

# MalaFA

Malaria Futures for Central Africa



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## The MalaFA study in brief

This is the third report in a research series commissioned by Novartis Social Business to capture the thoughts of malaria experts on the ground – ministers of health, members of parliament, senior civil servants working in health, heads of national malaria control programmes and representatives of academia and non-governmental organisations. This study in four Central African countries (Cameroon, Democratic Republic of Congo, Republic of Congo, Rwanda) supplements the first report covering East Africa (Ethiopia, Ghana, Kenya, Tanzania and Uganda), West Africa (Burkina Faso, Côte d'Ivoire, Mali, Niger, Nigeria, Senegal), and Southern Africa (Malawi, Mozambique, Namibia, Zambia). Rwanda was meant to be part of the earlier MalaFA Futures for Africa report covering East Africa. Yet, as research was completed too late for inclusion, Rwanda was incorporated in the MalaFA Central Africa supplement.

The contents of the report reflect only the views of the respondents, and are not necessarily the views of the co-chairs, study sponsor or partner organisations.

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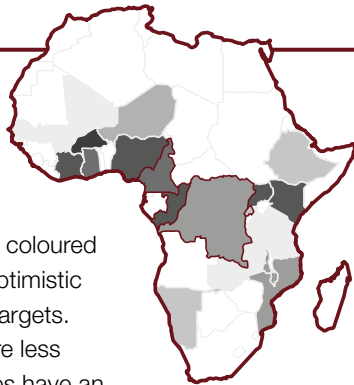
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# At a glance

The countries surveyed in the Central African region have the lowest level of optimism among countries in the four African regions surveyed (East, West, Southern, Central Africa) in all categories.

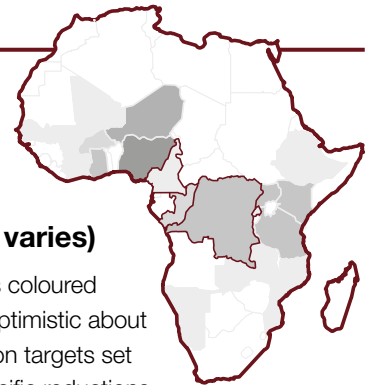
## Likelihood of eliminating malaria by 2030

Respondents in countries coloured lightest grey were most optimistic about meeting the 2030 targets. Darker grey countries were less optimistic. Not all countries have an explicit target to eliminate malaria by 2030, and countries with more academic and NGO respondents tended to be more pessimistic than politicians and senior officials.



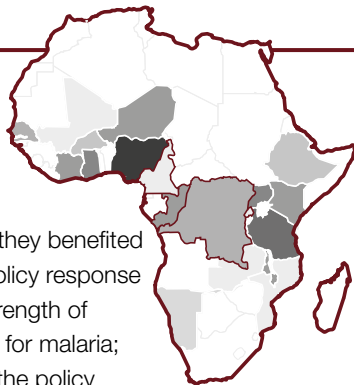
## Likelihood of halving number of malaria cases/deaths (timeframe varies)

Respondents in countries coloured lightest grey were most optimistic about meeting the 50% reduction targets set in their countries (the specific reductions and timetable vary from country to country). Slightly darker grey countries were only slightly less optimistic. Overall, nearly all respondents were positive about reaching the target in their country. Since each country sets its own timeframe for achieving this target, this may account for respondents' positive views on achieving it.



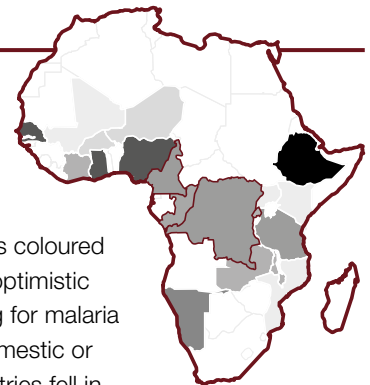
## Strength of policy response

Respondents in countries coloured lightest grey felt they benefited from a strong domestic policy response based on three criteria (strength of domestic political support for malaria; importance of malaria on the policy agenda; and leadership commitment to domestic financing against malaria). Central and Southern African respondents were most positive on this measure, with a more mixed picture in West and East Africa.



