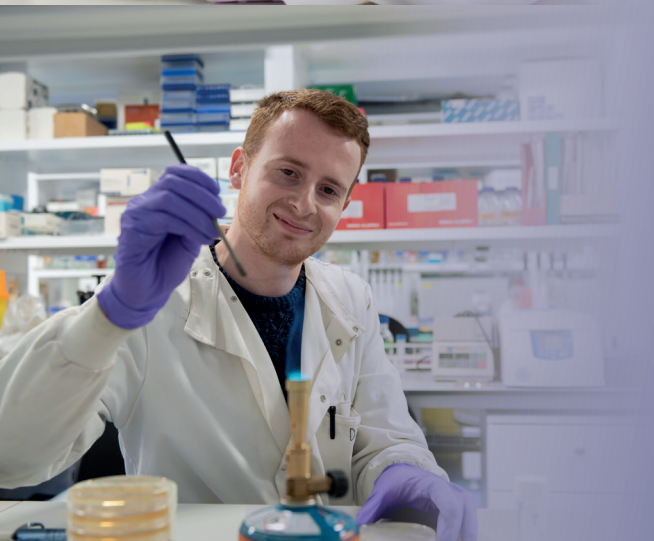


BRITAIN'S GOLDEN OPPORTUNITY:

THE UK'S ROLE IN ENDING THE MALARIA EPIDEMIC BY 2030

FINISH THE JOB

ZERO MALARIA | BRITAIN

CONTENTS

KEY FIGURES

ANALYSIS BY OXFORD ECONOMICS AFRICA HAS SHOWN THAT BY GETTING BACK ON TRACK TO MEET SUSTAINABLE DEVELOPMENT GOALS TARGET 3.3 FOR MALARIA, BETWEEN 2023 AND 2030 WE COULD SEE:

$126.9 BILLION
A BOOST TO THE GDP OF ALL MALARIA-ENDEMIC COUNTRIES IN AFRICA OF

$142.7 BILLION
A BOOST TO ALL MALARIA-ENDEMIC COUNTRIES' GDP GLOBALLY OF

$80.7 BILLION
A BOOST TO INTERNATIONAL TRADE OF
WITH THE UK'S EXPORTS TO KEY AFRICAN COUNTRIES INCREASING BY **$453 MILLION**

$3.9 BILLION
A BOOST TO G7 EXPORTS TO KEY AFRICAN COUNTRIES OF

ANALYSIS BY OXFORD ECONOMICS AFRICA ON MALARIA RESEARCH AND DEVELOPMENT (R&D) FUNDING HAS SHOWN:

$604 MILLION
IN 2022,
WAS INVESTED IN MALARIA RESEARCH AND DEVELOPMENT

$103 MILLION
SINCE 2019, THE PROPORTION OF GLOBAL HEALTH RESEARCH AND DEVELOPMENT SPEND ON MALARIA HAS HALVED, REPRESENTING A FALL OF

2ND LARGEST
THE UK RANKS AS THE
FUNDER OF MALARIA RESEARCH AND DEVELOPMENT GLOBALLY

INTRODUCTION

Malaria remains a severe threat, especially in sub-Saharan Africa, where millions are at risk. While great progress has been made — the global death rate halved between 2000 and 2015,[1] and case incidence fell by 26%[2] — the fight is far from over. The numbers are alarming: case incidence rose from 231 million in 2015 to 249 million in 2022, with deaths climbing from 586,000 to over 608,000 during the same period.[3] Factors like climate change, conflict, drug and insecticide resistance, and the fallout from the COVID-19 pandemic are exacerbating the challenge. Yet, there's hope. Malaria has one of the strongest research and development (R&D) pipelines. With new vaccines and tools, such as next-generation bed nets, being deployed and many more potentially game-changing innovations on their way.

Excitingly, the UK has been at the heart of this innovation. Our research shows that for over a decade the UK has been the second largest contributor to malaria R&D globally. This is something that the British public are immensely proud of: Malaria No More UK's polling shows that 84% of British people think it is important that the UK continues its scientific research into fighting malaria.[4]

This year sees not one, but two British-backed malaria vaccines begin deployment to 22 countries, with 30 countries expressing interest.[5,6] The R21 vaccine from Oxford University's Jenner Institute, alongside GSK's RTS,S vaccine, are significant milestones. It is vital that these vaccines are given the best chances of success by being rolled out alongside other malaria control measures to maximise their impact and save as many lives as possible. This can only be achieved if The Global Fund to Fight AIDS, Tuberculosis and Malaria (The Global Fund) and Gavi The Vaccine Alliance (Gavi) are successfully replenished financially in 2024 and 2025. The UK's longstanding commitments to both The Global Fund and Gavi have been instrumental in driving the progress towards ending malaria. It is crucial that both organisations are successfully replenished to ensure continued support for malaria control efforts and the successful rollout of these life-saving vaccines.

Investing in ending malaria isn't just the right thing to do; it's also economically smart. It reduces healthcare costs and boosts output, helping affected nations and the global economy. Our latest research reveals that achieving the Sustainable Development Goals (SDGs) target of a 90% reduction in case incidence by 2030 could significantly boost the GDP of malaria-endemic countries by $142.7 bn. This will also have global benefits by increasing international trade by $80.7 bn including direct trade benefits for the UK of almost half a billion dollars. This underscores the economic benefits of ending malaria, not just for affected nations but for the global economy as a whole. Staying on the current trajectory not only costs the lives and wellbeing of millions, it leaves billions of dollars of economic progress unrealised.

There is a golden opportunity to realign our efforts towards achieving the global malaria targets by 2030. With a steadfast commitment from the UK Government for the Global Fund and Gavi and with continued investment and support of malaria R&D, we will not only save lives but also strengthen the world's resilience against future pandemics and boost economic growth. It's time to seize this opportunity, finish the job, and pave the way for a healthier, more secure future.

GEORGE'S STORY: MALARIA'S HUMAN TOLL

George Otieno is a father, fisherman and community leader for sanitation and environmental health, from a vibrant fishing village on the shore of lake Victoria in Kisumu county, Kenya. George knows first-hand the impact of malaria through the devastating effect on his family and wider community and what we have to gain by ending this disease. George shares:

"Malaria is a disease that is always affecting my family, year in year out. We have experienced very difficult times with my family, it's like a cycle from one child to another child. And even to the fishing community, there are many economic activities with fishing, and when you work is when you get your pay. So, when you are sick with malaria it means you are not going to work, you are not going to fish. It's a disease that's very dangerous to the fishing community.

