

# WHY BUSINESS SHOULD FIGHT MALARIA

**An Investment Case** 





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# Introduction

# **Note from BAAM**

As we head into the vaccination phase of the coronavirus pandemic, we are only beginning to understand the dire impact that the pandemic has had on existing programs to combat infectious diseases such as HIV, tuberculosis and malaria. As new data emerges on the impact of diagnosis and treatment interruptions and suspension of services, the need for renewed action and support for measures to combat other global health challenges becomes even more clear. The fight against malaria, in particular, has suffered tremendous losses due to the coronavirus pandemic. While the full impact of the pandemic on the ongoing battle against malaria has not yet been fully quantified, reports from the past year suggest the virus has caused a substantial increase in malaria deaths in some regions, mostly driven by COVID-related barriers to diagnosis, treatment and care services.¹ By the time the COVID vaccine has been distributed and administered to a majority of the population worldwide, and specifically in the regions with the highest malaria burden, it is likely that the pandemic will have significantly set back the many noteworthy gains global health stakeholders have made in combating malaria in the previous decade.

These setbacks, however, need not be permanent. When efforts to defeat the pandemic wind down, and as resources, staff and facilities are reverted back towards efforts to tackle other infectious diseases, it is the private sector that will continue to play an essential and leading role in jumpstarting, developing, and sustaining global initiatives to combat malaria.

We know the private sector is capable of leading this fight because the pandemic exposed the creativity, ingenuity, and innovative spirit embedded in the very DNA of organizations' COVID response efforts. In the first weeks and months of the pandemic alone, thousands of organizations, large and small, across dozens of industries worldwide, found unique ways to donate their time, labor, resources, and intellectual assets to the cause. Distilleries and breweries converted their operations to make sanitizer; fashion companies and retailers switched over to mass-producing masks; meal delivery companies offered free meals to first responders; technology companies helped students and educators prepare for an unprecedented shift to online learning; and manufacturers donated raw materials necessary for producing the vital medical equipment needed on the front lines.<sup>2</sup>

While some of these organizations had been engaged in public health efforts prior to COVID, most had no experience in the space. Yet, within a matter of days, individuals in all of these organizations worked together to assess capabilities and make determinations about which gaps they could best fill, and then boldly went about trying to fill them. Many organizations had no playbook for this type of work, no template from which to construct these plans. CEOs were making commitments they weren't sure they could meet. Plans were being made and goals were being set — on the fly. And, remarkably, despite the uncertainty and anxiety, in most cases, companies successfully met their objectives and made meaningful contributions to efforts to combat the disease. And, as the pandemic has continued, we've seen more and more companies find interesting ways to help the cause. At the same time, companies in the malaria space have maintained and adapted their malaria activities — from mitigating supply chain disruptions to continuing to distribute ITNs to the most vulnerable populations, developing innovative drugs and vaccines for malaria, and conducting awareness raising campaigns, among other efforts.

<sup>&</sup>lt;sup>1</sup> World Health Organization. "World Malaria Report 2020". https://bit.ly/2LcMUBh

Tognini, G. "Coronavirus Business Tracker: How The Private Sector Is Fighting The Covid-19 Pandemic." 1 April 2020. Forbes. https://bit.ly/3rgd3i0

# So what does this all mean for the battle against malaria?

First, it is clear that private sector organizations are going to play a larger role in global public health initiatives. While malaria may have been perceived as less of an immediate need in the past, the pandemic has fundamentally shifted the way that companies understand their role in improving public health. Even before the pandemic has been deemed to come to an end, more organizations will likely look to more fully engage with global health stakeholders, with a goal of more formally including health goals into corporate social responsibility (CSR) and/or environmental and social governance (ESG) plans.

Second, despite their interest in increasing health-related engagements, challenges remain in reorienting a company's operations to best support anti-malaria campaigns. Though responses to the pandemic could serve as a blueprint for action against malaria, business leaders are not at the point where they are making the leap from one disease to the other.<sup>3</sup> As CEOs ask their sustainability directors which health issues and causes the company should engage with, the malaria community must be ready to make a compelling argument that investing in efforts to beat this disease are valuable and worthy. Convincing leaders to join these efforts will not be easy, however, as the disease is less visible and has a slower economic impact in comparison to the coronavirus.<sup>4</sup>

To address this challenge and arm business leaders with the constructive arguments they need to convince their colleagues to prioritize this issue, we have assembled this investment case outlining key arguments in support of increased private sector engagement in the fight against malaria.<sup>5</sup> Originally slated for publication in late February 2020, this document has been updated to better reflect the realities of the COVID-influenced landscape. Our hope is that this paper helps prospective partners better understand the value of investing in malaria efforts and helps individuals within these organizations better make the internal case for increasing support for initiatives. We also hope this document can help in ongoing efforts to move corporate conversations from *whether* to engage, to *how* to best engage.

In the coming years, we have a unique opportunity to mobilize critical assets to the fight against one of history's most lethal diseases. Unfortunately, many private sector organizations remain unengaged in the fight against malaria. Whereas climate change and broader environmental issues are increasingly embraced by Fortune 500 companies as central business priorities, global health has yet to reach a similar level of prioritization within corporate strategy-setting exercises. For example, a 2019 analysis revealed that while 55 percent of companies evaluated committed to an emissions reduction goal in service of improving the environment, only 4 percent specified any health goal — a number that should increase after the COVID-19 pandemic.<sup>6</sup>

Today, now that the coronavirus pandemic has highlighted the role that private sector actors can play in driving towards solutions to global health challenges, it is incumbent upon us to fully marshal the capabilities of new players in the private sector to get the fight against malaria back on the track.

Caroline Desrousseaux (BAAM Co-Chair) Sherwin Charles (BAAM Co-Chair)

<sup>&</sup>lt;sup>3</sup> GBCHealth. "Event Takeaways | Sustaining Malaria Intervention Amid COVID-19: World Malaria Day 2020 Webinar." May 2020. https://bit.ly/3cSvV2H.

<sup>4 &</sup>quot;IMF estimates global Covid cost at \$28tn in lost output." The Guardian. 23 October 2020. https://bit.ly/3ph1dCl.

The RBM Partnership to End Malaria. "Private Sector Engagement Framework and Work Plan." 16 August 2018. https://bit.ly/34swwRj.

<sup>&</sup>lt;sup>6</sup> Jha AK, & Sands P. "Most CEO's don't have a global health strategy. That needs to change." Fortune. 25 March 2019. https://bit.ly/2qWIDJ5.



# **FOREWORD**

While the global community has made tremendous progress in the fight against malaria, elimination will require further coordinated and committed action from all sectors. The scope of the remaining challenge-particularly in light of programming interruptions related to the coronavirus pandemic-is significant. A recent WHO report, "Malaria eradication: benefits, future scenarios and feasibility", projects that based on our current trajectory, Africa will still have 11 million cases of malaria in the year 2050. Compounding the challenge, traditional funding sources in the fight against malaria are flat-lining: between 2010 and 2018, development assistance for malaria decreased 1.9% annually on average, with little growth in future development assistance for health expected. In addition, malaria funding was reallocated to COVID-19 response in some malaria-endemic countries, which greatly disrupted malaria control activities in the short-term.

Even progress towards malaria elimination can come with some surprising financial challenges: governments attempting to fund their malaria elimination efforts domestically grapple with increasing costs per incident as the overall malaria burden decreases. A 2019 comparative study on malaria spending showed that in malaria elimination countries where incidence is lower and the spending focused on surveillance and prevention efforts, spending per incident case was higher than in malaria control countries, at \$28.12 versus \$14.07 per case, respectively. In other words, countries fighting malaria will face both diminished development assistance, and increasing expenditures as they approach elimination.

In this environment, increased engagement from the private sector on all fronts—through the development of innovative health products, corporate philanthropic contributions, and shared value approaches that align business practices with the needs of local communities—will be critical if malaria elimination goals are to be realized.

From the inception of the Millennium Development Goals (MDGs), through the adoption of Sustainable Development Goals (SDGs), we have witnessed a revolution in the way private and public sector actors collaborate to advance global health goals. Indeed, addressing unmet medical needs, especially in areas impacted by funding gaps and programmatic de-prioritization, cannot be addressed by the efforts of one sector alone. Increased collaboration across sectors has heightened the credibility of businesses as genuine and creative providers of solutions to global health challenges—an enhanced credibility that has led to a louder voice and a seat at the table for the private sector in global health policy-making circles.

WHO Strategic Advisory Group on Malaria Eradication. "Malaria eradication: benefits, future scenarios and feasibility. Executive summary." August 2019. https://bit.ly/20V6K1x.

<sup>&</sup>lt;sup>8</sup> Haakenstad A, Harle AC, Tsakalos G, Micah AE, Tao T, Anjomshoa N, Cohen J, Fullman N, Hay SI, Mestrovic T, Mohammed S, Mousavi SM, Nixon MR, Pigott D, Tran K, Murray CJL, & Dieleman JL. "Tracking spending on malaria by source in 206 countries, 2000-16: an economic modelling study." April 2019. https://bit.ly/2OTCeoQ.

<sup>&</sup>lt;sup>9</sup> Diptyanusa A, Zeblon KN. "Addressing budget reduction and reallocation on health-related resources during COVID-19 pandemic in malaria-endemic countries." https://bit.ly/201n5oL

Haakenstad A, Harle AC, Tsakalos G, Micah AE, Tao T, Anjomshoa N, Cohen J, Fullman N, Hay SI, Mestrovic T, Mohammed S, Mousavi SM, Nixon MR, Pigott D, Tran K, Murray CJL, & Dieleman JL. "Tracking spending on malaria by source in 206 countries, 2000-16: an economic modelling study." April 2019. https://bit.ly/2OTCeoQ.

# WHY MALARIA?

Combating malaria is good for business. Malaria interventions reduce healthcare costs for companies while improving workers' productivity. Further, broader investments in malaria control have the potential to unlock higher levels of consumer and household spending, boost market development, offer new growth opportunities, and bring social and reputational benefits to companies.

# Reducing Costs While Improving Productivity

Because malaria is a debilitating illness that saps energy from workers, it negatively impacts businesses through lost productivity and absenteeism. Malaria can also require lengthy treatment programs and extended hospital stays, resulting in higher healthcare costs for companies. Supporting malaria prevention and awareness programs can provide direct benefits to private sector organizations by helping them avoid productivity losses and by reducing healthcare costs.

For organizations operating in impacted areas, mitigation, management, education and awareness programs and traditional control methods (testing, treatment, bed nets, sprays), are a low-cost, high-benefit investment. The research bears this out — a 2011 report from the RBM Partnership to End Malaria reviewing three Zambian companies over a decade found that the estimated rate of return on malaria investments was 28 percent, with a related 94 percent reduction in absenteeism over the same period. 12

Other malaria campaigns realized similar benefits. As part of a pipeline project in Cameroon, ExxonMobil implemented a robust malaria initiative that saved UD\$3.8 million in project delay costs, reduced malaria incidence by 70 percent, and led to a dramatic decline in absenteeism since 2000.<sup>13</sup> And, over a five-year period from 2004 to 2009, Ghanaian gold producer AngloGold Ashanti worked with Ghana's National Malaria Control Programme to execute a comprehensive anti-malaria program that reduced their monthly malaria medication costs by over \$500,000 USD.<sup>14</sup>

Looking beyond these company-specific examples and instead turning our attention to the macro-level impact of malaria on economies, the potential gains are even more astonishing — one study of African agricultural households found that eradicating malaria by 2040 would win businesses back 3.2 billion workdays.<sup>15</sup>

Nonvignon J, Aryeete GC, Malm KL, Agyemang SA, Aubyn VNA, Peprah NY, Bart-Plange CN, and Aikins M. "Economic burden of malaria on businesses in Ghana: a case for private sector investment in malaria control." September 2016. https://bit.ly/32afibZ

Roll Back Malaria. "Business Investing in Malaria Control: Economic Returns and a Health Workforce in Africa." May 2011. http://bit.ly/2M0KQKd.