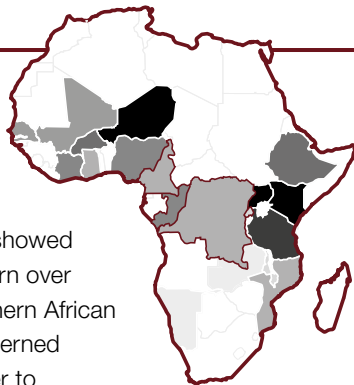
## Adequate funding from government and/or donors

Respondents in countries coloured lightest grey were most optimistic about the level of funding for malaria they receive (whether domestic or from donors). Most countries fell in the middle of the scale on this question, perhaps reflecting realism around resource mobilisation constraints. In Niger and Senegal, there were insufficient responses to this question, which is why those countries are not shaded.



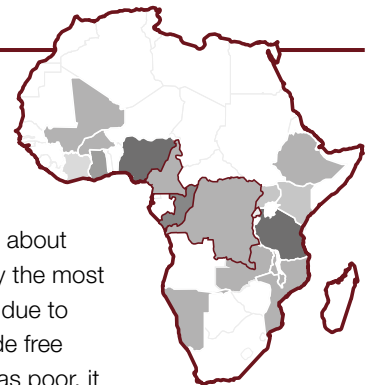
## Concern over resistance to ACTs

Countries in dark grey, especially in East Africa, showed the highest level of concern over resistance to ACTs. Southern African countries were least concerned possibly as they are closer to elimination, with a mixed picture in Central Africa.



## Universal access to ACTs

Most countries were generally more optimistic about this, with the lightest grey the most optimistic. This could be due to policies in place to provide free ACTs. When optimism was poor, it was usually due to stock-outs and inadequate staff training.



# Study objectives and methodology

This opinion research, carried out between December 2018 and August 2019, surveyed the views of 23 key stakeholders in four Central African countries affected by malaria: Cameroon, the Democratic Republic of the Congo (DRC), Republic of Congo, and Rwanda. Rwanda was meant to be part of the earlier MalaFA Futures for Africa report covering East Africa. Yet, as research was completed

too late for inclusion, Rwanda was incorporated in the MalaFA Central Africa supplement.

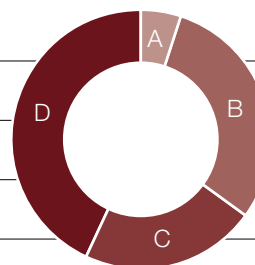
More details on the methodology, background on malaria and the 2030 global malaria elimination targets, and a glossary of terms can be found in the first Malaria Futures for Africa report<sup>1</sup>.

## Respondents by country

Cameroon	7
DRC	7
Republic of Congo	5
Rwanda	4
<b>Total</b>	<b>23</b>

## Respondents by type

A <b>Minister of health or deputy</b>	(5%)	1
B <b>Senior civil servant</b>	(30%)	7
C <b>Director of NMCP or equiv.</b>	(22%)	5
D <b>Senior malaria researcher/NGO</b>	(43%)	10



## Analysis

Interviews were coded using the six overarching themes identified in the first Africa dataset<sup>1</sup>.

