

## OFFICIAL STATEMENT

Message from the Chief Executive Director on the World Malaria Day 2023

### **Time to deliver #ZeroMalaria: Let's innovate the next generation malaria control tools**

Today, Ifakara Health Institute (Ifakara) joins the world to mark World Malaria Day – a day commemorated around the world every year on April 25<sup>th</sup>. This year's theme is "**Time to deliver zero malaria: Invest, innovate, implement.**" Ifakara remains committed to fighting to end malaria and maintains this focus through its comprehensive approach to research; collaborative training in public health; and strategic delivery of services focusing on various diseases, including malaria. Ifakara takes pride in the significant progress we have made to control and ultimately eliminate malaria in Tanzania and beyond.

Of notable importance today are efforts around the next generation malaria control tools, particularly vaccines and gene drives. Ifakara has contributed to the development of the world's first malaria vaccine, RTS,S and is now part of a global initiative (whose partners include the University of Oxford) to develop and evaluate a more effective vaccine – R21. Ifakara is eager to continue working with such strategic partners to help advance malaria vaccine development and deployment.

Ifakara is working to create an ecosystem for testing genetically modified mosquitoes in East Africa. This includes establishing partnerships as well as infrastructure and capacity to guide work on gene drives and other related technologies. The Institute works with partners, such as the Bill & Melinda Gates Foundation, in building capacity and engaging key stakeholders to position itself as a technology development leader in the region. Ifakara values research work on gene drives and believes this technology can have significant contribution towards malaria elimination efforts.

Ifakara's contribution to knowledge over the last 12 months has been equally impressive. We witnessed significant growth in our science portfolio with more than 100 active research projects at any point. Our scientists have also published 130 papers (slightly over 60% of these on malaria) in 2022 alone. Globally, Ifakara is among the leaders in malaria research, according to data archived by the Barcelona-based Malaria Elimination Scientific Alliance (MESA). Ifakara ranks second, after PATH, in a list that has institutions such as Liverpool School of Tropical Medicine, Harvard School of Public Health, London School of Hygiene and Tropical Medicine and the Swiss TPH.

An important recent development at Ifakara was the start of large-scale implementation programs in August 2022 through a 5-year USD 18 million malaria control initiative implemented by Ifakara and three other partners with funding from the US President's Malaria Initiative (PMI). The program – officially named "Shinda Malaria" – supports the Government of Tanzania in reducing the burden of malaria and moving towards malaria elimination.

Ifakara recognizes the importance and critical role of multisectoral partnerships in achieving significant strides towards the shared goal of malaria elimination. We value our partners and collaborators who have advanced our work in malaria research, both at the local level and global stage.

On this #WorldMalariaDay, we join the rest of the world to underline that, it's about "Time to deliver zero malaria: invest, innovate, implement". Within this theme, Ifakara focuses on the second and third "i" – innovate, implement – by highlighting our cutting-edge research on novel malaria control tools, particularly gene drives and the next generation malaria vaccines, and our involvement in large-scale implementation programs.

Happy Malaria Day!

**Dr. Honorati Masanja**  
Chief Executive Director  
Tuesday, April 25th 2023

## #MALARIADAY KEY MESSAGES

Dar es Salaam - Tuesday, April 25<sup>th</sup> 2023

### Time to deliver #ZeroMalaria: Let's innovate the next generation malaria control tools

#### 1. About IFAKARA Research Work

**Malaria vaccines.** Ifakara Health Institute contributed to the [development of the RTS,S/ASo2 malaria vaccine, also known as RTS,S](#). The Institute participated in Phase II and Phase III studies of the vaccine, and found that an earlier version of the vaccine, RTS,S, had a good safety profile and reduced malaria infection in infants when tested in Tanzania. The WHO endorsed the vaccine in 2021, recommending its inclusion in routine vaccination programs in malaria endemic countries. The vaccine has already been rolled out in some African countries.

*>> Already available malaria vaccines can be used as an alternative option and yet another tool in combating malaria right from young age. Experience shows that similar decisions concerning other diseases such as polio and measles achieved great results.*

Ongoing work includes evaluation of [the R21 malaria vaccine](#) together with University of Oxford vaccine as well as the Attenuated Sporozoite Vaccines together with Sanaria Inc. Both candidates are showing promising results, and Ifakara scientists are eager to continue in these partnerships to help advance malaria vaccine development and deployment.