Nigeria National Malaria Control Programme, Dangote Foundation. "Engaging the private sector to eliminate malaria in Nigeria." 2018. https://bit.ly/2N8fZhO

Nigeria National Malaria Control Programme, Dangote Foundation. "Engaging the private sector to eliminate malaria in Nigeria." 2018. https://bit.ly/2N8fZhO

<sup>&</sup>lt;sup>15</sup> Willis D, & Hamon N. Gates Open Research. "Eliminating malaria by 2040 among agricultural households in Africa: potential impact on health, labor productivity, education and gender equality." November 2018. http://bit.ly/2MqOn3j.



# Facilitating Market Development, Entrepreneurship, Consumer Spending and GDP Growth

Perhaps most promising are business growth opportunities that are created as a result of reducing or eliminating malaria. Unsurprisingly, eradication programs have been shown to foster market development and entrepreneurship, and have spurred crucial investments needed to accelerate economic growth in some of the poorest regions of the world.<sup>16</sup>

It is generally understood that companies benefit when populations are healthy, with studies showing that improved public health outcomes lead to increased Gross Domestic Product (GDP). The relationship between health and economies is especially stark in the context of malaria, where analysts find a dose-relationship between malaria mitigation efforts and per capita GDP: for every dollar spent on malaria mitigation efforts in African countries, there is a per capita GDP return of US\$6.75.17 Examined another way, several studies of malaria-endemic nations have found that a 10 percent decrease in malaria is associated with a 0.3 percent increase in annual GDP.18 In the Asia-Pacific region, a recent Mahidol Oxford Tropical Medicine Research Unit study found a 6:1 return on malaria investments in impacted countries.19

Purdy M, et al. The American Journal of Tropical Medicine and Hygiene." The Economic Case for Combating Malaria." November 2013. http://bit.ly/2MqcsYd.

Jobin WR. Malaria World Journal. "Suppression of malaria transmission and increases in economic productivity in African countries from 2007 to 2011." March 2014. http://bit.ly/2AZN06x.

Gallup JL, & Sachs JD. The American Journal of Tropical Medicine and Hygiene." The Economic Burden of Malaria." January 2001. http://bit.ly/2IDDMRx; Nayantara Sarma, Edith Patouillard, Richard E. ibulskis, Jean-Louis Arcand, "The Economic Burden of Malaria: Revisiting the Evidence"; Am J Trop Med Hyg. 2019; https://bit.ly/3uNAZeo

<sup>&</sup>lt;sup>19</sup> Asia Times, "Malaria fight needs steady funding, scientists warn." 29 June 2019. http://bit.ly/35e5Nc2.

# WHO STUDY estimates that

SCALING UP
INVESTMENTS
in 29 countries with
critical MALARIA
NEEDS to

\$34 BILLION





\$283 BILLION GDP RETURNS

Yet another study found that malaria vaccination with 100 percent coverage could increase the GDP of Ghana over 30 years by US\$6.93 billion above the baseline without vaccination, equivalent to an increase in annual GDP growth of 0.5 percent.<sup>20</sup>

A 2013 study conservatively estimated that the net present value of controlling and eradicating malaria by 2035 would be US\$208.6 billion.21 WHO's Global Technical Strategy for Malaria projected that meeting 2030 malaria funding targets would generate an additional US\$4 trillion in economic output, with a 40:1 return on investment worldwide and a 60:1 return in Sub-Saharan Africa.<sup>22</sup> Estimates from another WHO study show that scaling up investments in 29 countries with critical malaria needs to US\$34 billion generates US\$283 billion in GDP returns.<sup>23</sup> In their From Aspiration to Action report, the Bill & Melinda Gates Foundation and partners<sup>24</sup> estimate that from 2015 to 2040, malaria eradication efforts would cost the global health community US\$90 to US\$120 billion, while the returns generated could top US\$2 trillion.<sup>25</sup>

This macro-level economic growth is driven by unlocking resources and boosting consumer spending power by lowering household-level health expenditures related to malaria while simultaneously increasing labor productivity<sup>26,</sup> <sup>27</sup>. On the cost side, UNICEF estimates that on average, households in endemic areas spend over a quarter of their income on malaria-related expenses;<sup>28</sup> and, a study in Mozambique found that over one-third of families impacted by malaria incurred 'catastrophic' costs.29 Another, longerterm study of the impact of malaria control efforts in India found increased per capita household expenditures in adult men.30 A Vietnamese study bore out the impact of malaria on the workforce, demonstrating a correlation between decreased malaria cases and increased labor productivity.<sup>31</sup> These studies, taken together, point to malaria control efforts as beneficial to the overall health of the economy-households are not diverting resources towards the care of malaria, and workers are able to increase their participation in the labor force because they are not sick.

RAND Corporation. "Modeling the Economic Benefits of Malaria Control in Sub-Saharan Africa." Accessed January 2021. https://bit.ly/3qjScd5.

Purdy M, et al. The American Journal of Tropical Medicine and Hygiene. "The Economic Case for Combating Malaria." November 2013. http://bit.lv/2MacsYd.

<sup>&</sup>lt;sup>22</sup> Roll Back Malaria Partnership. "Action and Investment to Defeat Malaria: 2016-2030." 2015. http://bit.ly/312E6jb.

<sup>&</sup>lt;sup>23</sup> WHO Strategic Advisory Group on Malaria Eradication. "Malaria eradication: benefits, future scenarios and feasibility." 20 April 2020. https://bit.ly/2KYzqIM.

Note: This report was written in conjunction with the UN Secretary-General's Special Envoy for Financing the Health Millennium Development Goals and for Malaria, Malaria No More, and their partners.

<sup>&</sup>lt;sup>25</sup> EndMalaria2040.org. "From Aspiration to Action: What will it take to end Malaria?" http://bit.ly/30YeEv1.

<sup>&</sup>lt;sup>26</sup> David Cutler, Fung W, Kremer M, Singhal M, & Vogl T. American Economic Journal: Applied Economics. "Early-life Malaria Exposure and Adult Outcomes: Evidence from Malaria Eradication in India." April 2010. http://bit.ly/35pdeNU.

Mark Purdy et al. The American Journal of Tropical Medicine and Hygiene. "The Economic Case for Combating Malaria." Nov. 2013. http://bit.ly/2MqcsYd.

<sup>&</sup>lt;sup>28</sup> UNICEF. "Fact Sheet: Malaria A Global Crisis." 2004. https://uni.cf/30X2YIZ.

<sup>&</sup>lt;sup>29</sup> Marianela Castillo-Riquelme et.al. Tropical Medicine & International Health. "Household burden of malaria in South Africa and Mozambique: is there a catastrophic impact?" Jan. 13, 2008. http://bit.ly/33iMvAG.

David Cutler, Fung W, Kremer M, Singhal M, & Vogl T. American Economic Journal: Applied Economics. "Early-life Malaria Exposure and Adult Outcomes: Evidence from Malaria Eradication in India." April 2010. http://bit.ly/35pdeNU.

Ramanan Laxminaryan. Tropic Medicine & International Health. "Does reducing malaria improve household living standards." Feb 9, 2004. http://bit.ly/2MveVAm.



# **Delivering Social and Reputational Benefits**



"Supporting malaria control is a contribution that the private sector can and should make, strengthening their businesses while savings lives — a win-win model."

Nigeria MOH/Dangote

As consumers become more attuned to companies' societal impact, and scrutiny of corporations' activities grows, CSR initiatives have become an increasingly important element of corporate strategy.<sup>32</sup> When executed thoughtfully, corporate social responsibility (CSR) and shared value creation (CSV) initiatives can allow private sector leaders to better align their companies and brands with the social values of their customers and stakeholders.

Prior to the pandemic, companies who specifically engaged in malaria initiatives saw improvements to their reputations.<sup>33, 34</sup> During the pandemic, thousands of new companies have stepped up to support public health engagements, driven primarily by the need to address gaps in the COVID-19 response.

Stakeholder demands are also being internalized at the executive level. At an August 2019 gathering organized by the Business Roundtable, a non-profit CEO consortium, leaders of some of the world's largest and most influential corporations unveiled the "Statement on the Purpose of a Corporation", a bold public declaration which acknowledged the need for greater corporate involvement in social issues and for creating value for communities and shareholders alike.

Nigeria National Malaria Control Programme, Dangote Foundation. "Engaging the private sector to eliminate malaria in Nigeria." 2018. https://bit.ly/2N8fZhO

<sup>&</sup>lt;sup>34</sup> Roll Back Malaria. "Progress & Impact Series - Number 6. Business Investing in Malaria Control: Economic Returns and a Healthy Workforce for Africa." May 2011. https://bit.ly/2MSFyn6.



Coming out of the pandemic, private sector organizations will likely further acknowledge public health as an important business and social imperative. Global public health initiatives, including the fight against malaria, provide the opportunity for companies to address the challenges faced by the world's most vulnerable communities, while also allowing them to build positive brand recognition and access valuable emerging markets. Contributions from the private sector to fill resource gaps can also jumpstart co-financing with organizations like the Global Fund to fight HIV. Tuberculosis and Malaria. Company associations with larger global health organizations give private sector organizations a larger platform to be seen and heard.

# Generating Long-Term Commercial Value

There are many examples of companies that successfully align public health CSR initiatives with core business objectives, with motivations varying across industries and sectors. A USAID/ African Strategies for Health Project Review examining the CSR health initiatives of companies operating in Africa identified innovation, cost savings, long-term economic sustainability, brand differentiation and customer engagement as primary drivers of activity.35 In a 2015 study surveying six multinational pharmaceutical companies, CSR leaders reported seeing a clear link between public health initiatives and longterm economic benefits. Multiple respondents said that CSR health initiatives would drive "economic prosperity, increasing local purchasing power" and would "[open] doors to new markets for other pursuits."

USAID. African Strategies for Health. "A Review of Health-Related Corporate Social Responsibility in Africa." December 2014. https://bit.ly/32iZJgs.

Other respondents said that CSR health engagements had longer-term commercial value, helping the companies build relationships with key stakeholders, gather critical market intelligence and lay the groundwork for future economic pursuits.<sup>36</sup> In the fight to end malaria, actors inside and outside the health sector have invested heavily in CSR campaigns. For example, ExxonMobil has engaged in malaria eradication efforts, contributing over US\$170 million, distributing over 14 million bed nets and providing nearly five million antimalarial doses between 2000 and 2018.37 The company considers its investment in malaria prevention to be a key part of its business strategy. ExxonMobil is just one example: companies across business sectors have contributed financial and in-kind resources valued in the millions, pointing to the value that these private sector actors see in directing their resources towards the fight against malaria.

### **CEOs Lead the Way**

Corporate executive and social investors can also play a crucial role in tackling malaria-related challenges. Robert Brozin, the CEO of Nando's, a South African restaurant chain that now operates in 35 countries across five continents, has been involved in the fight against malaria for over a decade. In 2009, he helped form Goodbye Malaria, a partnership of African entrepreneurs focused on eradicating the disease.\*

Malaria to Zero, a private sector effort spearheaded by Access Bank CEO Herbert Wigwe in conjunction with the Private Sector Health Alliance of Nigeria, brings together both Nigerian and multinational corporations to take on malaria. Launched in 2016, the initiative has successfully reached over a million people with information and education campaigns and distributed over 30,000 long-lasting insecticide-treated nets (LLINs).\*\*

# Call to Action: Private Sector Organizations Have a Critical Role to Play in the Next Phase of the Fight

The private sector already has a long history of making game-changing contributions to the fight against malaria. Businesses have improved malaria service delivery through the development of innovative tools, approaches, and medicines and have provided catalytic resources to help close growing funding and programming gaps. Further, corporate actors have collaborated across sectors and industries to improve communications between stakeholder groups, design better supply chains, and leverage data to better source, track and manage the flow of essential products and services. The opportunities for the private sector to contribute to the fight against malaria are nearly endlessbusinesses have the resources and expertise to support, scale, and implement malaria initiatives in ways that have the potential to turn the tide in the fight against the disease.