It's important to advocate to end malaria, so it can give us the energy so we can build our economy. If you are a sick person, it means the economy will go down, but if you are healthy, it means the revenue we collect it will go up, because the fisherman and crews are working, the mothers are working and those doing related trading activities are also working, so if there is a way of stopping malaria, we would prefer if it could be stopped.

With zero malaria it means we can do a lot of things, our children will go to school, our fishermen will go to work, our farmers will go to the farm and those who are trading can do their business."

George Otieno
Fisherman, Kenya

ECONOMIC CASE FOR INVESTING IN MALARIA REDUCTION

METHODOLOGY

Investing in ending malaria isn't just a moral obligation — it's also a smart economic move. To quantify the potential impact of achieving the 2030 malaria targets, which involves a 90% reduction in case incidence compared to 2015 levels, Malaria No More UK commissioned Oxford Economics Africa (OEA). The methodology, detailed in the appendix, illustrates how each step contributes to the estimation of economic benefits at different levels — country, regional, and global.

Analysis by Sarma et al. (2019) found that a 10% decrease in malaria case incidence is associated with a 0.11 percentage point increase in annual GDP per capita growth.[7] The analysis combines these findings from Sarma et al. (2019) with case incidence projections over the 2023-2030 period using the latest World Health Organization data on case incidence. The research uses two scenarios - a 'baseline' scenario where case incidence maintains the rate of current trends, and an 'SDG achievement' scenario where case incidence steadily declines toward the 2030 targets. The difference in case incidence between the baseline and SDG scenarios when combined with the Sarma et al. (2019) findings provide an illustrative analysis of the potential boost to GDP if we were to meet the 2030 target for malaria. The results of this analysis are detailed in the following sections of this report.

To estimate the impact on trade, OEA extrapolated the impact on GDP to international trade, considering the economic outlooks of countries over the specified time frame. This process involves estimating how the boost to GDP translates into trade benefits, including both bilateral trade with select nations and trade with the 13 focus countries.[a] Detailed assumptions regarding trade impact can be found in the appendix, further explaining the methodology used to estimate economic gains by 2030.

BOOST TO GDP IN MALARIA-ENDEMIC COUNTRIES

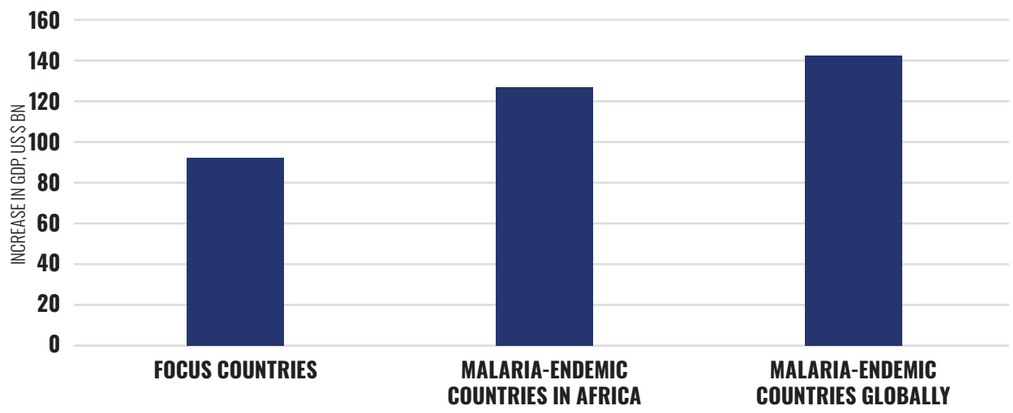
Malaria places a heavy economic toll on affected countries, stunting socioeconomic progress and perpetuating cycles of poverty. People who fall sick from malaria, overwhelmingly young children, require treatment and care. This is often paid for out-of-pocket, and increases the burden of unpaid care on carers (most often mothers), holding back their potential for economic engagement. Families who face catastrophic expenditure on treatment cannot invest in education or other methods of breaking the poverty cycle.

Through extrapolating the potential economic benefits of reducing malaria incidence, Oxford Economics Africa's analysis reveals the transformative impact of curbing malaria cases on GDP for endemic countries in Africa and globally.

The economic gains from malaria reduction efforts are substantial, particularly in Africa, where the projected GDP increase reaches the significant sum of $126.9 bn over the 2023-2030 period. This figure represents an overwhelming proportion of the potential gain for all malaria-endemic countries, comprising 88.9%. Across all malaria-endemic countries, the collective GDP increase is estimated at $142.7 bn, underscoring the widespread economic advantages of eliminating malaria. This data is illustrated in Figure 1.

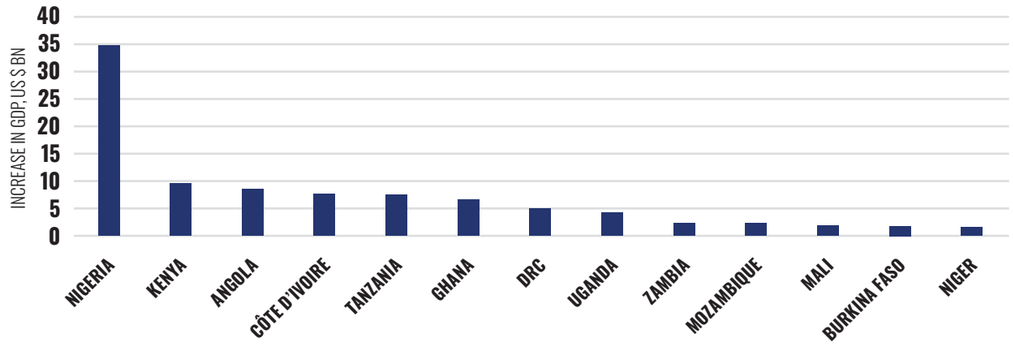
[a] The 13 focus countries refer to the ten countries most affected by malaria: Nigeria, the DRC, Uganda, Mozambique, Angola, Burkina Faso, Mali, Tanzania, Niger, and Côte d'Ivoire; and Ghana, Zambia, and Kenya.