### The themes are:

- **Policy coherence:** Participants' awareness of the countries' antimalarial policies and the extent to which they are applied
- **Budgetary integrity:** Whether or not there is a specific domestic budget for malaria and the extent to which it is consistently made available
- **Target compliance:** Adoption of international targets for the control and elimination of malaria and the likelihood of achieving them
- **Geographical focus:** Engagement with regional and sub-regional partnerships to optimise programme effectiveness
- **Programme integrity:** Budget and efforts devoted to short-term needs for diagnosis and treatment compared to the longer-term needs for elimination and/or eradication (dependent on country)
- **Evidence-based programming:** Deployment of newer, more effective treatments and chemical agents based on scientific evidence of insecticide and drug resistance development

<sup>1</sup> Malaria Futures for Africa report: [novartis.com/news/media-library/malaria-futures-for-africa-report](https://novartis.com/news/media-library/malaria-futures-for-africa-report)



## Key findings

- ✔ **There are major differences among the Central African countries surveyed, and fewer regional trends emerge compared to the previous African regions studied.** For example, respondents from the DRC, a country ravaged by Ebola while also having the second highest burden of malaria in the world, were not positive in many categories and identified weak political support. Meanwhile, respondents in Rwanda reported that their country had strong domestic political support for malaria elimination. It was also the only country in this study where interviewees felt that national policies are implemented and monitored.
- ✔ **As a block, Central African countries were the least optimistic of all African regions surveyed.** Respondents saw elimination as dependent on many factors often beyond their control. Confidence in whether malaria could be eliminated by 2030 varied among countries. Optimism towards reaching this target is high in Rwanda, moderate in the DRC, and very low in the Republic of Congo and Cameroon.
- ✔ **Halving deaths was seen as more achievable than elimination,** although for many the date of 2023 was not considered realistic.
- ✔ **Budgets depend on just a few international donors,** and funding, usually directed at programmes, is seen as frequently inadequate and declining in all countries but Rwanda and Cameroon, where donor funding is seen as stable or increasing. Almost all said there was an allocated minimal domestic budget for malaria usually reserved for staff, facilities and nets, but not always for diagnosis and treatment, and not protected for specific malaria programme activities.
- ✔ **All saw significant issues with programme delivery** (rated as the poorest regionally compared to other African regions). Study respondents highlighted low access to services, poorly trained personnel, substandard or falsified antimalarials and self-treatment without diagnosis.
- ✔ **All cited prevention as a core elimination strategy, and were concerned about maintaining and improving its activities.** Respondents identified serious challenges around implementing good vector control programmes. They believe that nets are used improperly, supplies are insufficient, and surveillance needs to increase to monitor resistance to insecticides.
- ✔ **Investments in operational research were seen as necessary,** particularly for programme planning and prioritisation. However, few respondents specified how they would target additional funding for operational research to support better delivery in their respective countries, suggesting the need to map where operational research could be most useful in developing new policies or adapting existing ones.
- ✔ **Climate change is a concern** for all. Some respondents made specific references to the effects on the numbers of mosquitos and their biting patterns, but there was little evidence of reliable data for decision-making. Overall, those in Central Africa were more concerned about climate change than those in the other regions.
- ✔ **The new “high burden to high impact” approach launched in November 2018 by the World Health Organization (WHO) and the Roll Back Malaria (RBM) Partnership to End Malaria was known in Cameroon and the DRC.** This question was only asked in the Central African study. Respondents strongly associated with malaria control programmes in these two countries, which are among the ten highest malaria-burden countries in Africa (and who would be expected to be implementing this strategy), were aware of the strategy and believed that with sufficient resources it would have great impact.

# Detailed results

## Policy coherence

### Cameroon

Most respondents felt there was low political support for malaria elimination. Government representatives tended to be more positive about support, and see the problems as coming from outside government, mentioning for instance health workers failing to adhere to treatment guidelines. However, those outside government noted multiple problems resulting from either a lack of policy or poor policy implementation/regulation. There were reports of improper diagnosis, limited community interventions, expired drugs, frequent stockouts, and charging for what should be free treatment. Lack of effective regulation of pharmacovigilance was seen as a substantial issue, resulting in growing problems with substandard and falsified medicines and poorly trained personnel, with no plan to address this. Further, they felt the lack of political support could jeopardise donor funding.