The private sector is uniquely positioned to make catalytic contributions to the fight against malaria by leveraging its differentiated innovations, technical expertise, and financial resources. And because malaria's impact extends across sectors, all businesses can and should play a role in combating the disease.

<sup>\*</sup> The RBM Partnership to End Malaria. "Private Sector Engagement Framework and Work Plan." 16 August 2018. https://bit.ly/34swwRj.

<sup>\*\*</sup> GBC Health. "Access Bank 'Malaria to Zero' Initiative." April 2019. https://bit.ly/32fytzH.

Droppert H, & Bennett S. Globalization and Health. "Corporate social responsibility in global health: an exploratory study of multinational pharmaceutical firms." https://bit.ly/33nZLUC.

<sup>37</sup> ExxonMobil. "Impacts of the ExxonMobil Malaria Initiative." 30 August 2018. https://exxonmobil.co/3tj2YSA.

There are several approaches that business leaders can adopt to optimize their organization's contributions:

# Strengthen Public-Private Partnerships

From improving the analytics capabilities of national health departments, to ensuring resources are allocated to those programs with the highest potential for impact, to finding creative ways to improve the distribution of diagnostic tools, public-private partnerships have been an essential part of the global health communities' approach to tackling malaria.

In Asia, one innovative private-public partnership is led by the Asia Pacific Leaders Malaria Alliance (APLMA). Their M2030 platform, launched in 2018, helps unite businesses through creative financing models and to raise awareness of their role in fighting malaria.38 In Malaysia, New Holland Agriculture and its local distributor, Yoma Heavy Equipment, partnered with M2030 to implement an education and awareness campaign focused on local farmers. Through the initiative, company showrooms across the country's 10 regions were outfitted with communications materials to help inform customers about malaria prevention techniques and raise funds to combat malaria. The funds raised provided direct support to malaria elimination programs being led by NGO Population Services International Myanmar.<sup>39</sup>

Looking beyond a platform model, public-private partnerships have the potential to bring together diverse actors across industries and sectors in pursuit of a common goal. For example, in 2011, ExxonMobil and MTN partnered with the government of Cameroon and *Malaria No More* to implement a nationwide campaign encouraging citizens to increase usage of bed nets. The project, called *NightWatch*, broadcast reminders to use bed nets, recorded by Cameroonian celebrities,

every night on television and radio.<sup>40</sup> One analysis of the program found it was a successful and cost-effective method of reducing the risk of contracting the disease, generating a 6.6 percent bump in bed net use among survey respondents and a 12 percent increase for children under five.<sup>41</sup> In addition to broad awareness and education campaigns, partnership operations targeted at small, high-risk groups can also be valuable and successful.<sup>42</sup>

### **INSPIRATION FOR ACTION**

# Public-Private Partnerships in Africa

In Africa, health product suppliers are working together with the Zambian government to conduct training programs and supply medical clinics with antimalarial drugs.43 In Angola, ExxonMobil partnered with both the President's Malaria Initiative (PMI) and the Angolan government to reduce malaria misdiagnoses by training clinicians to improve the identification of malaria symptoms in children.44 Delta Airlines has partnered with the Red Cross in high-incidence communities in Ghana to provide mosquito nets for over 50,000 people, specifically focusing on young children, pregnant women and people with suppressed immunity.45 In Ghana, the Ministry Health is working with private sector transport companies to deliver longlasting insecticide-treated nets (LLINs) to schools, including those in remote areas.46 In Senegal, a wide range of companies, including the Senegale Sugar Company, Laborex, Sodpharm, Ubiform and Duopharm are assisting with the distribution of ITNs as part of the PMI's country-level efforts.47

<sup>38</sup> Ravelo JL. DEVEX. "Asia-Pacific turns to innovative finance to stamp out malaria." https://bit.ly/37NNPyf.

<sup>99</sup> New Holland Agriculture. "New Holland Agriculture helps Myanmar farmers fight malaria." Accessed December 2020. https://bit.ly/35GjLCV.

<sup>40</sup> Bowen HL. "Private Sector Partners Help Cameroon "Knock Out Malaria" in Support of Historic Universal Coverage Campaign." Cision PR Newswire. https://prn.to/20QKAO5.

<sup>&</sup>lt;sup>41</sup> Bowen HL. "Impact of a mass media campaign on bed net use in Cameroon." Malaria Journal. https://bit.ly/2QXC6XZ.

<sup>&</sup>lt;sup>42</sup> Grass Root Soccer. "Malaria". Accessed December 2020. https://bit.ly/2L2l9ae. Note: ExxonMobil partnered with the Special Olympics and GRS, a youth soccer organization, to design and implement a malaria and HIV prevention program for youth with intellectual disabilities in Nigeria. To date, the Special Olympics/GRS program has distributed over 18,000 mosquito nets and administered nearly 5,000 malaria tests. ExxonMobil is helping GRS to scale malaria initiatives in 22 additional countries, in collaboration with the Peace Corps.

Fosun Pharma. "Expedite the pace of eliminating malaria Fosun Pharma donates antimalarial medicines to Zambia Ministry of Health." August 2018. Accessed December 2020. https://bit.ly/2XScUDU.

<sup>44</sup> Cheney C. Devex. "Making the case for malaria eradication in a tight budgetary environment." 24 July 2017. Accessed December 2020. https://bit.lv/2KK0Ylt.

<sup>45</sup> Delta. "Delta campaign working towards malaria-free Ghana." 7 December 2015. Accessed December 2020. https://bit.ly/2DBP469.

<sup>46</sup> USAID Global Health Supply Chain Program. "Video: Leveraging Private Sector Capacity to Combat Malaria in Ghana." Accessed january 2020. https://bit.ly/38KOB1w

<sup>&</sup>lt;sup>47</sup> U.S. President's Malaria Initiative. "Senegal Malaria Operational Plan FY 2020." Retrieved from (www.pmi.gov). https://bit.ly/3oM3Gpr.



### **INSPIRATION FOR ACTION**

# Public-Private Partnerships in Asia

In the Indian state of Odisha, Abbott Laboratories has partnered with local governments and Malaria No More to provide one million rapid diagnostic tests and has invested US\$750,000 to help the state identify and implement a malaria elimination strategy. In the Malaysian state of Sabah, private rubber, palm oil and acacia plantations have successfully partnered with the Malaysian Malaria Control Programme (MCP) to manage outbreaks and mitigate disease transmission.

There is also precedence for public-private partnerships in the sphere of research and development. In April 2019 GSK's malaria vaccine, RTS,S, was piloted by the WHO with the support of several partners including PATH, Gavi, Unitaid and the Global Fund. So far, the RTS,S is the first and only vaccine to show a protective

effect against malaria among children between 7 and 17 months of age in a Phase 3 trial. The pilot was introduced in Malawi, Ghana and Tanzania where the WHO works in close cooperation with the Ministers of Health to deliver the vaccine through local and international partners, and in parallel, PATH provides economic and social assessments — Gavi, the Global Fund and Unitaid fund the program.<sup>50</sup>

Looking ahead, public-private partnerships will be critical to sustaining the next phase of the fight. By leveraging the institutional knowledge, technical "know-how" and expertise of private sector actors, governments and NGOs can improve their approach across the malaria spectrum, by: identifying innovative methods for financing new malaria engagements, making improvements to the core delivery of services, leveraging data to optimize supply chains and surveillance programs, accessing new technologies to improve administration and management, and developing the next generation of innovative diagnostics and vaccines-similar to the innovations that we have seen in the fight against COVID-19.51

<sup>48 &</sup>quot;Abbott and "Malaria No More" Work Together to End Malaria in Odisha, India." Cision PR Newswire. https://prn.to/2L4dYzn.

<sup>&</sup>lt;sup>49</sup> Sanders KC, Rundi C, Jelip J, Rashman Y, Smith Gueye C, & Gosling RD. "Eliminating malaria in Malaysia: the role of partnerships between the public and commercial sectors in Sabah." Malaria Journal. https://bit.ly/2L2dGsu.

<sup>&</sup>lt;sup>50</sup> World Health Organization. "Q&A on the malaria vaccine implementation programme (MVIP)." November 2019. Accessed December 2020. https://bit.ly/37T2b0H.

 $<sup>^{51}</sup>$  Kumar, A. The Times of India. "Lessons for malaria elimination from COVID-19." https://bit.ly/3jfoK5r



# **Identify New Opportunities to Align Organizational Strengths with Needs**

In addition to corporate philanthropy activities and programmatic efforts to safeguard the health of employees and community members, corporations have the opportunity to leverage their unique expertise to implement shared-value initiatives that yield both positive social change and business impact.

Corporate leaders can ensure that shared-value and corporate social responsibility initiatives aimed at tackling malaria are aligned with organizational proficiencies, which could include product and service expertise, institutional knowledge, relationships, connections or other internal assets<sup>52</sup>. By applying their strengths to pressing and discrete needs, and by collaborating with other businesses or NGOs with complementary assets, companies can make a significant impact on the broader health landscape.

Creative use of business strengths to fight malaria is already underway in several endemic regions around the globe. Through Project Last Mile, a program co-led by the Global Fund, Coca-Cola leverages its logistical, supply chain and marketing expertise to improve the reach and uptake of lifesaving medicines and health treatments in Africa.<sup>53</sup> And, Hershey's Company's Ghana, a confectionery company, partnered with *Malaria No More* to deliver disease prevention messages through the CocoaLink phone application, reaching thousands of people living in the Ghana's cocoa region.<sup>54</sup>

In their Investment Case, Nigeria's Federal Ministry of Health/Dangote identify four ways companies can meaningfully contribute: "financial contribution[s] and support for marketing campaigns"; "pro-bono services and core competency partnerships"; "support for advocacy and governance, globally and locally"; "in-country investments and operational contributions"; Federal MoH & Dangote, "Engaging the Private Sector to Eliminate Malaria in Nigeria"; 2016; https://bit.ly/3qWUK0O

The Global Fund. "Project Last Mile: The Coca-Cola Company." September 2019. https://bit.ly/2XYOuIH.

<sup>&</sup>lt;sup>54</sup> Africa Health. "Malaria investments: corporate social responsibility at the national level." May 2014. https://bit.ly/2qVpeHe.

### **INSPIRATION FOR ACTION**

### **Creating Shared Value**

Kansai Plascon, a South African paint and coatings manufacturer, implemented a bold new program called 'Hold my hand to 5' in 2019 that involves re-painting the hallways of schools across the country with a specially designed mixture that disrupts the nervous systems of mosquitoes. The lead-free paint, which is effective for up to 24 months, aims to help lower incidence rates among children under the age of 5.55

ZERO by 40 offers another template for how organizations can leverage their sector-specific knowledge to address specific malaria challenges. The project, which is supported by the Gates Foundation and the Innovative Vector Control Consortium (IVCC), brings together five of the world's leading crop protection companies, including BAAM members BASF, Bayer and Sumitomo Chemical, to develop transformative vector control tools.<sup>56</sup>

In Nigeria, Telecom operator 9Mobile leveraged the company's communications capabilities and broad customer base across the country to broadcast an entertaining and informative radio drama series on malaria prevention and control. The company also used its expertise in mass communication - including delivering SMS messages to its entire subscriber base - to educate more than 90 million Nigerians during the Malaria Free Nigeria: Play Your Part Campaign.<sup>57</sup>

Defeating Malaria with Data, an effective venture funded by the Gates Foundation and run by Xinova, finds unique ways to address data and supply chain management gaps in the malaria delivery chain, ensuring critical supplies get to the people that need them.<sup>58</sup> In 2019, the organization sponsored rapid innovation sessions, convening analytics, supply chain and data experts to brainstorm methods for overcoming malaria challenges in Northern Nigeria. These efforts are part of a longer-term goal to digitize records, in order to help governments improve the efficacy of treatment and eradication programs.<sup>59</sup>

Private sector organizations can also help improve processes for implementing and executing malaria initiatives. Novartis' Malaria Futures for Africa Report compiled insights from surveys of malaria experts across the continent. By identifying the specific malaria issues each country and region faces and amplifying the voices of local stakeholders, the report helps shape decision-making and prioritization around anti-malaria initiatives.<sup>60</sup>

<sup>55 &</sup>quot;Kansai Plascon unveils major CSR drive to fight malaria in Uganda." Business Week. 18 February 2019. https://bit.ly/2rFOtxb.