FIGURE 1 - ESTIMATE INCREASE IN GDP FOR MALARIA-ENDEMIC COUNTRIES BETWEEN 2023-2030



The research shows the potential economic benefits at country-level for 13 malaria-endemic countries in Africa. For example, Zambia could receive a boost to GDP of approximately $2.2 bn and the Democratic Republic of Congo (DRC) could see a substantial GDP increase of $4.9 bn by 2030. Through tackling malaria, businesses in these countries, including those with a connection to Britain, could substantially benefit. Zambia Sugar and Fever-Tree are businesses that understand the importance of ending malaria for the health of their employees and the productivity of their operations.

FIGURE 2 - ESTIMATE INCREASE IN GDP FOR SELECTED "FOCUS" COUNTRIES, 2023-2030



ZAMBIA SUGAR

Zambia Sugar, a leading cane sugar producer in Africa under Associated British Foods, is dedicated to eradicating malaria. Operating from Mazabuka, Zambia, the company's commitment to eliminating malaria not only ensures a healthy workforce but also sets a precedent for successful business operations intertwined with community health initiatives.

Recognising the impact of malaria on productivity and sustainability, Zambia Sugar proactively addressed the challenge by implementing comprehensive control measures. Collaborating with local health authorities and NGOs, the company deployed sustainable interventions including biological control measures and malaria surveillance. Surveillance approaches range from malaria test and treat, delivered through community health workers and health facilities to active surveillance in the community targeting groups such as migrant workers and farm workers. These measures have resulted in improved productivity, reduced absenteeism, and lower healthcare costs for its workforce.

Additionally, surrounding communities benefited from enhanced health outcomes, leading to improved economic opportunities and social well-being. Zambia Sugar's malaria elimination programme demonstrates the transformative power of corporate social responsibility, emphasising the importance of integrating health initiatives into business strategies for sustainable development and shared prosperity.

FEVER-TREE

The fight against malaria has been foundational to Fever-Tree, spanning eleven years of partnership with Malaria No More UK. The quinine-producing cinchona tree, known colloquially as "the fever tree", has been hugely important in humanity's fight against malaria and is closely aligned to Fever-Tree's roots, given quinine's role as a key ingredient in tonic water. In addition, the quinine used in Fever-Tree's tonic water is sourced from the Democratic Republic of Congo (DRC), which is severely impacted by malaria and is one of this report's focus countries. The company's unwavering commitment to malaria eradication has been underscored over the years through a range of activities, from providing support to key events like the 2018 Malaria Summit London, to building consumer awareness through on-pack and social media campaigns as well as employees taking part in fundraising challenges.

Since 2023 Fever-Tree have been funding a campaign designed to support behaviour change efforts to inform, inspire, and protect communities living at risk from malaria in three target counties in Kenya.

As a responsible business Fever-Tree is committed to supporting the communities within their supply chain. They believe that by helping the goal to reduce the global threat of malaria and one day achieve a world free from this preventable treatable disease, they can play an important part in positively impacting the health and wellbeing of the communities that they touch.

FIGURE 3 - CUMULATIVE ECONOMIC GAINS DUE TO MALARIA CASE REDUCTION 2023-2030

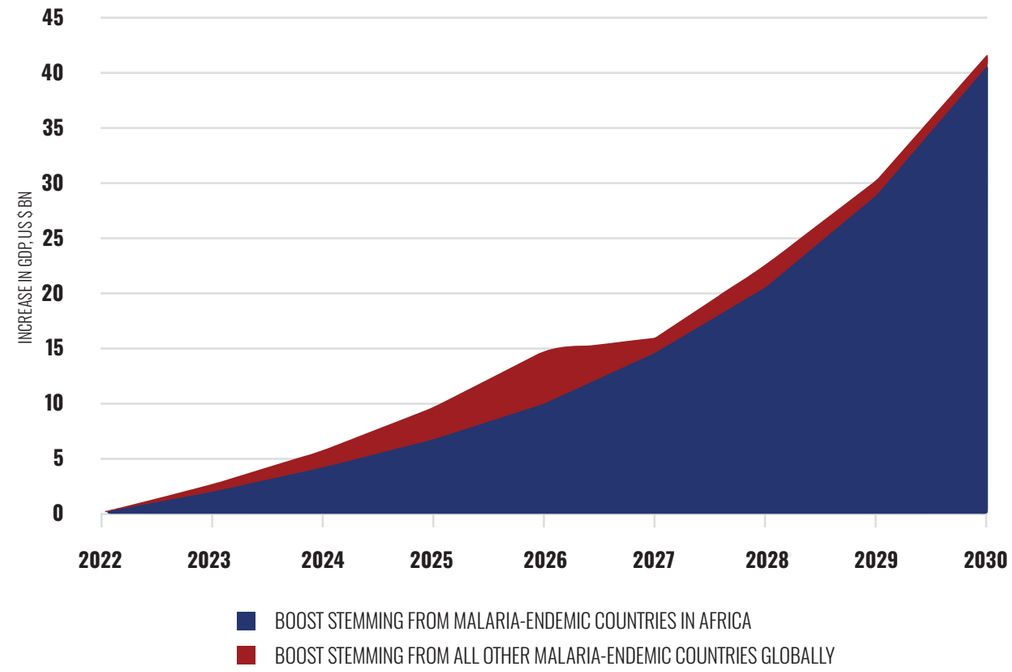
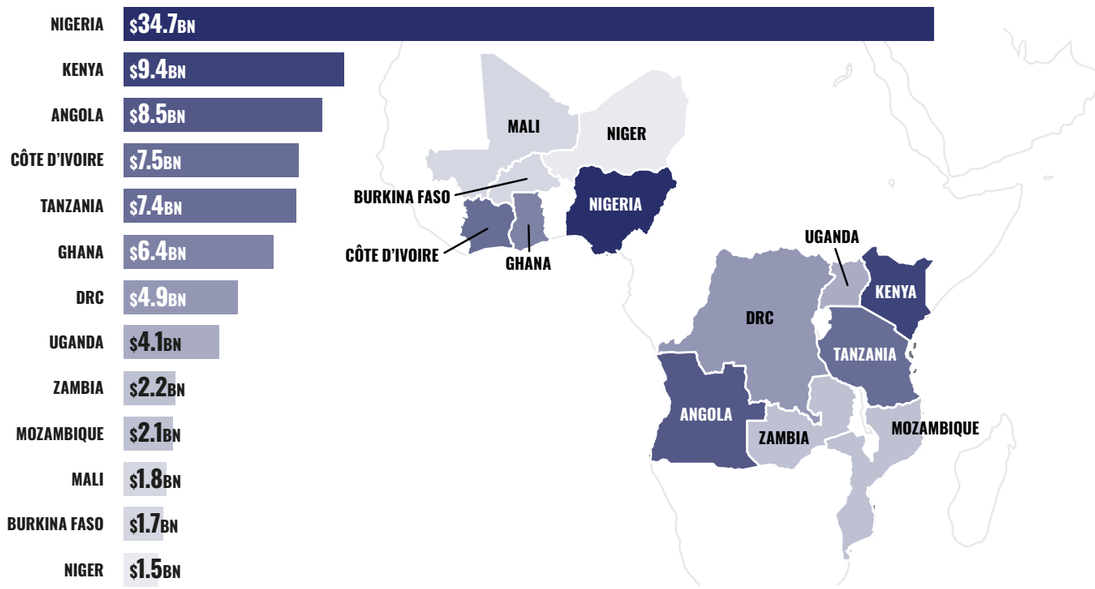