### Republic of Congo

All respondents agreed that while there was a presidential decree instituting free treatment for malaria patients and structures to support this decree, implementation and funding were weak. This lack of coherence has affected drug procurement, integration of rapid diagnostic tests, use of microscopes, monitoring and evaluation, and surveillance. Interviewees were also concerned about the absence of adequate training for healthcare workers and technicians.

### Democratic Republic of the Congo

Respondents were disappointed with a perceived low level of political support, which they felt was related to low levels of financial support. They feel malaria is not a priority in the face of a new Ebola crisis. While Ebola mainly affects the east of the country, overall health budgets and health systems are impacted. The WHO declaration of the Ebola outbreak as a public health emergency of international concern in July 2019 could worsen this trend.

Respondents cited poor coordination, and a lack of a functioning health system and leadership. While they referenced the existence of a national malaria task force, they reported that it does not meet regularly, and the size of the country presents large challenges for programme delivery. Regulatory authorities seem to have little control over the situation and respondents called for greater support in this area.

### Rwanda

Political support is described as strong. Malaria control is championed by the President, with the Minister of Health reporting directly to him. Respondents pointed to increased national funding and closer surveillance of targets, listing numerous strategies that have been in place – training for community healthcare workers, home-based malaria management for adults, and good utilisation of insecticide treated bednets (ITNs), indoor residual spraying (IRS), outdoor spraying, and environmental management (i.e. combination methods).



## In their own words

### Cameroon

“The free [malaria] treatment policy ... for the targeted population is not respected, the selling [subsidised] prices are also not followed, drugs are often expired, there are frequent stockouts. There has always been a significant amount of falsifications and very little action has been taken over the years.”

### Republic of Congo

“There is no text or law really taken by the parliament about public health or health. All the initiatives or decisions come from the high [Presidential] level.”

### Democratic Republic of the Congo

“The management of the national malaria control programme is a great challenge due to instability of the leadership team depending on the national government.”

### Rwanda

“He [the President] keeps the malaria programme manager and policymakers on their toes. For example, he keeps asking, weekly: ‘how is the programme moving, what are the challenges, and how to address those challenges?’ ”

## **Budgetary integrity**

### **Cameroon**

Domestic funding was reported to have been extremely limited over the last ten years – providing funds for general health services but not direct programme costs. While stronger support is coming from the President's Malaria Initiative (PMI), the lower domestic funding is seen as putting Global Fund support at risk, since that amount is dependent on domestic contribution.

### **Republic of Congo**

All respondents noted decreasing donor support overall, specifically mentioning the withdrawal of the Global Fund from the country. They noted that the Republic of Congo supported its own health programmes during the oil boom, then became 100% dependent on the Global Fund. The national budget has remained critical to the fight as other donor funding is believed to have decreased. Transparency and access to funds were seen as problematic, with respondents having no knowledge of the budget amount or whether funding was ring-fenced for specific malaria needs.

### **Democratic Republic of the Congo**

Donor funding, which supports the National Malaria Strategic Plan, was seen as weakening overall, especially from the major donors in the last two to three years. Domestic funding provides the co-financing level required to receive Global Fund support – a rule put in place to increase country ownership and build programme sustainability. However, national funding was seen as inadequate.

### **Rwanda**

Half of the respondents believed donor support was getting stronger, mentioning increases from the 2018-2020 Global Fund additional allocation and the President's Malaria Initiative (PMI). However, two respondents pointed out the danger of depending on only two donors, noting that more than 90% of the country's malaria budget is funded externally. National spending that covers IRS, drugs and other malaria interventions has been increasing every year since 2015, from 1 billion Rwandan francs (USD 1.1 million) to 3 billion (USD 3.3 million) in 2018/19.





## In their own words

### Cameroon

“The special bonus that was attributed to the state workers ... has been cut down (previously supported by the Global Fund). Now the state just pays their salary and it is somehow demotivating because they were already used to these special bonuses. I give a score of 3 [out of 10] on funding because it's not enough, just a few funders are present and effectively disburse.”