<sup>&</sup>lt;sup>56</sup> Anders M. Devex. "Leaders challenge Commonwealth countries to halve malaria cases by 2023." 17 April 2018. https://bit.ly/370t2L5.

<sup>&</sup>lt;sup>57</sup> GBC Health. "Access Bank 'Malaria to Zero' Initiative." April 2019. https://bit.ly/32fytzH.

<sup>58</sup> Xinova. "Xconomy — Gates Foundation-Xinova using data to fight malaria." 25 April 2019. Accessed December 2020. https://bit.ly/2R1Qwqq

<sup>&</sup>lt;sup>59</sup> Thorne J. GeekWire. "Inside a 'rapid innovation session' as Gates Foundation and Xinova fight malaria with tech." 29 June 2019. Accessed December 2020. https://bit.ly/2R3MvBw.

<sup>60</sup> Novartis. "MalaFA - Malaria Futures for Africa Study." 2018. https://bit.ly/3shGqAm.

# **Continue to Develop Innovative Products**

Private sector organizations are leading the way in developing the next generation of vector control, diagnostic, and treatment tools that will accelerate efforts to eradicate malaria, and there are always opportunities for new product innovations across the disease cycle.

### **Prevention**

Bed nets remain the primary tool for effective malaria prevention and are most effective when treated with long-lasting insecticides. However, mosquito resistance to traditional insecticides is on the rise, indicating that new vector-control tools and approaches are needed to continue keeping communities in malaria-endemic regions safe.

Innovations in insecticides are a central part of the New Nets Project, an initiative co-financed by the Global Fund to Fight AIDS, Tuberculosis and Malaria and Unitaid, with technical support from the Innovative Vector Control Consortium (IVCC).61 Through the project, BASF, a chemical company, collaborated with the Bill and Melinda Gates Foundation and MedAccess to help build an evidence base for next-generation bed nets that are treated with two different types of insecticide to help combat resistance.62 The private sector has identified other approaches to addressing insecticide resistance: hybrid polymer and controlled release insecticide technologies that are under development,63 and new vector control techniques such as spatial repellentswhich recent research shows could drastically decrease infection rates.64,65

The private sector also has the opportunity to collaborate on innovative data-sharing and analysis approaches to beat insectic ide resistance. The WHO's Global Plan on Insecticide Resistance Management (GPIRM)<sup>66</sup> was launched in 2012 and highlighted the need for a global database on insecticide resistance records to coordinate



efforts from multiple actors. As a result, in recent years, there have been increases in innovations focusing on making malaria-related data more timely, accurate and available. For example, in 2015, Visualize No Malaria, a consortium of eight technology and services companies<sup>67</sup>, launched a campaign which enables health care workers to access accurate, reliable, real-time data to track emerging malaria transmission patterns.68 The initiative establishes new operational dashboards to assist district health personnel making critical decisions like ensuring bed nets are distributed when and where they are needed, homes are properly treated against mosquitoes during high risk periods, and malaria supplies are procured in sufficient quantity.<sup>69</sup> In Zambia, these efforts resulted in a 92 percent reduction in malaria-related deaths in the Southern Province

<sup>&</sup>lt;sup>61</sup> BASF. "The New Nets Project: Building a stronger line of defense against malaria." Accessed December 2020. https://bit.ly/2L5gHZs.

<sup>&</sup>lt;sup>62</sup> BASF, "BASF, MedAccess and the Bill & Melinda Gates Foundation collaborate to bring innovative mosquito nets to malaria-endemic countries." 8 October 2019. Accessed December 2020. https://on.basf.com/3518Tob.

<sup>63</sup> Sumitomo Chemical. "Olyset net." Accessed December 2020. https://bit.ly/33w14Av.

<sup>64</sup> SC Johnson spatial repellent innovation provides new potential solution for communities in malaria-endemic areas." Cision PR Newswire. 29 August 2019. https://prn.to/2DtXVqk.

<sup>65</sup> SC Johnson spatial repellent innovation provides new potential solution for communities in malaria-endemic areas." Cision PR Newswire. 29 August 2019. https://prn.to/2DtXVqk.

<sup>&</sup>lt;sup>56</sup> World Health Organization. "Global Plan for insecticide resistance management in malaria vectors." May 2012. https://bit.ly/2OZ9T0k.

<sup>&</sup>lt;sup>67</sup> PATH. "It helps to have friends in tech (unless you're a malaria parasite)." Accessed December 2020. https://bit.ly/2rysLeO.

Thorne J. "Seattle-area groups embrace data to curb malaria in sub-Saharan Africa." 25 April 2019. https://bit.ly/2L4yPT6.

<sup>&</sup>lt;sup>9</sup> Path. "Visualize No malaria." Accessed December 2020. https://bit.ly/33pHWnK.



between 2014 and 2017.<sup>70</sup> The initiative has also expanded to Senegal, where officials have seen a 60 percent reduction in malaria reports in Northern part of the country in only two years.<sup>71</sup> The program is set to expand its engagement in up to six sub-Saharan nations on the heels of a US\$4.3 million commitment from four of its member organizations.<sup>72</sup>

### **Diagnostics**

The private sector also plays a crucial role in developing the diagnostic tools of tomorrow. Companies are at work making diagnostic tests more sensitive, more accurate, and easier to use and transport. Further, several smaller companies have also recently entered the market, with innovative products that use blood, urine, light or body temperature to improve detection.<sup>73</sup>

Additional innovations in malaria diagnosis will speed elimination efforts by providing health systems and national malaria programs with a fuller picture of the disease landscape, and interrupt outbreaks before they start.

# MALARIA DIAGNOSTIC INNOVATIONS

In early 2016, Meridian Biosciences launched a molecular diagnostic test that allows for robust detection of malaria parasites in blood using amplified DNA. Unlike other tools, the test can be conducted at constant temperature, which makes for easier transport in the field.<sup>74</sup>

In 2014, Sight Diagnostics Ltd. launched an enhanced automated microscopy system that functions as a one-stop point of care. The technology leverages breakthrough hardware, machine vision and AI to provide doctors with an almost instant diagnosis of the disease.<sup>75</sup>

TermoTell<sup>76</sup>, a socially focused start-up, has designed an innovative bracelet and patch that helps diagnose malaria in children earlier by tracking changes in body temperature and sweat patterns. The company was among the finalists of UNICEF's Wearables for Good Challenge in 2015.<sup>77</sup>

UK-based biotech company QuantuMDX is designing a rapid diagnostic tool to help professionals detect the DNA of malaria parasites in blood samples.<sup>78</sup>

Alere, an Abbott-owned company, also recently launched a product that helps improve detection of HRP2 protein, which is present in higher levels in individuals with malaria.<sup>79</sup>

Path. "Visualize No malaria." Accessed December 2020. https://bit.ly/33pHWnK.

<sup>&</sup>lt;sup>71</sup> Thorne J. "Seattle-area groups embrace data to curb malaria in sub-Saharan Africa." 25 April 2019. https://bit.ly/2L4yPT6.

<sup>&</sup>lt;sup>72</sup> Tableau. "Visualize No Malaria crosses new frontiers in fight against disease." 25 April 2019. Accessed December 2020. https://tabsoft.

PATH. "Finding the final cases of malaria using more sensitive diagnostics." 30 August 2019. Accessed December 2020. https://bit.ly/34yvF1J.

<sup>&</sup>lt;sup>74</sup> Meridian Bioscience. "Platforms". Accessed December 2020. https://bit.ly/2Drl7FB.

<sup>75</sup> Sight. "Blood diagnostics, meet machine vision." Accessed December 2020. https://bit.ly/2Dpa3ZI.

<sup>&</sup>lt;sup>76</sup> TermoTell. Accessed December 2020. https://bit.ly/2QZ1EUN.

<sup>77</sup> UNICEF. "Meet UNICEF wearables finalists series: TermoTell." 10 November 2015. Accessed December 2020. https://uni.cf/3mJAPIf.

Fedor L. "Demand for good, rapid malaria tests outstrips supply." Financial Times. 17 April 2018. https://on.ft.com/20tx5Vs.

<sup>79</sup> PATH. "Finding the final cases of malaria using more sensitive diagnostics." 30 August 2019. Accessed December 2020. https://bit.ly/34yvF1J.

### **Treatment**

The private sector is also driving innovation to more effectively and efficiently combat the disease in another critical area: treatment. There is a need for treatments that are able to cure drug-resistant infections and better address the needs of pediatric patients. Further, the private sector has identified opportunities to streamline treatment regimens by addressing the disease using fewer doses of medication helping with treatment adherance.

Many of the tools being used in today's fight against malaria — such as insecticide-treated mosquito nets, indoor residual spraying, and artemisinin-based treatments — were developed in the last century and have begun to diminish in efficacy as drug- and insecticide-resistance spreads. With promising new diagnostics, medications, insecticides and vector control approaches under development, the private sector has an important role to play in both developing new tools, educating policymakers, health systems and end users with the end goal of facilitating successful intake and adoption of these lifesaving treatments.

# MALARIA TREATMENT INNOVATIONS

Novartis produces a fixed-dose artemisinin-based combination therapy (ACT), a malaria treatment that has become the standard of care for the majority of malaria cases. The company is also leading two malaria treatment development programs, one of which could potentially be effective against infections resistant to currently available antimalarial drugs.<sup>80</sup>

In 2018, the U.S. Food and Drug Administration (FDA) approved the first single-dose medicine to prevent the relapse of P. vivax malaria, the result of a decades-long development effort led by GSK, in collaboration with the not-for-profit drug research organization Medicines for Malaria Venture (MMV).<sup>81</sup> In November 2020, the partners presented positive data in children from 6 months up to 15 years of age.<sup>82</sup>

Sanofi contributes to ACT accessibility through policy level mandates by working public organizations (such as governments, NGOs, and international funders). The price, set by Sanofi and by the Drugs for Neglected Diseases initiative (DNDi) is less than one dollar to treat an adult, and 50 cents to treat a child. This price has become the standard reference price for new antimalarial drugs.

Sanofi and Medicines for Malaria Venture are developing a fixed-dose combination of antimalarials independent of artemisinin, currently in Phase II clinical trials. As of November 2019, the study met the criteria for efficacy.<sup>83</sup> They also committed to develop a primaquine-type medication suitable for pediatric populations.

China's Fosun Pharma has been a leader in developing innovative anti-malaria drugs. Recently, the company has been distributing WHO PQ-certified artesunate products to Zambia and has also developed injectable artesunate to treat severe cases of malaria.<sup>84, 85</sup>

Novartis. "Malaria treatment." Accessed December 2020. https://bit.ly/2QY5tcS.

<sup>81</sup> GSK. "US FDA approves Krintafel (tafenoquine) for the radical cure of P. vivax malaria." 20 July 2018. Accessed December 2020. https://bit.lv/20tYα2α.

<sup>&</sup>lt;sup>82</sup> "GSK and MMV present positive data on treatment for Plasmodium vivax malaria in children from 6 months up to 15 years of age." Accessed December 2020. https://bit.ly/3hkT1Py.

U.S: National Library of Medicine. ClinicalTrials.gov. "To Evaluate the Efficacy of a Single Dose Regimen of Ferroquine and Artefenomel in Adults and Children With Uncomplicated Plasmodium Falciparum Malaria (FALCI)". November 2019. http://bit.ly/2RilGs0.

<sup>&</sup>lt;sup>84</sup> "Fosun Pharma, unremitting efforts to eliminate malaria." Asia One. 23 August 2018. https://bit.ly/2qW7uvu.