FIGURE 4 - CUMULATIVE ECONOMIC GAINS DUE TO MALARIA CASE REDUCTION 2023-2030 BY COUNTRY



BOOST TO GLOBAL AND UK TRADE

The economic advantages of ending malaria reach far beyond endemic regions, offering tangible opportunities for UK trade and investment. Malaria disproportionately impacts countries with emerging economies and high disease burdens, many of which are trading partners of the UK.

In addition to boosting GDP for malaria-endemic countries, international trade stands to receive a substantial lift, with an estimated increase of $80.7 bn between 2023 and 2030. This surge in trade is caused by increased economic demand, leading to a $31.7 bn increase in exports to African countries alone over the same period (39.3%). Notably, exports from the G7, UAE, Republic of Korea (ROK), and the rest of the European Union (EU) to the focus countries are projected to increase by $8.5 bn, with G7 exports alone contributing $3.9 bn to this growth. This surge in economic output not only fosters growth but also enhances living standards and unlocks human potential. Figure 5 illustrates where the UK may receive increased income through exports with this report's focus countries.

Our analysis reveals that over the period 2023-2030, exports from the UK to the focus countries could rise by $453 million if malaria elimination efforts are ramped up and the 2030 targets are achieved. This upsurge in trade reflects the potential for expanded market access, increased consumer purchasing power, and enhanced business prospects in malaria-endemic regions.

To capitalise on this golden opportunity, drive down the malaria burden and unlock these substantial economic benefits, it is imperative that the UK continues to support and invest in organisations such as the Global Fund and Gavi which deliver disease prevention programmes in partnership with the governments and communities of malaria-endemic countries in an efficient and cost-effective way. By investing in global health initiatives, we not only save lives but also foster economic growth and stability.

FIGURE 5 - ESTIMATE INCREASE IN VALUE OF EXPORTS FROM UK TO "FOCUS" COUNTRIES OVER 2023-2030 PERIOD

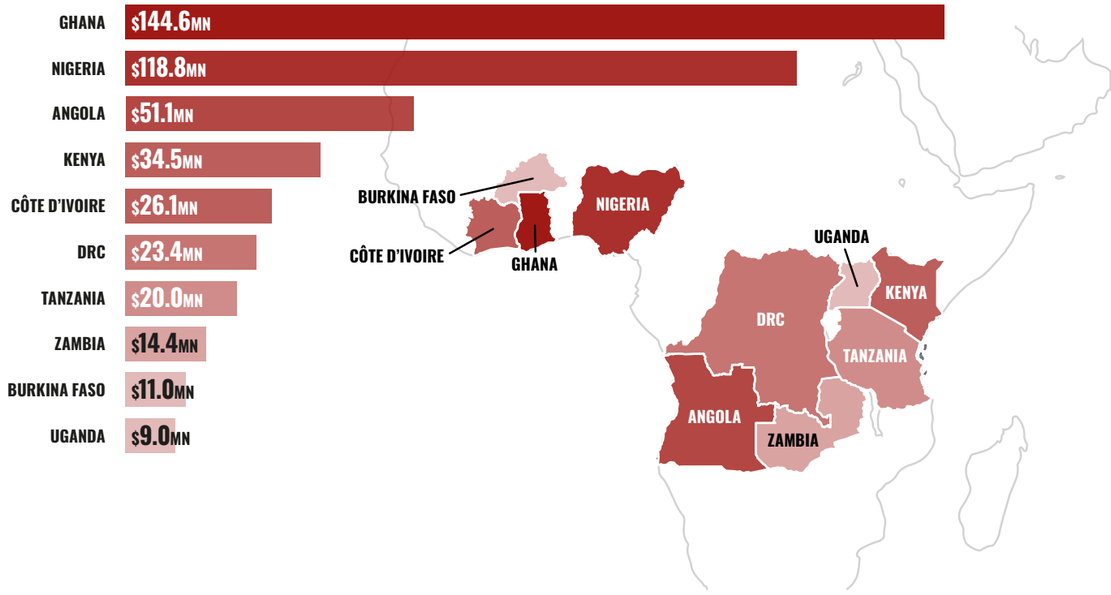
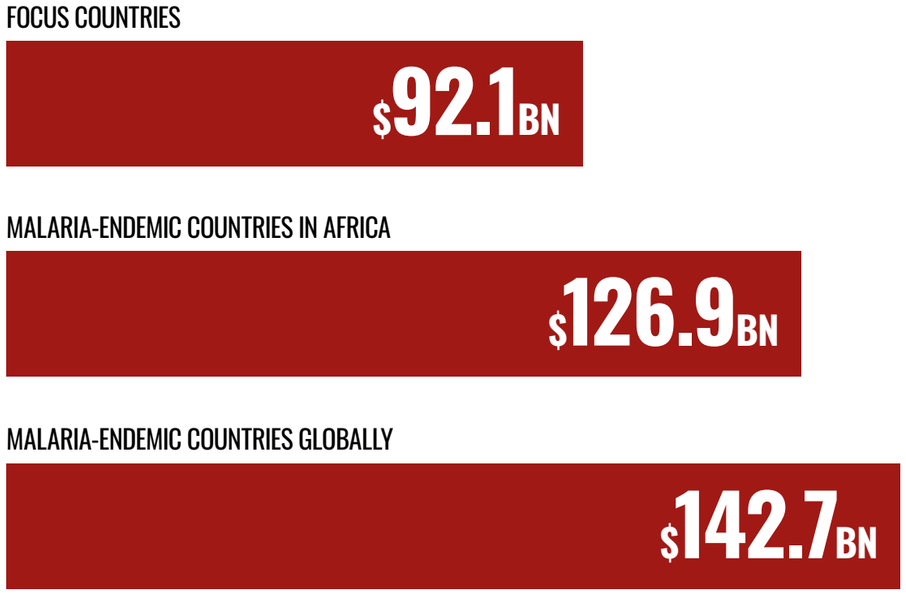