### Republic of Congo

“We don't know anything about the real amount allocated to the programme and if the funds we received are the real amount. The problem is the follow-up of the political decisions. Donations dropped due to donor fatigue, due to lack of monitoring and evaluation, and the fact that ministries, because of oil revenues, were no longer soliciting donors.”

### Democratic Republic of the Congo

“Partners' funding of malaria is considerable but does not cover all country needs. There are still gaps.”

### Rwanda

“Support from donors is getting stronger, but it's not enough. We are fighting for more.”

## Target compliance

### Cameroon

Cameroon is one of the 11 highest burden countries for malaria in the world, with increasing numbers of cases.<sup>1</sup> While HIV/AIDS causes more deaths overall, malaria causes the most premature deaths (death that occurs before the average age of mortality), and the most deaths and disability combined.<sup>2</sup> None believed that the country could meet the 2030 elimination target without increased funding. There was no agreement on how long it might take to halve deaths; one respondent said it could take up to 2040.

### Republic of Congo

Malaria is the fifth leading cause of death, and the third leading cause of premature death.<sup>3</sup> Respondents were pessimistic about malaria elimination by 2030, citing a lack of support for prevention and vector control. There was optimism that deaths could be reduced by half by 2023, if the need for changes in delivery strategies and increased investment were met.

Currently, without accurate data and a surveillance system, delivery of the national strategy and progress towards targets cannot be tracked.

### Democratic Republic of the Congo

Malaria causes the most deaths overall and the most premature deaths in the DRC, placing the country as one of the 11 highest malaria-burden countries in the world. After a decade of declining mortality, the numbers are now rising. Almost all the respondents were aware of the WHO's "high burden to high impact" approach to address this trend and felt it could be beneficial if funded and implemented. There was some optimism about eliminating malaria in eastern areas of the country by those directly involved in the malaria programme and by the parliament/government representative, but this optimism was dependent on uninterrupted donor aid and better understanding of why cases were increasing. However, others working with international organisations were not hopeful and did not believe elimination or halving deaths could be achieved by 2030 because programme implementation was poorly coordinated. Most respondents believed halving malaria deaths would take until 2028 to 2030.

### Rwanda

Malaria is the sixth leading cause of death in Rwanda. Between 2007 and 2017, malaria deaths increased by more than 100%, raising the disease from the thirteenth to the sixth most deadly disease in the country (just above HIV/AIDS).<sup>4</sup> For the most part, respondents believed both elimination by 2030 and halving deaths was possible (but the date for mortality reduction varied or could not be predicted). However, they pointed out that current practices are not sufficient and more will need to be done to achieve those goals, including universal distribution of insecticide-treated nets and other preventive measures.

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<sup>1</sup> WHO High burden to high impact. <https://apps.who.int/iris/bitstream/handle/10665/275868/WHO-CDS-GMP-2018.25-eng.pdf?ua=1>

<sup>2</sup> IHME Cameroon country health data. <http://www.healthdata.org/cameroon>

<sup>3</sup> IHME Congo country health data. <http://www.healthdata.org/congo>

<sup>4</sup> IHME Rwanda country health data. <http://www.healthdata.org/rwanda>



## In their own words

### Cameroon

“Cameroon has several epidemiological strata with different transmission levels. Some zones have low and seasonal malaria transmission making them favourable for elimination programmes. With the increased funding in these areas, high impact intervention will be implemented that will accelerate elimination in some health districts.”

### Republic of Congo

“No [to meeting the elimination target], because [I see that] there is no integrated struggle, no well-organised programme, not enough financial income involved, the trained personnel are weak or almost absent to achieve this objective.”

### Democratic Republic of the Congo

“Malaria [elimination] can be achieved in the DRC by 2030. However, it is important to understand why the number of cases increases while there is better health coverage (in both prevention and treatment) and while mortality decreases.”