<sup>&</sup>lt;sup>85</sup> Fosun Pharma. "Expedite the pace of eliminating malaria Fosun Pharma donates antimalarial medicines to Zambia Ministry of Health." Accessed December 2020. https://bit.ly/20V2Wxh.

# Provide Catalytic Contributions to Close the Funding Gap

Data from a forthcoming WHO report shows that if funding were secured to support scaling up malaria interventions to 90 percent of the population in the 29 countries that accounted for 95 percent of the global burden in 2016, an additional 2 billion cases, and 4 million deaths, would be prevented.<sup>86</sup> Unfortunately, the global community is far from meeting malaria funding targets set by the WHO—in 2016, malaria spending totaled US\$4.3 billion globally, falling short of the US\$6.6 billion target.<sup>87</sup> The private sector has a role to play in closing the financing gap.

Corporations can make catalytic investments in innovative funding models, and companies can make direct financial contributions to non-governmental organizations and multinational institutions implementing malaria programs. These commitments can help offset projected losses and prevent the disease from spreading. They are also a great way for companies to demonstrate their commitment to eradicating the disease.

Businesses can also help close the funding gap by embracing innovative financing models, several of which have been piloted and adopted in recent years.88 For example, Malaria to Zero created a private sector catalytic fund to allocate resources to areas most directly impacted by the funding gap. The initiative currently involves 15 private sector organizations including Aliko Dangote Foundation, Stanbic IBTC Plc., Zenith Bank Plc., GSK, Etisalat and Huawei Technologies Plc, all of whom signed a joint commitment declaration towards mobilizing resources towards the effort.89, 90 The initiative leverages the voluntary solidarity contribution model, in which consumers or businesses donate a small percentage of sales, or direct monetary

or in-kind contributions, to an organization at the point of sale; several such initiatives have been successfully implemented in recent years. For instance, through the Product RED initiative in Singapore, some high-profile partners co-brand select products with a project logo, signifying that a portion of the profits from their sale will be donated to the Global Fund. As of September 2020, the campaign has contributed more than US\$650 million for the Global Fund's HIV/AIDS initiatives in Africa.

Another approach is impact bonds, through which governments or international donors pay back initial investors once specific malaria targets are met. 93 Under this model, funds raised would be distributed directly to organizations working on malaria interventions, with clear pay-for-performance metrics. 94 These bonds could also be an interesting mean by which existing donors are able to draw new donors into the fight. 95 Elimination bonds are yet another method that could yield favorable results. A variation of the pay-for-performance model, with these bonds, pay out to investors once a community or country completely eradicates the disease. 96

<sup>&</sup>lt;sup>86</sup> WHO Strategic Advisory Group on Malaria Eradication. "Malaria eradication: benefits, future scenarios and feasibility. Executive summary." August 2019. https://bit.ly/20V6K1x.

<sup>&</sup>lt;sup>87</sup> Institute for Health Metrics and Evaluation. "Global malaria spending \$2 billion short of WHO target, stifling progress toward eliminating disease." 24 April 2019. https://bit.ly/34wg5n3.

<sup>88</sup> https://www.financialexpress.com/opinion/innovative-financing-funding-progress-in-the-times-of-covid/2164262/

<sup>689</sup> GBCHealth. "World malaria day 2019 shines light on urgent need for continued investment." April 2019. Accessed December 2020. https://bit.ly/33siduJ.

<sup>90</sup> Access Bank 'Malaria to Zero' Initiative." GBC Health. April 2019. Accessed March 2021. https://bit.ly/20Ldu6j.

<sup>91</sup> Malaria To Zero. "HUAWEI, Access Bank and Private Sector Health Alliance of Nigeria Partner For Accelerated Impact To Tackle Malaria." Accessed January 2021. https://bit.ly/3qnn1NT.

<sup>&</sup>lt;sup>92</sup> The Global Fund. "(RED)". Accessed December 2019. https://bit.ly/3rh0d2J.

<sup>93</sup> Murray S. "Why it is hard to attract private capital to fight against malaria." Financial Times. 25 April 2019. https://on.ft.com/20xxlCY.

<sup>94</sup> Purdy M, Robinson M, Wei K, & Rublin D. "The economic case for combating malaria." November 2013. https://bit.ly/2soCaWw.

<sup>95</sup> Murray S. "Why it is hard to attract private capital to fight against malaria." Financial Times. 25 April 2019. https://on.ft.com/20xxlCY.

<sup>96</sup> Murray S. "Why it is hard to attract private capital to fight against malaria." Financial Times. 25 April 2019. https://on.ft.com/20xxlCY.

### **INSPIRATION FOR ACTION**

### **Catalytic Contributions**

Tata Trust seed-funded the India Health Fund, in collaboration with the Global Fund, to raise financial resources from the Indian private sector and apply them towards grants to organizations developing new scalable tools, technologies, products and systems to strengthen the fight against TB and malaria.<sup>97</sup>

ExxonMobil has already invested US\$160 million in the fight against malaria, distributing over 14 million bednets to date. In Kumasi, Ghana, ExxonMobil contributed US \$500,000 to help establish a malaria diagnostic laboratory at the HopeXChange Medical Center. The lab is the site of clinical studies for antimalarial drugs and a key resource for malaria diagnosis, treatment and prevention in the area. In the site of clinical studies for antimalarial drugs and a key resource for malaria diagnosis, treatment and prevention in the area.

Joining the ranks of companies making large pledges to malaria eradication efforts are pharmaceutical companies Novartis (US\$100M) and GSK (US\$250M+ through 2023).<sup>100</sup>

# Focus CSR Efforts on Global Health

Forward-looking companies have an opportunity to establish global health as a key priority in corporate citizenship - a recognition that a business has social, cultural and environmental responsibilities to the community in which it operate, as well as economic and financial ones to its shareholders or immediate stakeholders -and CSR efforts. Understanding how malaria affects business is imperative for all companies with operations and markets in malaria-endemic regions. Corporate leaders should strive to help their organizations and shareholders gain a better understanding of malaria's impacts across the value chain, and in collaboration with other organizations. Comprehensive scoping and research can help determine how malaria impacts each business both directly and indirectly, via employees, customers, partners, suppliers and other key stakeholders.

Further, corporate citizenship demands that organizations directly impacted by malaria educate employees about the dangers of the disease and ensure the availability of prevention and treatment resources. Corporations not directly impacted by malaria can still feel the effects of the broader and indirect impacts of malaria on their business sector and the global economy. Visionary leaders will ground their corporate strategy in an understanding of both central productivity drivers, and their responsibility to the communities in which they operate. Taking action on malaria is a powerful way for private sector actors to advance both of these considerations simultaneously.

<sup>97</sup> The Global Fund. "Private Sector Innovation Partners for the Global Fund's Sixth Replenishment." 9 October 2019. https://bit.ly/3axYpf9.

Anders M. Devex. "Leaders challenge Commonwealth countries to halve malaria cases by 2023." 17 April 2018. https://bit.ly/370t2L5.

<sup>&</sup>lt;sup>99</sup> Exxonmobil. "ExxonMobil Foundation provides support for leading edge malaria diagnostic laboratory in Ghana." 18 July 2011. Accessed December 2020. https://bwnews.pr/3hrE9iu.

<sup>100</sup> Anders M. Devex. "Leaders challenge Commonwealth countries to halve malaria cases by 2023." 17 April 2018. https://bit.ly/370t2L5.



## THE ROAD AHEAD

Engaging in the fight against malaria has yeiled and will continue to yield compounding returns for the private sector. Direct malaria programming and partnerships have the potential to cut operating costs through reduced absenteeism and healthcare expenditures, while simultaneously boosting consumer spending power in malaria-endemic communities. Further, as businesses continue to grow in relevance, credibility, and influence on the global health stage as a result of continued social responsibility and shared value commitments, private sector organizations will be even better positioned to leverage their political capital and influence to help advocate for policies that can support malaria initiatives. Some of this work is already underway: in July 2020, the Coca-Cola company, in conjunction with 14 other private sector organizations (including BAAM members Vestergaard, Sanofi, and Novartis), sent a letter urging U.S. Congressional leaders to sustain funding for Sub-Saharan African healthcare programs to ensure continuity of services for infectious diseases during the pandemic.<sup>101</sup> That same month, Ecobank announced a new malaria initiative to help improve domestic resource mobilization in 30 African countries.<sup>102</sup>

Though the global community has a long way to go to end malaria for good, private sector players have reason to be encouraged by the potential gains associated with engaging in the fight. Companies from a wide range of sectors, including those organizations less directly impacted by the disease, will have a crucial role to play. By learning from the private sector's historical efforts in the malaria space, new players will be able to better leverage their assets, expertise and available resources to tackle discrete challenges in the malaria space, develop essential and transformative diagnostic, prevention and treatment tools, and successfully form public-private partnerships to further improve delivery of core malaria services.

<sup>101</sup> Friends of the Global Fund. "Private sector calls for global action on pandemic in next supplemental appropriation." https://bit.ly/38Lx8WT.

<sup>102 &</sup>quot;Ecobank launches a program to eradicate malaria in 30 African countries." Togo First. 6 July 2020. https://bit.ly/3qmDouL.

# **Case Studies**

# Forward-Looking Companies Drive Progress Against Malaria

Below we offer examples of companies — from six critical sectors — that have excelled in their efforts to mitigate malaria's impact on their employees, stakeholders, partners and communities.

# **Banking and Insurance**

The banking and insurance industries in malariaendemic countries are impacted by the disease in several of the most common ways — direct and indirect healthcare costs, lost productivity due to employee absence, and loss of employee effectiveness. Malaria also impacts employees' families. When young people suffer from infection, they miss school and their working parents are often the primary caretaker, leading to further absenteeism and lost productivity.

The direct economic and productivity costs can take a significant financial toll on industry. According to research by the University of Ghana and the Ghana Health Service, in 2014 malaria cost the financial services sector in Ghana US\$1.4 million, the third highest burden of any sector in the country.<sup>103</sup>

Moreover, the insurance industry suffers when malaria-related claims rise. Malaria-related missed work and medical claims represent a significant proportion of filed insurance claims in malaria-endemic countries. There is potential for insurance companies to offer financial incentives for certain interventions and advocate for increased awareness in endemic regions in order to reap the financial benefits from reducing the number of malaria-related claims being filed.<sup>104</sup>

Banks and insurance companies have more direct access to individuals, which makes them a valuable ally in the fight against malaria. With thousands of customers and employees and branches in both urban and rural areas, banks can easily leverage their physical and digital tools to educate people at risk of malaria in the communities in which they operate, which can help reduce cost burdens on businesses and employees and minimize the productivity loss due to the disease.

One of Africa's leading financial services organizations, Standard Bank, has implemented a malaria prevention strategy in partnership with the United Against Malaria campaign. Recognizing the impact malaria has on the bank's business, its employees and their families - absentee rates of one to five days per malaria episode, equaling approximately US\$6 million in a year - Standard provides each staff member with mosquito nets<sup>105</sup> and publishes educational materials on its company portal. 106 To mark World Malaria Day, the company partnered with Nando's and MTN to promote the United Against Malaria bracelet campaign and raised money for the Global Fund. 107 The bank has also partnered with soccer stars and celebrities to help recognize the day and raise the profile of United Against Malaria's work. 108

Nonvignon J, Aryeetey GC, Malm KL, Agyemang SA, Aubyn VNA, Peprah NY, Bart-Plange CN, & Aikins M. "Economic burden of malaria on businesses in Ghana: a case for private sector investment in malaria control." https://bit.ly/20Xgzfn.

<sup>&</sup>lt;sup>104</sup> RBM Partnership to End Malaria. "Vector-control working group: Potential topics for the multisectoral working group." 20 August 2018. https://bit.lv/34B1VkA.

<sup>105 &</sup>quot;Stanbic pledges more support to anti-malaria drive." Daily News. 25 April 2012. https://bit.ly/37HXnee.

