to the journey of impact it will create in the years ahead.

UNERI,Inc. CEO
Masaki Kawai

Next Steps

Toward Sustainable Impact Creation

Integrated Impact Assessment

Comprehensively visualizing value, including cost-effectiveness, OPD (Outpatient Department) data, yield improvement, reduced chemical usage, and job creation. Achieving data-driven, comprehensive impact measurement.

Multi-use AI Model Development

Training the model with information on water bodies, vegetation, and soil to advance it into a versatile AI applicable across multiple domains. Supporting decision-making in various sectors.

Strengthening Global Partnerships

Deepening impact-driven collaboration with such as WHO, the Global Fund, UNICEF, and JICA. Accelerating policy dialogue, pilot scaling, and resource mobilization through global partnerships.

Regional and Horizontal Expansion

Aiming for both sectoral and regional (e.g., Asia, South America) scale-up beyond malaria control, into areas such as environment, agriculture, mining, disaster prevention, and water hygiene. Technically, promoting the optimization of field implementation through the integration of drone and satellite technology.

Strengthening Organizational and Financial Foundations

Promoting capital policy and governance enhancement with a view toward an IPO. Balancing the establishment of a sustainable business model with the maximization of social impact.

Next Steps

The Intent and Passion of the Team

Managing Director
Founder & CEO

Yosuke Kaneko

From the beginning, we have pursued both social value and business growth. Believing that technology matters only when it serves people, we have used SORA's technology to increase the ROI of impact investment in health and climate. We will continue moving forward as one team, true to this purpose.

Director
Vice CEO

Masaki Umeda

Technology saves lives only when it is carried forward by the people who deliver it. This belief guides my work at SORA. By implementing drones and AI together with local talent, I aim to build health infrastructure that delivers value even to those at the margins of society.

Chief Operating Officer

Marina Ishikawa

During my time in Africa, I realized that breaking cycles of hardship requires creating conditions where no one become infected. Driven to address challenges in developing countries at their roots, I joined SORA and remain committed to delivering solutions that improve people's lives.

Chief Mosquito Officer

Masahiro Yamaguchi

During my time at Sumitomo Chemical, malaria deaths fell from one million to five hundred thousand, showing that business can save lives. Today, progress has stalled. With SORA, I believe the future of international cooperation lies in uniting people and technology.

Head of Africa Business

Mary Yeboah Asantewaa

I joined SORA after recognizing the need for life-saving health systems in Africa, and I feel proud to see the technology implemented in my home country of Ghana. I hope to help expand its application beyond healthcare to shape practical solutions for Africa's future.

Operations Lead,
Sierra Leone

Benjamin Bai Koroma

I joined SORA because I believed in its mission to use drones to address challenges in developing countries. Drawing on my internship experience, I lead sustainable operations in Sierra Leone and aim to expand collaboration through stronger technical and data-driven approaches to deepen local impact.

European Business
Consultant

Ralph Ankri

I have supported SORA since its early days, driven by a strong desire to help build a company that balances social value with business growth. Looking ahead, I hope SORA will expand its impact beyond healthcare into B2B fields such as agriculture and mining, becoming a globally trusted partner.

Next Steps

Leadership's Vision for the Future - Operations

Kaneko (CEO) :
What we do is use drones, satellites, and AI to gather environmental data from the sky and change how people make decisions. Starting with malaria control, we see many more applications—from agriculture to ESG efforts in mining—that can benefit society. Over the past year, I have strongly reaffirmed both the versatility of this approach and the scale of the need. While keeping malaria as our core, we aim to expand into other regions such as Southeast Asia and Latin America, addressing challenges in infectious diseases, water, agriculture, and mining.

Ishikawa (COO) :
What drew me to SORA was its direct impact on saving lives. Addressing infectious diseases that pose high risks to pregnant women and children delivers clear and meaningful impact. Beyond malaria, I see great value in expanding our efforts to diseases such as dengue fever and extending our work to other regions, including Southeast Asia.

Umeda (Vice CEO) :
Our mission, "transforming the way people live from the sky," carries two meanings: protecting lives, and expanding people's choices for how they live beyond survival. Some seek to escape poverty or disease, while others aspire to pursue careers that reflect who they are. We want to be a business that contributes to both. That is why, while keeping infectious disease control at our core, we aim to take on challenges in areas such as agriculture and resource development—sectors that are deeply connected to local livelihoods and industries.

Kaneko (CEO) :
The combination of aerial data, AI, and on-the-ground operations that we have built through malaria control can be applied beyond Africa to Asia, Latin America, and eventually even Japan. Viewed from a global perspective, this challenge has the potential to become a next-generation form of public infrastructure that works across countries. With that vision firmly in mind, we aim to significantly accelerate our growth—both geographically and across sectors—in 2026.

Next Steps

Leadership's Vision for the Future - Organization

Umeda (Vice CEO) :
I believe SORA's impact should not be measured by how many people drones replace, but by the kinds of jobs and opportunities they create. In Ghana and Sierra Leone, we have worked closely with local universities to provide employment opportunities for many young people as data collectors and operators. Instead of being drawn into dangerous illegal mining, they gain access to work where they can apply AI and digital skills. That, in itself, holds significant meaning.

Ishikawa (COO) :
Including not only our employees but also partners involved in data collection, we already feel that we are creating work opportunities on the scale of around 100 people. Going forward, I want to carefully capture and share the life stories and voices of local team members—making visible how involvement with SORA's technology and business has changed the way they live and see their future.

Kaneko (CEO) :
We have defined five core values—global perspective, reality and speed, equal opportunity, dreams and ideas, and challenge—but they are not yet fully embedded across the organization. We see this Impact Report as a launchpad for updating and deepening those values company-wide. Starting as a beta version, we plan to actively incorporate feedback from our team members, local teams, and stakeholders.

Umeda (Vice CEO) :
To truly put impact into practice, I believe it is essential to engage sincerely with local realities and to feel genuine conviction in what we do. That is why we want to carefully listen to voices from within—including those of our local team members—and shape an approach to impact that is true to SORA.

Ishikawa (COO) :
Anchored in our challenge that began in Africa, we aim to expand our circle of partners to Asia and Latin America. That process itself is SORA's impact story. Beyond delivering data from the sky, we want to create more discoveries that deeply move the emotion of the people working on the ground—together.

SORA Technology Co.,Ltd.

https://sora-technology.com/