### Rwanda

“Yes [elimination is possible], if we do the right things, like scale up IRS [indoor residual spraying] coverage, ensure sustainable distribution of ITNs [insecticide-treated bednets], distribute ITNs every three years, handle the issues of resistance, scale up social behaviour change communications, etc., including partnership with development partners, CSOs [civil society organisations] and the private sector. No, if we continue with business as usual.”

## Geographical focus

### Cameroon

Respondents did not name any regional collaboration specifically for malaria, and the absence of a regional RBM Partnership to End Malaria coalition was noted (an RBM Partnership to End Malaria network covering West and Central Africa was established in 2018). A national RBM Partnership to End Malaria committee meets twice a year, and there is a national task force comprising technical and financial partners. However, researchers said the national plan/strategy was poorly developed. Cameroon has different malaria epidemiological profiles, with more intense programme delivery in the north. Consequently, most respondents mentioned sub-national networks, which involved WHO, RBM Partnership to End Malaria, Global Fund, PMI/United States Agency for International Development (USAID), the Bill & Melinda Gates Foundation, and the Organisation of Coordination for the Fight Against Endemic Diseases in Central Africa (OCEAC). A global strategy against substandard and falsified antimalarials has been set up at the sub-regional level for Central African country members. Despite the priority assigned to this issue, the programme in place was described as being in its infancy, not efficient because of a lack of financial resources and capacity, and with little if any cross-border collaboration.

### Republic of Congo

There was no mention of a national collaboration or network but one respondent said one may be in the process of being set up. Two regional coalitions – the Conservation Action Research Network (CARN) Regional Coalition and OCEAC – were mentioned. The country signed the MediCrime convention and has a department to protect pharmacovigilance. However, repeated mentions of the need for better training suggests it may not be effective.

### Democratic Republic of the Congo

The Democratic Republic of the Congo is a very large country, which may explain why it is challenging to establish and maintain a Central African regional network. All respondents were deeply concerned about self-administration of antimalarials and widespread availability of substandard/falsified antimalarials. Yet there is no regional initiative to address this. One respondent described a 'culture of impunity' in the country and an urgent need to enforce the law. There is a national task force on malaria that includes the malaria programme of the Ministry of Health and technical, scientific and financial implementing partners, but it does not meet regularly and is not seen as effective. One respondent mentioned national and regional malaria groups (regional within the DRC) including RBM Partnership to End Malaria.

### Rwanda

Respondents reported cross-sector collaboration at the ministry level in Rwanda, driven in part by a strong economic development ethos. At a regional level, there was no evidence of active cross-border collaboration, despite agreement on the need for this. Some respondents said substandard and falsified antimalarials were a major issue. The national regulatory authority was said to be new and still getting established.



## In their own words

### Cameroon

“We have a National Task Force for the fight against malaria that is made of technical and financial partners. The national Roll Back Malaria, MoH [Ministry of Public Health], partners, administration meet twice a year. The support is important to us.”

### Republic of Congo

“Pharmacovigilance does not exist, [there is] only the National Laboratory for Public Health ... the new director is trying to implement a pharmacovigilance system for the country.”

### Democratic Republic of the Congo

“Yes, it’s [lack of regulation] a real concern because we find monotherapies on the market.”

### Rwanda

“We do not meet malaria programme officers from other countries. There is a need to organise collaboration, information sharing, and networking meetings, including harmonisation of interventions for the region. A proposal has been drafted for that purpose, but there are no funds to move it forward.”