<sup>&</sup>lt;sup>106</sup> Standard Bank Group. "Join the fight against malaria." 16 April 2010. https://bit.ly/34xidv5.

<sup>107</sup> Voices for a Malaria-Free Future. "Case Studies: Standard Bank." Accessed December 2020. https://bit.ly/2qWpZzV.

<sup>108</sup> Standard Bank Group. "Standard Bank Group gets behind the Orange Africa Cup of Nations, South Africa 2013." 25 October 2012. Accessed December 2020. https://bit.ly/3a7SwFU.



Another Ghanian bank, Access Bank of Ghana, hosted an educational seminar on workplace policies for HIV/AIDS, TB, and malaria for small-and medium-size businesses. The seminar provided advice and ideas for establishing effective health policies around the diseases to improve the wellbeing of staff, reduce disease instances and improve business productivity and profitability. The Access Bank seminar was provided to 130 businesses from various sectors across the country.<sup>109</sup>

### **Telecommunications**

The telecommunications sector, which faces many of the typical challenges associated with malaria, has a unique established infrastructure from which to spread information and increase knowledge and awareness of the disease in atrisk areas.

Like other industries, telecom businesses and employees in malaria-endemic countries are impacted by increased healthcare costs from malaria incidents, including lost revenue, lower levels of productivity, and diminished effectiveness due to employee absenteeism. In the telecommunications industry specifically, positions like equipment operators, maintenance

teams or technicians in the field may face heightened risk of exposure to malaria-infected mosquitoes.

Due to their service offerings and expansive communications infrastructure, telecommunications companies are able to easily spread malaria education and prevention information to millions of customers and employees without significant burden to business.

Successful initiatives using the communications power of the industry are already underway in several countries.

The MTN Group, a telecommunications services provider operating in 21 countries in Africa, Asia and the Middle East, used an internal employee awareness campaign to educate 34,000 employees at risk of malaria. The company distributed information about malaria and prevention strategies, and enlisted employee volunteers to distribute 28,000 mosquito nets in their communities.<sup>110</sup>

 $<sup>^{109} \ \</sup> A frica\ Health.\ "Malaria\ investments: corporate\ social\ responsibility\ at\ the\ national\ level."\ May\ 2014.\ https://bit.ly/2qVpeHe.$ 

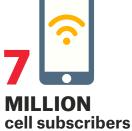
<sup>110</sup> Voices for a Malaria-Free Future. "Case Studies: MTN." Accessed December 2020. https://bit.ly/20x68Aj.

# UNITED AGAINST MALARIA partnered with MTN UGANDA

LAUNCH a country-wide SMS CAMPAIGN

The company sent EDUCATIONAL TEXT MESSAGES to

raised money from



20,000





800
MOSOUITO NETS

for pediatric and maternal wards in an at-risk region of Uganda



Additionally, United Against Malaria partnered with MTN Uganda to launch a country-wide SMS campaign. Taking advantage of the expansive reach of the MTN network, the company sent educational text messages to 7 million cell subscribers and raised money from 20,000 respondents. The funds were used to purchase 800 mosquito nets for pediatric and maternal wards in an at-risk region of Uganda. In Zanzibar and Tanzania, researchers are using mobile phone data to study human movement, a major contributing factor to the spread of malaria from one location to another.



# Food, Beverages, Retail and Consumer Goods

Direct and indirect healthcare costs, lost productivity due to employee absence, and loss of employee effectiveness also affect the food, beverages and consumer goods and retail sectors. With access to broad networks of stores, distributors, employees and customers, food, beverage and consumer goods companies are able to utilize brand promotion and advertising campaigns to directly influence billions of consumers around the world, providing them with unique opportunities to communicate messages about malaria prevention, diagnosis, management and treatment initiatives or to raise funds for existing campaigns. Fever-Tree Mixers used its online presence to raise money for the Malaria No More charity, contributing US\$5 each time a customer shared a photo including a

John Hopkins Center for Communication Programs. "Ugandans fight malaria with cell phones." 31 July 2011. Accessed December 2020. https://bit.ly/2XYFzqM.

<sup>112 &</sup>quot;Mobile phone data help contain human spread of malaria." Financial Times. 25 April 2016. https://on.ft.com/2rB8F3y.



drink and a specific tagline.<sup>113</sup> The retail industry indirectly impacts millions of customers in both urban and rural areas via large distribution networks and therefore has the potential to make a big impact in the fight against malaria.

Additionally, the consumer goods and retail industries manufacture and market some of the key mosquito repellant and malaria treatment products like bed nets and insecticides, offering another avenue for industry action. Existing distribution networks provide the opportunity to disperse large quantities of repellant, protection and treatment products without significant logistical or financial burden, helping to keep treatments available and affordable.

Successful initiatives led by businesses in these sectors are already underway. In Southeast Asia, leading e-commerce retailer Shopee is a partner of M2030, which seeks to end malaria in the Greater Mekong Subregion and Indonesia by 2030. Shopee is using its expansive platform and millions of users to raise awareness about malaria via an interactive game, and is investing in the M2030 initiative by contributing US\$1 for every US\$1 spent on goods in the M2030 capsule collection developed by the company. Shopee raised US\$30,000 as a result of its malaria campaign that ran between May and July 2019.<sup>114</sup> Major alcohol producer Nigerian Breweries launched its Workplace Malaria Program in 2003 to cut back the lost productivity and absenteeism the company had experienced due to malaria. Under the program, Nigerian Breweries provides health education and awareness programming, supplies a monthly provision of insecticides and four long lasting bed nets for use by employees and their families, and keeps diagnostic tools on hand at each brewery, promising prompt treatment of any confirmed malaria cases. Over the past three years the business has seen a 10% reduction in absenteeism from malaria, a significant drop in total malaria cases for employees and dependents, and a significant lowering of total man-hours lost due to malariarelated hospital treatments.<sup>115</sup>

Unilever has initiated workplace programs providing education, preventive care and treatment to employees on all of their agricultural plantations in Africa, as it recognizes that alleviating the malaria burden can improve local economies, therefore opening up for a broader range of choices for current and future customers. 116

In partnership with United Against Malaria, Manzi Valley, a Zambian beverage company with a 60 percent share of the national bottled mineral water market, increases awareness by incorporating conversations about malaria into the company's weekly radio programming, which reaches hundreds of thousands of listeners per week.<sup>117</sup>

<sup>113 &</sup>quot;Fever-Tree mixers launches social media campaign to benefit Malaria No More." Bevnet. 22 April 2019. https://bit.ly/2P0OALQ.

Asia Pacific Leaders Malaria Alliance. "Shopee unveils second phase of its partnership with MR2030." 25 April 2019. https://bit.ly/2Dx52y0.

<sup>115</sup> GBCHealth & Corporate Alliance of Malaria in Africa. "2018 Case Studies: Corporate Action on Malaria: Best Practices and Guidance." https://bit.ly/34AYbja.

<sup>&</sup>lt;sup>116</sup> World Economic Forum. "Harnessing Private Sector Capabilities to Meet Public Needs: The Potential of Partnerships to Advance Progress on Hunger, Malaria and Basic Education." January 2006. https://bit.ly/2MYAFZi.

<sup>117</sup> Voices for a Malaria-Free Future. "Case Studies: Manzi Valley." Accessed December 2020. https://bit.ly/2Y6p7VG.

# Agriculture, Water and Industrials

In Sub-Saharan Africa, as much of 70 percent of the population lives in rural areas where residents depend on farming as a major food resource. The nature of outdoor work that makes up much of the employment in the agriculture, water, and industrial industries creates a heightened risk of exposure to malaria for employees or subsistence farmers. Moreover, several common practices, such as irrigation and deforestation for farming, can impact the natural environment in a way that increases the local mosquito population. 119

Malaria infections can lead to lost productivity and revenue for agriculture, water, and industrial businesses, and limit the ability of subsistence farmers to tend to the crops that feed themselves and their families. As the adverse impacts associated with malaria can threaten food security, a long-running development concern in Africa, companies working in these sectors must take measures to ensure agriculture and water services are operating independently and effectively.

As malaria is a disease driven by water, the water resources industry has a major stake in eradication and prevention efforts. Employees working on water resource projects, like irrigation systems, dams, or reservoirs can face high risk of malaria transmission. Many malaria endemic-countries are also in need of increased investments to help support water-related infrastructure programs, including improvements to irrigation and potable water systems.

Other industry-related concerns include the risks that mosquito control efforts (pesticides, insecticides) could harm food and water resources and that agricultural pesticides could reduce the effectiveness of insecticides, thereby contributing to increased resistance in some malaria-endemic areas.<sup>120</sup>

Businesses in these industries have a unique connection with rural populations and can conduct malaria-education outreach that extends to some of the most at-risk areas. The Igara Growers Tea Factory in Uganda distributes bed nets to its employees. In the Rift Valley of Ethiopia, sugar producers "rigorously modify the

# **Boosted Productivity at Said Salim Bakhresa & Co.**

Salim Bakhresa & Co., a flour company based in Tanzania, successfully implemented a MALARIA INITIATIVE targeted at REDUCING ABSENTEEISM among its

6,000 EMPLOYEES



The initiative caused malaria-related ABSENCES TO DROP by

80%

and the resulting INCREASE IN PRODUCTIVITY



# allowed Said Salim Bakhresa to recoup their initial investment in just one year.

Malaria Safe. "Said Salim Bakhresa & Co. Case Study." 2013. https://bit.ly/2Dow9vn

landscape in the vicinity of their operations and apply residual insecticides to the homes of their workers" to protect employees and their families from the risk of malaria in the region. As a result of these measures, infection is rare. <sup>121</sup>

Said Salim Bakhresa & Co., an East African flour mill based in Tanzania, initiated a malaria treatment and prevention program to educate and protect its 6,000 workers. Through the initiative, the company provided mosquito nets to its over 6,000 employees, made rapid diagnostic tests and medicines accessible at its clinics and modernized the company malaria protocols. The program caused malaria-related absences to drop by 80 percent, increased productivity in

Van Vark C. "Agriculture's impact on malaria." The Guardian. 13 June 2013. https://bit.ly/2L3jS3O.

GBCHealth. "Linkages between malaria and agriculture." March 2012. Accessed December 2020. https://bit.ly/34B5oj6.

<sup>120</sup> RBM Partnership to End Malaria. "Vector-control working group: Potential topics for the multisectoral working group." 20 August 2018. https://bit.lv/34B1VkA

<sup>121</sup> Spielman A, Weerasuriya S, Malaney P, Kiszewski A, Willis D, Pollack R, & Teklehaimanot A. "industrial anti-malaria policies." 2002. https://bit.ly/37Rq9Jk.

factories and reduced malaria-related treatment costs by two-thirds. In only one year, the company recouped their investment through productivity gains.<sup>122</sup>

Volta River Estates, a Ghanaian fair-trade banana farming and exporting company, initiated in 2007 a program in partnership with the Asuogyaman District Malaria Advocacy Team (DMAT) to train select staff members to be malaria peer educators and promote malaria prevention education in plantation communities. Volta River Estates also purchased and distributed 900 LLINs for its workers and trained the company's clinic staff to treat cases of malaria. The initiative helped reduce monthly absenteeism by 65 percent. 123

In Zambia, a collaboration between the government and Konkola Copper Mines (KCM), Mopani Copper Mines, and Zambia Sugar for indoor-residual spraying resulted in positive returns on investment for the companies. The success of the program is due in part to the three-ones approach: one coordinating mechanism; one implementation plan, and one monitoring plan. 124

# **Energy and Extractive Industries**

Malaria uniquely impacts the energy and extractive sectors, as the nature of the work creates favorable conditions for malaria parasites to develop and the industry's subcontracted sourcing model poses considerable challenges to prevention and education efforts.