FIGURE 6 - ESTIMATE INCREASE IN GDP FOR MALARIA-ENDEMIC COUNTRIES BETWEEN 2023-2030



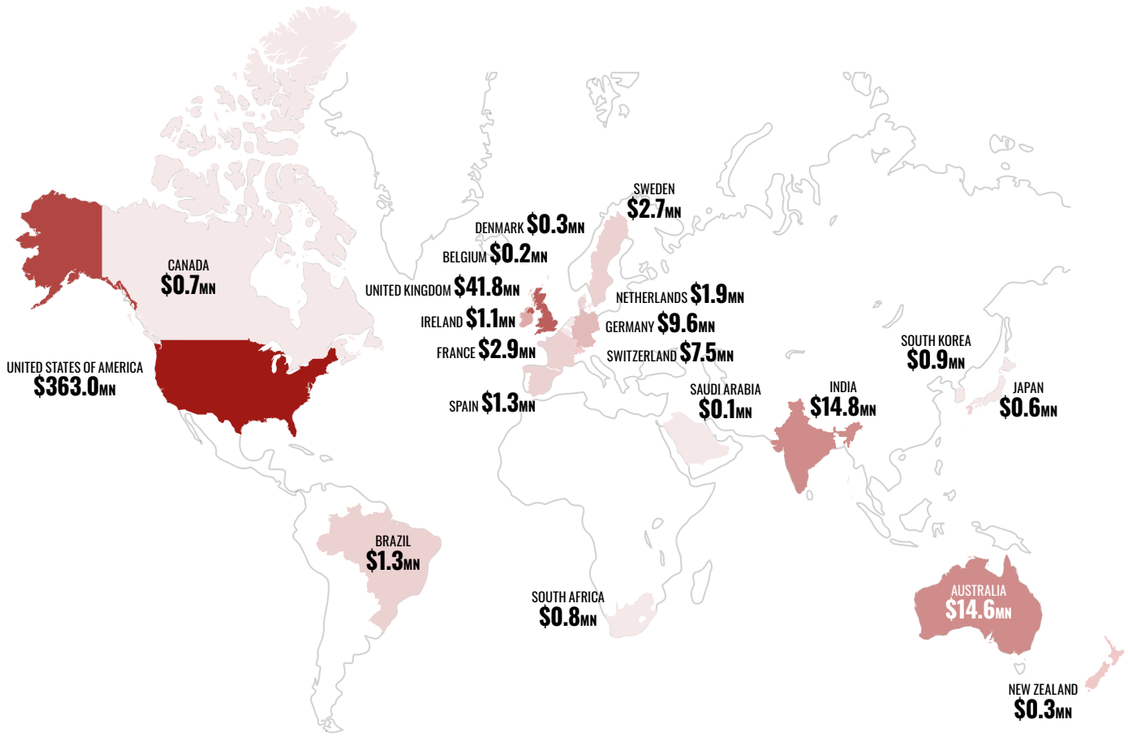
THE UK AS A LEADER IN MALARIA RESEARCH AND DEVELOPMENT

METHODOLOGY

Oxford Economics Africa analysed the G-FINDER survey, hosted by Policy Cures Research, to track investment trends in malaria R&D. The G-FINDER project primarily focuses on funding aimed at developing new tools to address global health challenges.[e]

Data from the survey, covering the period from 2007 to 2022, provides essential insights into British investments in malaria R&D. A breakdown of global funding, which includes UK contributions, may be found in Figure 7.

FIGURE 7 - RESEARCH AND DEVELOPMENT INVESTMENT BY COUNTRY (2022)



[e] The project ensures confidentiality of pharmaceutical data and employs rigorous validation processes, including inflation adjustments and currency conversions, to enhance data reliability. By relying on survey data, policymakers gain valuable information to guide British support for malaria research and development efforts.

PROPORTION OF MALARIA RESEARCH AND DEVELOPMENT FUNDING HALVED SINCE THE COVID-19 PANDEMIC

Malaria R&D is pivotal in advancing the tools and strategies essential for effectively combating the disease. However, in the wake of the notable surge in malaria cases and deaths during the COVID-19 pandemic, our analysis finds that the proportion of R&D funding for the disease has halved – from 12% to 6% – representing a fall of over $100mn in absolute terms. This underscores the urgent need for increased support from international aid and multilateral agencies. Despite these challenges, the UK remains the second-highest contributor to malaria R&D, reaffirming its dedication to scientific innovation and global health.