## **Programme integrity**

### **Cameroon**

Respondents believe community interventions are only implemented in 69 of the over 189 health districts. Access is described as poor, with frequent stockouts and expired drugs. However, free access to antimalarials for children under the age of 5, and good availability of effective ACTs were pointed out. Use of Intermittent Preventive Therapy (IPT) is reported to be low. Participants expressed concern over adherence to treatment guidelines. They were also worried that poor pay and the lack of bonuses, due to decreased Global Fund support, had resulted in frequent staff turnover and increased training needs. Progress was reported on access to rapid diagnostic tests at health facilities, but not all diagnoses were believed to be accurate. PMI is funding indoor residual spraying and larval control in the north of the country. Funding and supply of nets is good. However, myths about insecticide-treated nets, such as fears that chemicals could cause cancer or that nets could make breathing difficult, have led to low and inconsistent use. Further, non-treated bednets were reported to be in circulation. Concern was expressed over not knowing how big a problem ACT resistance could be, noting a lack of monitoring.

### **Republic of Congo**

The malaria elimination programme is in its infancy, without a clear strategy and functioning structures. Respondents were less well informed than in other countries. Little accurate data and no surveillance system mean that it is nearly impossible to track progress towards targets and delivery of the national strategy. People with fevers buy antimalarials from market kiosks without seeking out a diagnosis at healthcare facilities. RDTs are not widely available and reagent supplies may be inconsistent or absent. There is also insufficient training for healthcare workers and technicians, and no adherence to guidelines. The emphasis of all respondents was on prevention, rather than treatment. They mentioned many challenges, ranging from low funding that leads to insufficient supply and resupply of treatment, to the misuse of long-lasting insecticide-treated nets.

### **Democratic Republic of the Congo**

Respondents described a lack of leadership and poor coordination of those involved in elimination, including outdated knowledge of treatment practices. The impression given was one of little government engagement. Responsibility for treatment seems to remain with the individual, accessed through the private sector. Treatment challenges include self-administered treatment, substandard or falsified drugs, and unreliable supply and availability of antimalarials. Suggestions for improvements included mass treatment, more funding for RDTs and ACTs, and using the public sector to increase access. There were no mentions of surveillance systems, or of widespread access to diagnostics. Almost all discussion of programme delivery focused on preventive measures. Respondents said that behaviour change is needed. There are also concerns about insecticide resistance. The WHO recommendation for three doses of IPT for pregnant women is not followed in the DRC.

### **Rwanda**

The healthcare system was described as well developed and surveillance systems are in place. Free malaria diagnosis and treatment are part of general healthcare programming, delivered by healthcare workers at the community level. However, the proportion of people seeking services represents less than half of the total malaria burden. Respondents noted the need to increase community education, and to address healthcare staff retention through training and incentives. Prevention challenges included mosquito biting behaviour change and the lack of tools that work outside the home. The lack of specialists and the need to better motivate, support and supervise community healthcare workers were also mentioned. No one mentioned the lack of a policy on IPT for pregnant women.



## In their own words

### Cameroon

“ITN coverage of the general population is still low in Cameroon (less than 60%), probably due to insufficient involvement of communities ...”

### Republic of Congo

“The problem with malaria is everybody knows a treatment and goes without a clinical exam and test to buy drugs.”

### Democratic Republic of the Congo

“There are big logistics challenges [the country is large with weak transportation and communication routes]. Bednet distribution campaigns are not systematically organised on a two-year basis.”

### Rwanda

“Recruitment of community health workers has brought about great coverage. You give them bednets, but because of unwarranted myths – [bednets cause] breathing difficulties [they] bring bedbugs, etc. – some of them do not use bednets.”

## Evidence-based programming

### Cameroon

All respondents felt that surveillance was poor, and that data are vital to inform decision-making. Awareness of new prevention technologies was good, with several mentions of a vaccine and of the new Piperonyl butoxide treated nets, but there was little comparable awareness of new treatment technologies. There were conflicting views on resistance to ACTs, with almost half the respondents not believing it is a problem now or will be in the near future. Resistance to insecticides was a concern to all, with some saying it is already occurring in the East Region. On climate change, there were repeated mentions of the epidemiological differences between the north and south of Cameroon, as well as shifts that could be attributed to climate change, such as increases in temperature. Respondents also saw the value of investing in operational research, given that most of their perceived challenges are programmatic, and operational research can provide insights into addressing these inefficiencies.