The employees of oil and gas companies, which have extensive operations in some of the most malaria-affected countries throughout West Africa and Asia, have a substantially higher risk of contracting the disease. Industry-wide labor sourcing practices are a key reason why the effectiveness of education and prevention initiatives is limited. Many workers are hired via contractors and subcontractors, which means that the companies themselves are not responsible for offering education and healthcare programs for workers. This is a particularly significant issue for upstream (exploration and production) and midstream (transportation, storage, wholesale marketing) projects where

contractors and subcontractors make up a significant proportion of the workforce.

Traveling and expatriate employees also present a challenge. Workers that travel from non-endemic regions can be particularly vulnerable due to lower natural immunity to the disease or lack of adequate awareness and preparedness in a new area. Traveling workers also raise the risk of exporting malaria to other places.

The nature of much of the work in the oil and gas industry is an additional risk factor. Construction of pipelines, construction at onshore drilling sites, and regular operations at often-remote project locations heightens the risk of environmental changes such as standing water that can result in an increase in local mosquito populations.

Companies in energy and extractive industries have, however, demonstrated success in implementing initiatives to help their employees navigate challenges in malaria-endemic countries. One such program is the Bioko Island Malaria Control Project (BIMCP), a public-private campaign led by Marathon Oil, Noble Energy, AMPCO and the Government of Equatorial Guinea, along with several implementation partners. The four-year, public health initiative came about after Marathon Oil noticed considerable absentee and productivity issues linked to malaria. Key initiatives include spraying community-based education programs and partnerships with contracting companies to improve awareness and access to prevention resources. Working with expert academic and development implementation partners, the project developed guidelines, training materials, and job aides for health personnel and community groups to improve vulnerable care-seeking behavior among populations and speed up diagnosis and treatment of the disease. Expert stakeholders also developed strategic communications and messaging materials to broadcast educational information, collect and record data, and implement the proper prevention strategies and treatments at each location. Between 2014 and 2018, BIMCP successfully reduced mosquito populations, including the elimination of one of the three main malaria vector species, greatly reduced infection rates, and strengthened surveillance and management programs. 125

Malaria Safe. "Said Salim Bakhresa & Co. Case Study." 2013. https://bit.ly/2Dow9vn.

<sup>&</sup>lt;sup>123</sup> Volta River. "Strategy for malaria control." April 2012. https://bit.ly/33yhzMv.

<sup>124</sup> Kamuliwo M, Steketee R W, Macdonald M B, Babaniyi O, & Mukonka V M. "An Overview of the Malaria Control Programme in Zambia." November 2012. https://bit.ly/3rgjh18.

<sup>&</sup>lt;sup>125</sup> Medical Care Development International. "Malaria control and elimination: Bioko Island malaria control project (BIMCP) phase III." Accessed December 2020. https://bit.ly/20xQkgB.

In the Philippines, the Pilipinas Shell Foundation received a consolidated malaria grant from the Global Fund. The Foundation worked with the Department of Health, local government units, and NGOs to distribute LLINs, spray cans, microscopes, to conduct indoor residual spraying and train health workers. In total, Pilipinas Shell Foundation was able to engage 66 partners, consisting of NGOs, faith-based organizations, media, academe, military and people's organizations who have contributed in enhancing program implementation particularly in the far flung villages and tribal communities, and helped establish the Philippine Movement Against Malaria. As a result, in 2010, malaria cases had decreased up to 63% and deaths by up to 92.7%.126

In Malaysia, a partnership between the Malaysian Malaria Control Programme (MCP) and private palm oil, rubber and acacia plantations in the state of Sabah demonstrate that consistent communication, developing government-staffed subsector offices for malaria control on-site, engaging commercial plantations to provide financial and human resources for malaria control activities, and the development of new worker screening programs were the key to success. Similarly to extractive industries, plantation and timber activities can contribute to malaria resurgence and incidence as they hire workers from outside the region.<sup>127</sup>

During the first two years that aluminum smelter company BHP Billiton operated in Mozambique, the company reported 6,000 malaria cases, which included 300 medical evacuations and 13 fatalities, and incurred US\$ 2.7 million in malaria-related costs. The company partnered with the Lubombo Spatial Development Initiative to help reduce malaria infections from 625 cases per 1,000 people to fewer than 200 cases per 1,000 in the Maputo Province of Mozambique. In addition to savings resulting from reduced absenteeism and healthcare costs, the initiative's success helped secure two grants worth US\$ 47 million from the Global Fund for the Regional Control of Malaria.<sup>128</sup>

Golden Star Resources Limited, a gold mining company in Ghana, started implementing a malaria prevention strategy when it noticed that



absenteeism rates due to malaria continued to increase among its employees, and that despite large investments in malaria testing and treatment. Therefore, the company distributed insecticide-treated nets to staff, their dependents and surrounding communities, coupled to malaria prevention education and awareness activities, all contributing to the company's overall employee wellness strategy.<sup>129</sup>

Asanko Gold, another gold mining company operating in Ghana, calculated that the costs of treating cases of uncomplicated and complicated malaria was US19.00 and US\$37.69, respectively, and that lost productivity for eight hours of absenteeism for a junior staff was US\$25.00, and on average US\$75.00 for a senior staff. In

Rebueno-Trudeau M. Pilipinas Shell Foundation. "Shrinking the Map of Malaria thru Private-Public Partnerships.". July 2012. https://bit. lv/2MvCP2a.

<sup>&</sup>lt;sup>127</sup> Sanders K C, Rundi C, Jelip J, Rashman Y, Gueye C S, & Gosling R D. "Eliminating malaria in Malaysia: the role of partnerships between the public and commercial sectors in Sabah." 2014. https://bit.ly/3oN01Xt.

Jones R T, Tusting L S, Smith H M P, Segbaya S, Macdonald M B, Bangs M J, & Logan J G. "The Role of the Private Sector in Supporting Malaria Control in Resource Development Settings." December 2020. https://bit.ly/3a9RwBJ.

<sup>129</sup> Private Sector Malaria Prevention. "Case Study: Golden Star Resources Limited." 2017. https://bit.ly/3pO4pXH.



January 2018, the company joined the network of Malaria Safe partners to receive implementation support for its malaria control strategy and purchased 2,000 insecticide-treated nets for its employees. 130

Another example is The Sociéte d'Exploitation des Mines d'Or de Sadiola gold mine in the Kayes region of Mali, which benefited tremendously from a 70% reduction in malaria cases within 2 years of reinstating IRS in their malaria vector control program. Spraying was part of a community-based drive, which also included a partnership for the distribution of bed nets, sponsored by the President's Malaria Initiative, to reduce mortality and morbidity amongst mine employees and their dependents, and to improve health in the surrounding villages.<sup>131</sup>

A malaria control program was initiated by AngloGold Ashanti (AGA) in Ghana in 2006 after the company recognized malaria as a threat to the company's operations in the country. By 2012, it had reduced malaria cases in the Obuasi mine area by about 75%, well above the 50% target set in 2006, thanks to indoor-residual spraying and education and awareness raising activities. Figures show that the number of malaria cases among employees fell from more than 7000 to almost zero between 2005-2015, malaria incidence rate per 100 employees fell from 23.8 to 1.04 over the same period, and that the work time lost due to malaria fell to zero altogether. 132

Large extraction and other industrial companies have excellent logistics and networking capabilities, sufficient monetary resources, advanced systems in healthcare and public health, and the ability to develop close, long-term national and international relationships. Further, their often remote locations, the immediate resources available to them, and their relationships with surrounding communities allow these companies to respond quickly and appropriately to malaria and other disease outbreaks and install preventative measures in a timely and effective manner.

Looking ahead, subcontracting, which has traditionally complicated efforts to successfully implement workplace initiatives, could also become an opportunity for the industry. By conducting short, targeted malaria education programs and working directly with contractors to ensure information is passed on to downstream hires, companies can ensure greater accountability across projects and provide crucial information to a mobile and transitory workforce. As the energy sector is highly consolidated, there is also an opportunity for more coordinated, industry-wide initiatives that engage a range of stakeholders around common anti-malaria approaches.

<sup>&</sup>lt;sup>130</sup> Private Sector Malaria Prevention. "Case Study: Asanko Gold." 2017. https://bit.ly/3rhmRrK.

Wragge S E, Toure D, Coetzee M, Gilbert A, Christian R, Segoea G, Hunt R H, & Coetzee M. "Malaria control at a gold mine in Sadiola District, Mali, and impact on transmission over 10 years." December 2015. https://bit.ly/3oLwIKh.

<sup>&</sup>lt;sup>132</sup> African Natural Resources Center, African Development Bank. "AGA malaria and public private partnerships in Ghana's health sector to obtain value from extractives projects," 2016. https://bit.ly/3tCca5k.

# Aviation, Travel and Hospitality

The aviation, travel and hospitality sectors are greatly impacted by high healthcare costs, decreased productivity, and increased absenteeism resulting from malaria. The disease also exacerbates labor challenges in these sectors, as malaria-stricken workers regularly need to be replaced.

Another challenge for the aviation, travel and hospitality sectors is the high-touch nature of the business that puts employees in constant contact with people from all over the world. Whether or not a business operates in a malaria-endemic country, travelers and tourists coming from areas with a risk of malaria infection put industry employees at heightened risk.

Additionally, the threat of malaria or other infectious diseases can substantially decrease revenues generated through tourism. In one study analyzing the impact of infectious diseases on tourism, countries with malaria risks were found to receive 48% less inbound tourists. 133

Conversely, eradicating malaria would help boost tourism-related revenues at the country-level. According to one estimate, the eradication of diseases like dengue, Ebola, malaria, and yellow fever in affected countries would increase global tourism by 10 million people and tourism expenditures by US\$12 billion. Another study estimated that malaria eradication, however, would increase tourism in impacted countries by an average of 19.8%, generating an additional US\$3.5 billion in revenues.

In recent years, Azalaï Hotels Group, a network of 3 and 4 star hotels throughout West Africa, have implemented important initiatives to combat the disease. In 2008, the company unveiled a program to give each of its 250 employees two long-lasting insecticide-treated nets (LLINs), which they plan to replace every three years. Headquartered in Mali, one of the most malaria-endemic countries in Africa, Azalai recognized the cost of replacing and training new employees to fill open roles left by malaria-stricken workers was higher and more burdensome on the

business than the cost of providing employees with nets. Since implementation, worker infection rates have dropped from 750 cases per year to almost zero in three locations in the capital city of Bamako. The initiative's success has encouraged company leaders to investigate further malaria prevention programs at locations in Burkina Faso, Guinee Bissau and Benin. In partnership with United Against Malaria, the hotel chain also made mosquito nets, coils and spray available to any customer who requests them and have trained staff on site to administer the latest WHO approved medicines. 136

Providing information and safety programs for travelers is essential to maintaining a healthy tourism industry in malaria-endemic areas. Hospitality organizations with branches in malaria-affected countries can put in place coordinated malaria prevention programs. We could imagine, for example, that they could set up "challenges" for their different locations to motivate the creation and uptake of employee-focused malaria programs. Given their constant contact with customers from around the world, hotels also have the unique opportunity to spread messages about malaria prevention to a high number of mobile people, maximizing the effectiveness of these initiatives.

Increased sector-wide engagement, through more widespread adoption of employee education and treatment programs, will improve productivity, lessen overall turnover, reduce the costs associated with replacing workers and limit expenditures for treating sick employees.<sup>137</sup>

Rossello J, Santana-Gallego M, & Awan W. "Infectious disease risk and international tourism demand." Health Policy and Planning. https://bit.ly/33th8CZ.

Rossello J, Santana-Gallego M, & Awan W. "Infectious disease risk and international tourism demand." Health Policy and Planning. https://bit.

Jaume Rossello, Maria Santana-Gallego, Waqas Awan, "Infectious disease risk and international tourism demand"; Health Policy and Planning; 2017 https://europepmc.org/article/med/28104695

Voices for a Malaria-Free Future. "United against malaria — case study on Azalai Hotels Group." January 2012. https://bit.ly/34HXGEd.

<sup>137</sup> Voices for a Malaria-Free Future. "United against malaria — case study on Azalai Hotels Group." January 2012. https://bit.ly/34HXGEd.