FIGURE 8 - FUNDING FOR MALARIA RESEARCH AND DEVELOPMENT GLOBALLY

THE UK REMAINS THE SECOND LARGEST CONTRIBUTOR TO MALARIA RESEARCH AND DEVELOPMENT

The UK stands at the forefront of the battle against malaria, wielding its scientific prowess, research infrastructure, and financial resources to drive forward innovation and progress. Malaria No More UK's research has found that the UK is the second-largest contributor to global malaria R&D after the United States. Leading the charge is the Foreign, Commonwealth & Development Office (FCDO), standing as the primary contributor and providing vital funding for research grants, collaborative projects, and global health partnerships.[8] Furthermore, contributions from philanthropic organisations, academic institutions, and private sector entities serve to enrich the UK's malaria R&D ecosystem.[9]

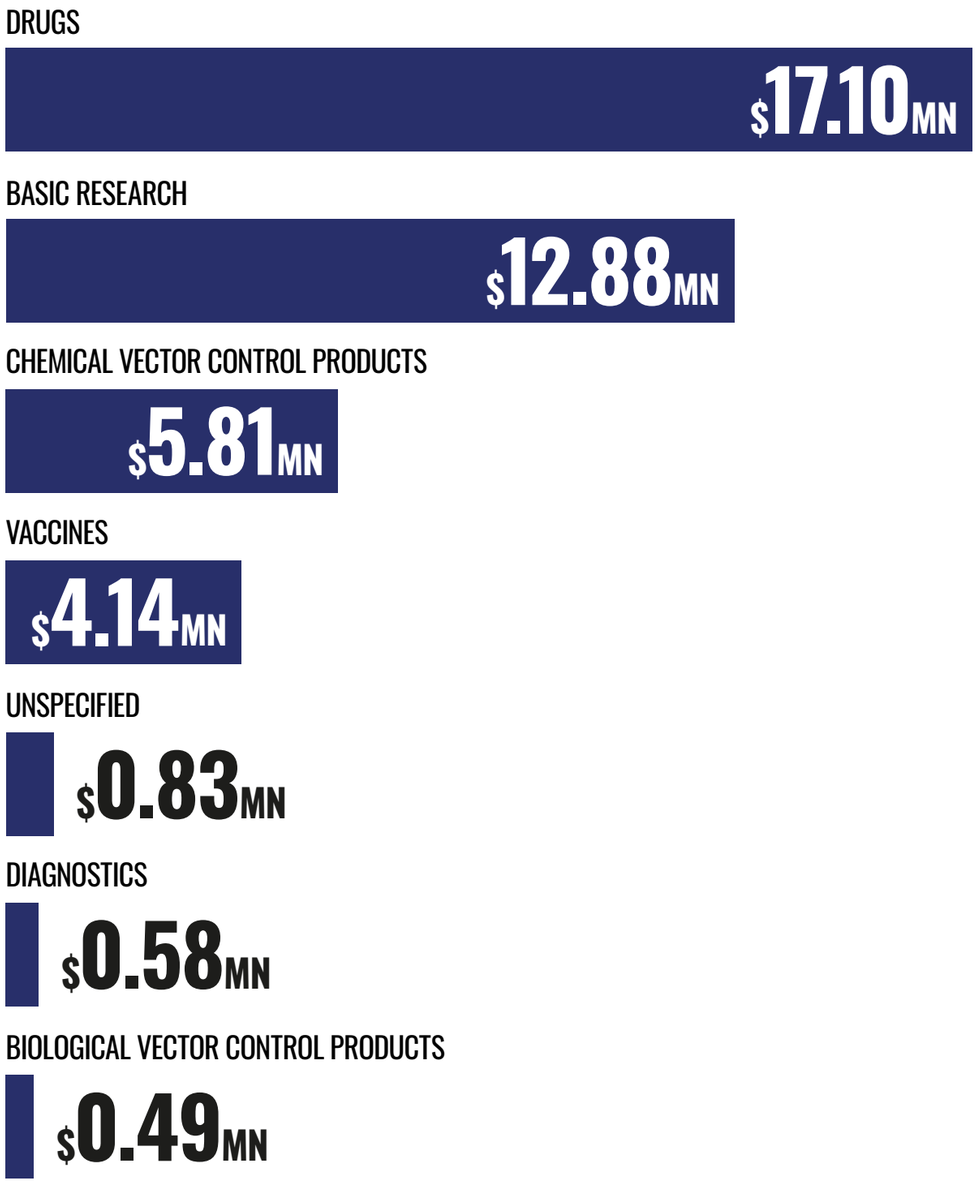
While UK funding for malaria R&D in 2022 saw a decline compared to 2007, following the global trend, investments from the FCDO have begun to increase once again. Additionally, philanthropic organisations, academic institutions, and private sector entities continue to play substantial roles in enriching the UK's malaria R&D landscape.[f] Notably, the UK not only stands as a major funder but also ranks as the second-largest recipient of malaria R&D funding, providing jobs and stimulating the economy. Investment in malaria R&D not only drives scientific progress but also benefits UK research institutions by expanding their expertise, global influence, and talent pool.

The role of the UK Government in fuelling innovative projects such as vaccine development, drug discovery, and vector control strategies is particularly important. By fostering public-private partnerships and funding organisations such as Innovative Vector Control Consortium (IVCC) and Medicines for Malaria Venture (MMV), the UK accelerates progress towards ending malaria. The UK occupies a pivotal position in supporting groundbreaking research projects, clinical trials, and capacity-building initiatives. Initiatives like IVCC-supported programmes bolster capacity-building by identifying key partners on the African continent to support in strengthening research facilities. Collaborations funded by UK Research & Innovation (UKRI) and the National Institute of Healthcare Research (NIHR) enhance research and diagnostic capacity across six African countries. The Malawi-Liverpool-Wellcome Trust Programme, funded by the Wellcome Trust, epitomises the UK's unwavering commitment to global health by addressing various health challenges and nurturing the next generation of research leaders in malaria-endemic regions.

The UK's steadfast commitment to malaria R&D, exemplified by its consistent support and innovative contributions, demonstrates its leadership in the global fight against malaria. However, it is crucial for the UK and governments worldwide to continue their support for vital organisations like The Global Fund and Gavi. By ensuring sufficient funding and resources, we can effectively translate British-backed innovations into tangible solutions that reach the most vulnerable communities affected by malaria, ultimately saving lives and driving us closer to a malaria-free future.

[f] This analysis excludes 'non-specified' funding sources, covering governmental and philanthropic sources but excluding pharmaceutical sources.

FIGURE 9 - AREAS OF RESEARCH AND DEVELOPMENT FUNDED BY THE UK (2022)



BRITISH-BACKED SCIENCE: THE MALARIA VACCINES

In a remarkable stride forward, recent breakthroughs in malaria vaccine research, have brought about the development and endorsement of two ground breaking vaccines: RTS,S and R21. The RTS,S vaccine, spearheaded by GSK, is the first ever malaria vaccine approved by WHO. The addition of the R21 vaccine in 2024, developed at the University of Oxford's Jenner Institute, will allow much wider reach of malaria vaccines.

