

FOCAL POINT ON NEGLECTED TROPICAL DISEASES

PRODUCED IN PARTNERSHIP WITH THE MINISTRY OF FOREIGN AFFAIRS, JAPAN

BRINGING NEGLECTED TROPICAL DISEASES INTO THE SPOTLIGHT

Why **JAPAN IS TAKING A LEADING ROLE** in the fight against a raft of infections that receive little global attention, but have devastating impacts.

Japan is not a country immediately associated with the word 'tropical'. Yet this highly developed nation is focusing its scientific knowledge and technological capabilities on developing treatments for neglected tropical diseases (NTDs).

The World Health Organization defines NTDs as a group of 20 illnesses, including rabies, Chagas disease, dengue fever, and leishmaniasis, that are most prevalent in the world's tropical regions, and disproportionately impact impoverished communities, women, and children.

The United Nations' (UN) Sustainable Development Goal 3.3 aims for the end of epidemics, including those of NTDs, by 2030. However, as NTDs typically don't affect people in high-income countries with purchasing power, there's not a lot of commercial incentive for private pharmaceutical companies to develop medicines to treat them. Despite this situation, researchers in Japan are hoping their work can overcome the lack of effective treatments.

"As a member of the international community working towards the SDGs, Japan is responsible for supporting both the research and development of medicines for NTDs by utilizing Japanese scientific knowledge and technologies, as well as the delivery of those medicines to the people who need them. This is critical to realizing the Universal Health Coverage (UHC) principle of leaving no-one's health behind," explains Satoshi Ezoe, the director of the global health division at

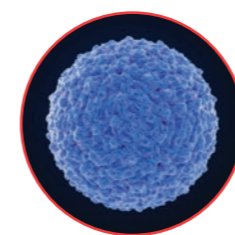


Illustration of *Trypanosoma cruzi*, the parasite behind Chagas disease.

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OSAMU KUNII
CEO, Global Health
Technology Fund

"In the 21st century, infectious diseases are becoming even more of a threat to lives in developed as well as developing countries."



Approximately **1.7 BILLION PEOPLE** are affected by neglected tropical diseases each year, and an estimated **200,000 PEOPLE** die from them annually.

JUAN GAERTNER/SCIENCE PHOTO LIBRARY/Getty

the Ministry of Foreign Affairs, Japan.

UHC is necessary to ensure everyone has access to health services, when and where they need them, without leading to financial hardship. Japan introduced a universal health insurance system in 1961, as the Japanese version of UHC, and it later became the foundation of their global health diplomacy efforts. Japan contributes to UHC through a range of mechanisms, one of which is public-private partnerships, such as the Global Health Technology Fund (GHIT) — a funding body founded in 2012, supported by the Japanese government, the Japanese private sector as well as global philanthropic societies such as the Bill & Melinda Gates Foundation and the Wellcome Trust, explains Ezoe.

"The access to innovations, that the fund has been working on with global partners, can provide a gateway to UHC," says Osamu Kunii, GHIT's CEO, who explains that through its efforts more than one billion people have been treated in a single year, millions of health workers and community volunteers have been trained, and countless services have been provided to people who are often far from health facilities.

Among these partners, universities and research institutes in Japan and abroad play an important role in basic and clinical research, and coordinating stakeholders such as private companies, local governments and local communities. In particular, The Science and Technology Research Partnership for Sustainable Development (SATREPS) programme, run by the Japan Agency for Medical Research and Development (AMED) and the Japan International Cooperation Agency (JICA) brings together researchers in Japan and developing countries to tackle a range of global issues, including NTDs.

"By strengthening collaborations between domestic and international researchers and R&D networks, and integrating the latest international scientific knowledge, NTD research can be revitalized and have a greater impact," says Ezoe.

Kunii agrees that a global, multi-sector approach is needed. "No one

country, company, or organization can solve this complex agenda alone," he says. "Cross-cutting and harmonized collaboration, from R&D all the way through to access and delivery, are essential to enable the more than a billion people suffering from NTDs to lead healthier and more productive lives."

MOVING FORWARD

Kunii is hopeful that the lessons learned about developing new treatments and tools used for COVID can be applied to the sphere of NTDs. "The extraordinary speed of pandemic tool development over the past year demonstrates the innovation and scale that is possible when stakeholders are incentivized to collaborate meaningfully," he adds. "We at GHIT are committed to leveraging the power of this potential for R&D for neglected diseases."

The treatment and control of NTDs is growing more important every day as the range of these conditions spreads due to factors including climate change, environmental destruction, civil war, terrorism, global migration, urbanization and political unrest. "In the 21st century, infectious diseases are becoming even more of a threat to lives in developed as well as developing countries," says Kunii.

Underlying their significance, NTDs will be at centre stage during The Eighth Tokyo International Conference on African Development (TICAD8) which will be held in Tunisia on August 27-28. The TICAD conferences began in 1993 in Tokyo, as an initiative of the Japanese government, the UN, the UN Development Programme, World Bank, and the African Union Commission. Ahead of TICAD8, Japan's Parliamentary Vice-Minister for Foreign Affairs, Shingo Miyake, signed the Kigali declaration on NTDs, a commitment to accelerating the industry-academic-government partnerships, such as the GHIT fund, aimed at ending NTDs.

"Eliminating the burden of NTDs could remove the risk of infection with debilitating disease for so many individuals, enabling them to focus on leading productive and fulfilling lives," adds Kunii. ■

NEGLECTED TROPICAL DISEASES include the following:

- Buruli ulcer
- Chagas disease
- Dengue and chikungunya
- Guinea worm disease
- Foodborne trematodiasis
- Human African trypanosomiasis
- Leishmaniasis
- Leprosy
- Lymphatic filariasis
- Mycetoma
- Chromoblastomycosis and other deep mycoses
- Onchocerciasis
- Rabies, scabies and other ectoparasitoses
- Schistosomiasis
- Soil-transmitted helminthiasis
- Snakebite envenoming
- Taeniasis/cysticercosis, trachoma, and yaws
- Other endemic treponematoses