# **Company Case Studies**

### COMPANY

### **SANOFI**

Sanofi is a global healthcare company with more than 100,000 employees committed to preventing diseases and treating people around the world.

#### **PROGRAM OVERVIEW**

Sanofi's Schoolchildren against Malaria, MOSKi Kit, and Moski Toon programs are education and behavior change initiatives aimed at providing young children with knowledge, tools, and resources to become well-informed about the dangers of malaria and strategies for prevention and treatment.

In partnership with National Malaria Control Programmes and ministries of education in 17 sub-Saharan African countries, Sanofi has developed engaging resources for teachers to educate their students.

The MOSKI Kit and MOSKI Toon programs are interactive educational tools for children. MOSKI Kits are physical toolkits with "edutainment" resources about malaria and various techniques aimed at teaching children key messages and helping them remember important points. The kits include educational games, playing cards, picture books, and more to increase children's understanding of the disease. Similarly, the Moski Toon is an educational cartoon published on YouTube that shows a young boy educating his cousin about methods of managing and preventing malaria.



# POPULATION FOCUS

Schoolchildren in sub-Saharan Africa aged approximately 7-12 years old.



### **WHY MALARIA**

Sanofi Global Health is dedicated to collaborating on initiatives to provide sustainable solutions to unmet medical needs of people in low- and middle-income countries including malaria. Children are the primary victims of malaria - one of the leading causes of death for children under age 5 in Africa. If they are educated on the threat of the disease, they can also be important advocates for peers and the next generation.

### **RESULTS**

More than 330,000 schoolchildren in 17 sub-Saharan African countries have been exposed to the Schoolchildren against Malaria, MOSKI Kit and Moski Toon educational resources. In 2016, the MOSKI Kit was recognized as the Most Valuable Patient Initiative or Service Award at the eyeforpharma Barcelona Awards. One study of the Moski Toon program in Cote d'Ivoire and Kenya found children exposed to the cartoon had a higher level of knowledge and were likely to change their behaviors and encourage relatives to change behaviors about the disease.<sup>140</sup>

sanofi. "For a malaria free world, Sanofi's commitment continues through innovative educational program." September 2015. https://bit. lv/2gNmFat.

<sup>139</sup> Sanofi. "Malaria: Children at the heart of prevention strategy." 25 April 208. Accessed December 2020. https://bit.ly/33yisVI.

<sup>&</sup>lt;sup>140</sup> "Sanofi's 'MOSKI Kit' wins the 'Most valuable patient initiative or service' at eyeforpharma Barcelona Awards 2016." EyeForPharma. 16 March 2016. https://bit.ly/2R6iiBR.

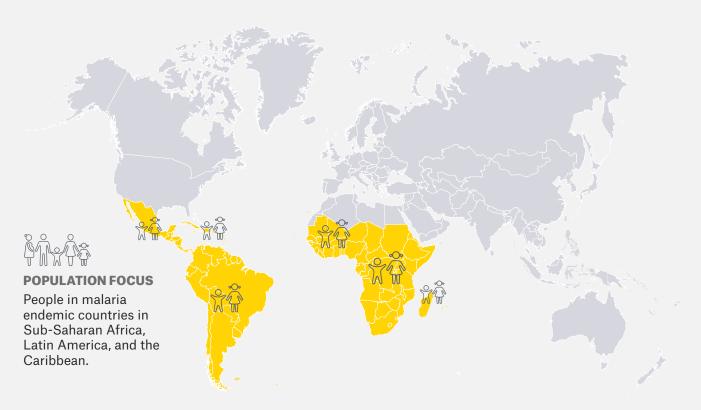
#### COMPANY

# SUMITOMO CHEMICAL

Employing over 30,000 employees, Sumitomo Chemical is one of the largest chemical companies in the world. The company is headquartered in Japan.

#### **PROGRAM OVERVIEW**

In 2015, Sumitomo Chemical and the United Nations Foundation's Nothing But Nets campaign initiated a three-year commitment as part of the United Nations 'Every Woman Every Child' initiative to protect women, children, refugees and vulnerable, marginalized populations from malaria. Since then, this partnership has allowed Nothing But Nets to increase its reach and impact, providing 2.3M bed nets and other life-saving tools to protect 4.6M men, women, and children to ensure that the most vulnerable people are not left behind. For the duration of the three-year partnership, nets were distributed through UN agency partners to families throughout Africa, as well as marginalized populations in Haiti, the Dominican Republic, and other areas throughout the Americas.<sup>141</sup>



### **WHY MALARIA**

Since Sumitomo Chemical developed Olyset Net - the first long-lasting bednet to gain WHO recommendation, in 2002 - it has introduced a full suite of innovative vector control tools to fight malaria and has pledged to continue to innovate new tools until malaria is ultimately eradicated.<sup>142</sup>

### **RESULTS**

Sumitomo has supplied approximately 2.3 million lifesaving bed nets, and additional contributions that will protect an additional 1.2 million people at risk of malaria. According to Nothing but Nets, widespread use of bed nets has contributed to saving an estimated 6.8 million lives since 2000. 144

<sup>&</sup>lt;sup>141</sup> Nothing But Nets. "Nothing But Nets expands work to end malaria in Latin America and the Caribbean with major commitment from Sumitomo Chemical." 13 February 2018. Accessed December 2020. https://bit.ly/3mHkvBw.

<sup>142</sup> Harvard Kennedy School. "Sumitomo Chemical and the Fight Against Malaria Using Bednets A CASE STUDY". 2013. https://bit.ly/3wTPi2Q

<sup>143</sup> Nothing But Nets. "Nothing But Nets expands work to end malaria in Latin America and the Caribbean with major commitment from Sumitomo Chemical." 13 February 2018. Accessed December 2020. https://bit.ly/3mHkvBw.

<sup>&</sup>lt;sup>144</sup> Nothing But Nets. "We're winning the fight to defeat malaria." Accessed December 2020. https://bit.ly/34yOaDd.

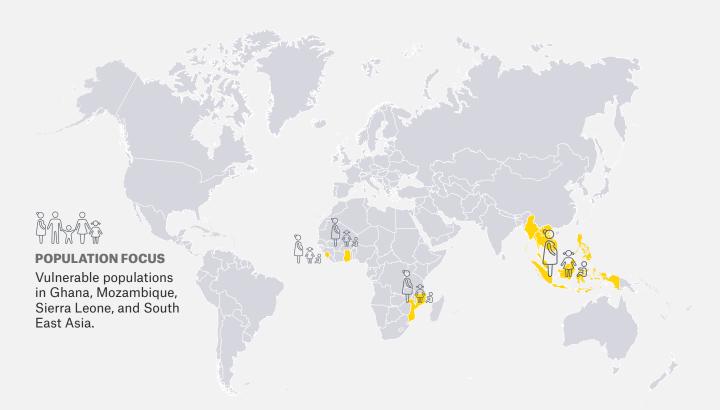
### **COMPANY**

### **GSK**

GSK is a leading global healthcare company dedicated to the research, development, and manufacture of innovative pharmaceuticals, vaccines, and consumer healthcare products.

#### **PROGRAM OVERVIEW**

In 2016, GSK partnered with UK charity Comic Relief to establish locally-based programs to combat malaria and strengthen healthcare systems. Between 2016 and 2021, GSK will contribute £17 million and Comic Relief will contribute £5m to the campaign. The partnership focuses on several high-need countries - Ghana, Mozambique, Sierra Leone, and the Greater Mekong Subregion. Funds are used in coordination with local partners to: improve health outcomes of people living in the focus countries; strengthen health systems in focus countries, particularly as it relates to malaria; and to collect and communicate compelling stories that inspire global action on malaria.



### **WHY MALARIA**

For over 30 years, GSK has been engaged in the research and development of effective responses to malaria. The GSK malaria vaccine is being piloted in Ghana, Malawi and Kenya in partnership with the WHO and PATH.<sup>145</sup>

### **RESULTS**

To date, the GSK-Comic Relief Partnership has reached more than 5 million people, in addition to more than 500,000 children under the age of five, has trained 2,700 health workers on malaria interventions in different geographies and more than 2,000 health service providers on data reporting, and that despite the COVID-19 crisis. The partnership has also captured compelling stories from local programs that help inspire others in the fight against malaria. These stories are occasionally published on the Comic Relief website.<sup>146</sup>

<sup>&</sup>lt;sup>145</sup> WHO. "Malaria vaccine pilot launched in Malawi." Accessed December 2020. https://bit.ly/3pwwMJb.

<sup>&</sup>lt;sup>146</sup> GSK. "The Comic Relief GSK Partnership: Protecting progress towards malaria eradication and universal health coverage through the COVID-19 pandemic." December 2020. https://bit.ly/3nWvLKh.



### **About BAAM**

The Business Alliance Against Malaria is the world's leading business voice on malaria. BAAM was launched in July 2018 alongside the First Malaria World Congress in Melbourne, Australia, during a launch event that welcomed key players from the public, private, and NGO sectors. Formerly known as the Private Sector Malaria Coalition (PSMC), BAAM has a long history of engagement with the world's foremost policymakers and influencers, such as the RBM Partnership to End Malaria and the Global Fund to Fight HIV, TB, and Malaria. BAAM serves as the only platform that unites companies across industries and continents to bring multi-sector expertise and strategic partnership to the fight a gainst malaria. A dditionally, BAAM has been recognized as the RBM Partnership's first official private sector partner. Together, BAAM members aim to shape global and regional policy, mobilize stakeholders, and bolster the work of those who share BAAM's vision of a malaria-free world.

### **List of BAAM Members**

Bayer

**GSK** 

International Public Health Advisors

Nando's

**Novartis** 

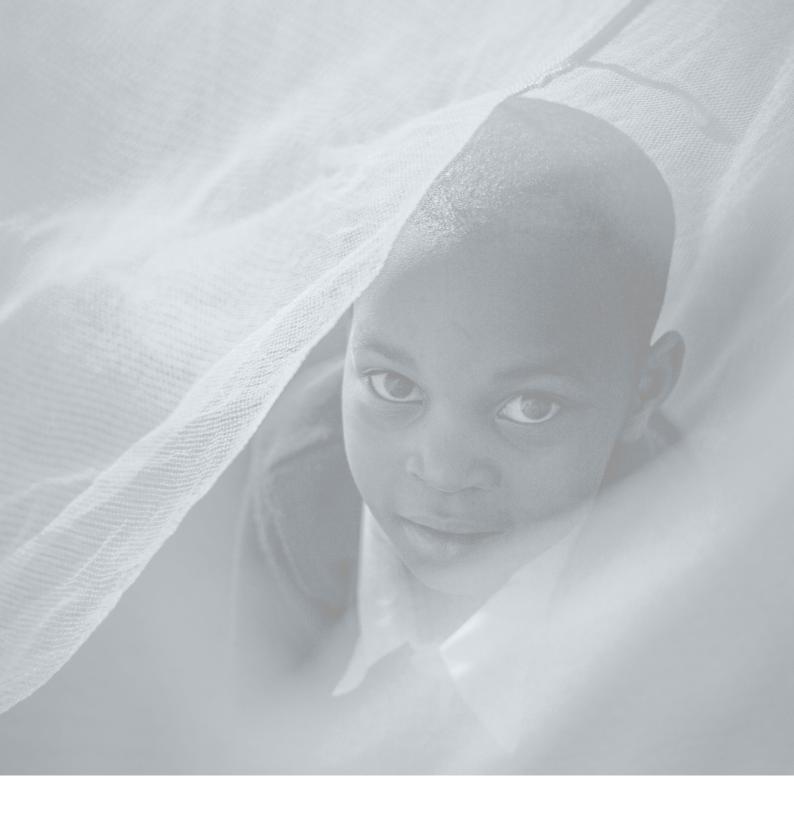
Sanofi

TropMed Pharma Consulting

Vestergaard

Powered by: High Lantern Group







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### malariabizalliance.org