Thomas Breuer, GSK Chief Global Health Officer, said: "The launch of RTS,S the world's first malaria vaccine for use in endemic countries, underscores how vital partnership and collaboration is in the global effort to achieve the 2030 SDG of reducing the number of cases and deaths caused by malaria. However, the toolbox of malaria vaccines and medicines needs further upgrades, as current tools will not be enough to conquer malaria. GSK will continue to invest in innovation and R&D to improve malaria prevention and treatment in children and vulnerable populations to support global eradication."

However, the journey towards malaria eradication doesn't end with vaccine development alone. These vaccines must be deployed alongside other essential tools and interventions for maximum impact.

Thanks to British innovation and global collaboration, the extraordinary potential of science in addressing some of the world's most pressing health challenges is being realised. As both malaria vaccines begin scalable rollout, their success relies on integration with other malaria tools and programmes.

IVCC'S NEW NETS PROJECT REVOLUTIONISES MALARIA PREVENTION[10]

The New Nets Project, funded by Unitaid and the Global Fund and led by the Innovative Vector Control Consortium (IVCC), has transformed malaria prevention in sub-Saharan Africa. Between 2019 and 2022, the initiative introduced 56 million state-of-the-art mosquito nets across 17 countries, mitigating malaria transmission and saving countless lives.

Facing rising resistance among Anopheles mosquitoes to conventional pyrethroid insecticides, the project piloted the use of dual-insecticide nets. These innovative nets, including BASF Interceptor® G2 ITNs and DCT's Royal Guard® nets, coated with novel insecticides such as chlorfenapyr and pyriproxyfen, proved highly effective in areas with insecticide resistance.

The deployment of these advanced nets averted an estimated 13 million malaria cases and 24,600 deaths. Clinical trials and pilot studies demonstrated a 20-50% improvement in malaria control compared to standard nets, leading to new WHO recommendations supporting their adoption.

Despite a slight increase in cost per case averted, the long-term financial savings to health systems amounted to a potential US$28.9 million, highlighting the cost-effectiveness of these advanced nets. Catalytic market-shaping efforts ensured equitable access to these life-saving tools, supported by partnerships with MedAccess, the Bill & Melinda Gates Foundation, and IVCC.

The success of the New Nets Project underscores the importance of continuous innovation and collaboration in the fight against malaria. As efforts to scale up the deployment of dual-insecticide nets continue, the project sets a precedent for delivering high-impact, cost-effective prevention tools to malaria-endemic regions, contributing significantly to global malaria eradication efforts.

TAFENOQUINE: A SINGLE-DOSE CURE AND AN ELIMINATION TOOL FOR MALARIA

Tafenoquine, a single-dose antimalarial drug developed through collaboration between Medicines for Malaria Venture (MMV) and GSK, stands as a significant breakthrough in the battle against malaria. In 2023 the governments of Brazil and Thailand became the first in the world to take the decision to incorporate the use of this new single-dose treatment for adults within their public health systems. Notably, Brazil also achieved another milestone by registering this impactful drug for use in children aged 2 years and above, weighing more than 10 kg, making it the first malaria-endemic country to do so. The dispersible 50mg tablet paediatric formulation of tafenoquine enables precise dosing and administration, thereby lightening the load on healthcare workers and ensuring children receive the correct dosage.

With its convenient single-dose regimen, tafenoquine emerges as a vital tool in preventing debilitating P. vivax malaria relapses, overcoming the adherence challenges patients faced with the current standard of care, which involves a 7- to 14-day treatment regimen. Its ability to provide a single-dose cure underscores the significance of public-private partnerships in driving scientific innovation and advancing global health initiatives. Through collaborative efforts and innovative approaches, tafenoquine represents a critical stride forward in the journey to eliminate malaria and save lives worldwide.

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

This year represents a golden opportunity for the malaria fight. British support and investment in the Global Fund and Gavi will not only save lives, but it will boost economic output and ensure that the British-backed scientific breakthroughs are not confined to laboratories but reach the most vulnerable populations in need of life-saving interventions.

The necessity of funding both the Global Fund and Gavi in tandem cannot be overstated. Their complementary roles in advancing malaria control strategies, particularly with the recent introduction of malaria vaccines, exemplify the urgent need for joint investment. The successful rollout of malaria vaccines in Africa relies on the funding of both organisations. To maximise their impact, these vaccines must be integrated into comprehensive malaria control programmes that encompass various interventions such as bed nets and community education initiatives. This united approach, facilitated by Gavi's procurement of vaccine doses and the Global Fund's support for malaria prevention and control measures, is essential to accelerate progress towards ending malaria and ultimately save lives.

Supporting malaria-endemic countries' economic growth not only strengthens affected communities but also creates increased trade prospects for the UK. By investing in the fight against malaria, the UK ensures that British-backed tools reach those who need them most, tackling poverty and enhancing global stability. Ultimately, British investments contribute to making the world a safer and more prosperous place for everyone, including the people of the UK. By addressing health disparities and promoting economic growth through the Global Fund and Gavi, the UK not only fulfils its moral duty but also safeguards its own economic interests in an interconnected world, paving the way for a future where malaria is but a distant memory.

RECOMMENDATIONS

As demonstrated by this report, the road to ending the malaria epidemic by 2030 is within reach with Britain's unwavering leadership. The recommendations below outline the UK's role in combatting malaria effectively over the next decade:

1. **Fully fund The Global Fund to end HIV, Tuberculosis and Malaria and Gavi, The Vaccine Alliance:** The UK Government should commit to fully financing both the Global Fund and Gavi. These organisations play indispensable roles in the fight against malaria, and their work must be fully supported to ensure effective malaria control and immunisation efforts reach those who need them most.
2. **Provide comprehensive funding to Product Development Partnerships through multi-year funding agreements:** Investing in these partnerships, such as with MMV and IVCC, is not just about funding; it's about nurturing international collaboration, sharing scientific expertise, and driving innovation to combat malaria on a global scale.
3. **Strengthen partnerships and collaborations:** Continue to forge strategic alliances between UK institutions, malaria-endemic countries, international organisations, and the private sector. By working together, we can maximise our impact, pool our resources, and accelerate progress towards ending malaria. It's time to unite and stand together in the fight against this deadly disease.