**Gene drives.** Ifakara Health Institute is working to create an ecosystem for testing genetically modified mosquitoes in East Africa. This includes establishing a partnership with Imperial College London to build a state-of-the-art laboratory in Bagamoyo, conducting surveys to gauge stakeholder opinions on gene drives, participating in local and international committees and meetings about the technology, and engaging with regulatory authorities in Tanzania.

*>> IFAKARA values research work on gene drives and believes if this technology is used effectively, through smart partnerships and collaborations, can have a significant contribution towards malaria elimination efforts in malaria endemic countries.*

The Institute has also established an Institutional Biosafety Committee to guide its work on gene drives and other related technologies. With funding from the Bill & Melinda Gates Foundation and the Foundation for the National Institutes of Health, the Institute is building capacity and engaging key stakeholders in Tanzania in an effort to position itself as a technology development leader in the region. >> <https://www.transmissionzero.org/>

**Contribution to knowledge.** Over the last 12 months, Ifakara Health Institute witnessed significant growth in its science portfolio with [more than 80 active research projects](#). Our scientists also had a strong publication record, [with 130 papers \(slightly over 60% of these on malaria\) in 2022 alone](#). Ifakara is currently ranked as the Number 1 scientific organization in Tanzania based on online citation records comparing 55 institutions in Tanzania.

*>> We commit to continue researching public health for the purpose of improving the health and wellbeing of people. We shall keep on doing that while also contributing public health knowledge globally.*

Globally, Ifakara is among the leaders in malaria research, according to data archived by the Barcelona-based [Malaria Elimination Scientific Alliance \(MESA\)](#). Ifakara has – for a long time – the highest number of malaria research projects. It ranks second, after PATH, in a list that features Institutions such as Liverpool School of Tropical Medicine, Harvard School of Public Health, London School of Hygiene and Tropical Medicine and the Swiss TPH. The database currently ranks 576 Malaria research institutions globally.

#### 2. About IFAKARA Implementation Work

An important recent development at Ifakara Health Institute was the start of large-scale implementation programs in August 2022. In particular, we successfully competed and won the Tanzania Malaria Surveillance Activity (TMSA) award – a 5-year USD 18 million initiative – implemented by Ifakara and three other partners with funding from the US President's Malaria Initiative (PMI).

## #MALARIADAY KEY MESSAGES

The program – officially named “[Shinda Malaria](#)” – supports the Government of Tanzania in reducing the burden of malaria and moving towards malaria elimination. The program is addressing the urgent healthcare needs of at-risk populations, particularly vulnerable pregnant women and children under five.

The program covers five councils in Katavi region for case management and malaria in pregnancy (MIP) services, social behavior change communication; and supports the National Malaria Control Program (NMCP) in implementing Therapeutic Efficacy Studies (TES) to evaluate effectiveness of malaria drugs and in malaria surveillance nationally. In April 2023, PMI added 10 councils in the Kagera region to the Shinda Malaria team to support case management, MIP services and SBC.

*>> Involvement in large-scale implementation programs in the public health sector gives Ifakara Health Institute yet another avenue for leveraging its scientific research with health issues happening on the ground.*

### 3. About IFAKARA Technical Support Work

The Ifakara Health Institute’s Data Science & Mathematical Modelling (DSCap) team is making significant progress in advancing the field of data science and mathematical modelling in Tanzania and beyond. Through a variety of initiatives, the team is fostering the growth of a skilled and knowledgeable workforce in the application of data science and modelling in global health.

The team provides technical support to National Malaria Control Programs and Zanzibar Malaria Elimination Program, and has members placed at prestigious international institutions such as the University of Glasgow, University of California-Berkeley, and Swiss TPH modelling labs to enhance their technical skills. The DSCap team is steadily unlocking the power of data to improve health outcomes in Tanzania and beyond.

*>> Application of data science and mathematical modelling can help to improve our understanding of gigantic data from multiple sources and derive valuable insights to make smarter decisions in the public health sector.*

#### About IFAKARA

Ifakara Health Institute, widely known as “Ifakara”, is a leading research organization in Africa with a strong track record in developing, testing and validating innovations for health. Driven by a core strategic mandate for research, training and services, the Institute’s work now spans a wide spectrum, covering biomedical and ecological sciences, intervention studies, health-systems research, service delivery and policy translation.

Ifakara is best known for its work on malaria. However, we focus on all health challenges identified as important by the Tanzanian government and the people living in communities near each of the Institute’s facilities. Ifakara scientists are working on a wide range of diseases, ensuring that research translates into tangible health outcomes.

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