Now is the time for decisive action and unwavering commitment to ending malaria. By prioritising investments in the Global Fund, Gavi, MMV and IVCC, the UK can lead the charge towards a malaria-free future and fulfil its commitment to global health equity and solidarity. Together, we can build a world where no one suffers or dies from malaria, and every individual has the opportunity to thrive and prosper.

ACKNOWLEDGEMENTS

We would like to express our gratitude to all the individuals, organisations, and partners we at Malaria No More UK work with. Their dedication, expertise, and unwavering commitment to the fight against malaria are invaluable and inspire us to continue our collective efforts towards a malaria-free world. With special thanks to GSK, Fever-Tree, Zambia Sugar, IVCC, and MMV.

We extend our sincere thanks to Oxford Economics Africa for their invaluable contribution to this report. Their expertise and meticulous research have greatly enhanced our understanding of the economic benefits of investing in malaria control and elimination efforts. We appreciate their collaborative approach and dedication throughout the research process.

APPENDIX

The appendix contains detailed methodology, data sources, and supplementary information referenced in the report.

METHODOLOGY

Economic impact analysis

Malaria No More UK commissioned Oxford Economics Africa (OEA) to estimate the potential economic gains if the 2030 global malaria targets are met.

OEA's economic impact analysis relies on the research conducted by Sarma et al. (2019), which examined the historical economic effects of changes in malaria case incidence from 2000 to 2017. Their findings indicate that a 10% decrease in malaria case incidence is associated with a 0.11 percentage point increase in annual GDP per capita growth.[11]

OEA's analysis combines these findings from Sarma et al. (2019) with case incidence projections over the 2023-2030 period using the latest World Health Organization data on case incidence. The analysis uses this period as 2022 is the most up to date case incidence data available at the time of the research. The analysis looks at all malaria-endemic countries globally as well as provides deep dives for thirteen focus countries including the top ten highest burden in Africa and additionally Kenya, Zambia and Ghana because of their global economic and political influence.

The research uses two scenarios – a 'baseline' scenario where case incidence remains on the same trend and a 'SDG achievement' scenario where cases decline towards the indicator for success of SDG target 3.3 on malaria. For the current trends scenario, the analysis extends the annual change in cases from 2015 to 2022 to predict cases up to 2030 using UN population forecasts. Conversely, the 'SDG achievement' scenario calculates the required reduction in incidence from 2022 levels to achieve the SDG target of a 90% decrease in malaria cases by 2030 compared to 2015 levels.

The difference in case incidence between the baseline and 'SDG achievement' scenarios when combined with the Sarma et al. (2019) findings is used to quantify the potential boost to GDP per capita growth.

Trade impact analysis

The analysis also delves into the impact on international trade resulting from the projected economic growth. The research disaggregates economic output by expenditure type to estimate the impact on international trade if the economic growth projections materialise.

The analysis uses the median GDP contributions of exports and imports over the past three years and uses these ratios on the different economic scenarios for the future. This analysis is first applied to all malaria-endemic countries globally, to measure the broader global impact of achieving SDG targets. The analysis is then narrowed to examine the benefits that would stem from Africa if all African SDG targets regarding malaria incidence were achieved by 2030.

The research then looks at the boost to trade at the bilateral level between the 13 Focus Countries and the G7 (comprising Canada, France, Germany, Italy, Japan, the UK, and the US), the EU, the UAE, and the Republic of Korea. Here, again, it is assumed that current trade patterns remain largely the same by using the mean contribution of each bilateral trade partnership over the past five years. These ratios are then used on the broader trade benefits to calculate the boost to bilateral trade.

Research contributions

The originality of the analysis in this report lies in leveraging the latest and most prominent research on the economic impact of reducing malaria incidence; projecting incidence under two different scenarios; and then calculating the projected economic outcomes under each scenario and comparing them.

The modelling applied in this study should be viewed as building on the prevailing body of evidence. In addition to advancing on the work of Gallup and Sachs (2001) and Sarma et al. (2019), and extending estimated economic impacts to international trade, the method further contributes to research by the WHO (2020) and Patouillard et al. (2023). This study adds to the existing body of literature by:

1. Considering not only the GDP impacts of malaria-endemic countries to international trade, but also the trade impacts for donor countries.
2. Designing and applying the effects of both scenarios of (a) the current baseline whereby trending elimination figures persist; and (b) the economic gains that could be realised in a scenario in which malaria case incidence declines toward 2030 targets.
3. Forecasting economic and trade impacts into the future, as opposed to estimating the historic economic impact of malaria. While previous research also considered future economic impacts, this was done so by using the WHO model for Economic Projections of Illness and Cost (EPIC). This report's combination of forward projections offers a unique insight into the landscape of malaria as it relates to trade and the economy.

Research and development funding analysis

Oxford Economics Africa analysed the G-FINDER survey, hosted by Policy Cures Research, to track investment trends in malaria research and development (R&D). The G-FINDER project primarily focuses on funding aimed at developing new tools to address global health challenges. Data from the survey, covering the period from 2007 to 2022, provides essential insights into British investments in malaria R&D.

Within this analysis, researchers have excluded data parameters to arrive at conclusions. Our finding that funding for malaria has halved since the Covid-19 outbreak was arrived at by removing certain funding sources which would otherwise have been unaffected by the pandemic.

LIST OF ABBREVIATIONS

bn – *billion*

DRC - *The Democratic Republic of the Congo*

FCDO – *Foreign, Commonwealth & Development Office*

Gavi – *Gavi, The Vaccine Alliance*

Global Fund – *The Global Fund to end HIV, Tuberculosis and Malaria*

IVCC - *International Vector Control Consortium*

MMV - *Medicines for Malaria Venture*

mn – *million*

NGO – *non-governmental organisation*

OEA – *Oxford Economics Africa*

R&D – *research and development*

SDG – *Sustainable Development Goal*

UKRI – *UK Research & Innovation*

UN – *United Nations*

WHO – *World Health Organisation*

$ – *US dollars*

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