### Republic of Congo

Only one of the five respondents was informed about new technologies to fight malaria. One mentioned vaccine development but did not know details. All respondents were concerned about ACT resistance, pointing to the widespread access to antimalarials on the private market as the most significant cause and accelerator of resistance. Four of the five respondents expressed concern about resistance to insecticides.

### Democratic Republic of the Congo

Knowledge of new treatment technologies was low, but higher for new prevention strategies, with references to the new class of bednets, larvicides, IRS insecticides and vaccine development. Most were concerned about climate change and the likely extension of the breeding season and of endemicity. While there was concern about insecticide resistance, some believed resistance to ACTs was not a problem and there was no mention of surveillance (this may be the reason for the lack of concern).

### Rwanda

Respondents said that implementation of new technologies was evidence-based, relying on both local research and WHO prequalification. Awareness of emerging prevention technologies was good. Those mentioned included larvicides, several new insecticides, personal protection and repellents. There was considerable concern over insecticide resistance, with evidence that long-lasting insecticide-treated nets are no longer effective and new formulations are needed. There were few mentions of new treatment technologies and little concern about ACT resistance. Some pointed to risks from over-treatment at a community level, others noted that ACTs may not be effective against all species. All respondents said they have considerable concern (and evidence) that changes in seasonal rainfall and mosquito behaviour are related to climate change. For example, mosquitoes are now in high altitude areas of Rwanda, and cases of malaria have started to increase, even to epidemic levels. Most recognised the need for operational research (consistent with the first African report) and most would allocate more than 25% of the overall budget to it, seeing the need to better understand how to implement programmes.





## In their own words

### Cameroon

“The information system is improving very slowly. Because of lack of adequate equipment and personnel, quality of data is still poor.”

### Republic of Congo

“Do you know that 53 ACTs circulate in the country? What is the follow-up?”

### Democratic Republic of the Congo

“The level of self-administered drugs is still high [taking products unduly in terms of dose, duration of treatment and even treatment without testing beforehand]. This runs the risk of seeing emergence of resistance. A way to support the regulation of antimalarial drugs is needed.”

### Rwanda

“Here in Rwanda, low altitude areas are in the Eastern and Southern provinces. Incidence of malaria is usually high here. But in the North and West of Rwanda, the altitude is high, hence usually no malaria. But due to climate change, we have already started witnessing increases in malaria.”



## Areas for action

We hope the important points made by these Central African leaders will assist the global malaria community in refocusing and recommitting at the global, regional, national and local levels to push forward the malaria elimination agenda. These build on points raised in the first African report. Regional differences are noted in the report<sup>1</sup>.

<sup>1</sup> Malaria Futures for Africa report: <https://www.novartis.com/news/media-library/malaria-futures-for-africa-report>



## Respondents focused on the six following areas for action:

1.

### Strengthen political commitment for more effective funding and infrastructure, both nationally and regionally

Positive change was noted in countries such as Rwanda where the President has made commitments towards malaria elimination, and allocated domestic funding to existing international support. This could provide a model for other countries to follow suit. Regional networks would also be effective but require funding and support.

2.

### Increase the quality and amount of data for surveillance, for strategy development and for monitoring resistance

All countries are struggling with getting field data to inform funding programmes and to monitor resistance and treatment effectiveness. Partnerships with national, regional and international organisations have shown promise but more are needed.

3.

### Increase community education and social behaviour change

This includes awareness raising, communication and empowerment to improve bednet usage, increase the use of diagnostics and reduce self-treatment.

4.

### Develop new vector control tools

Both insecticide resistance and changing mosquito-biting patterns are a growing concern. Respondents believe that new technologies for long-lasting insecticide treated nets, environmental improvement, personal protection and repellents, indoor residual spraying and larvicides are needed. To support these new interventions, some respondents also called for more data on the impact of climate change.

5.

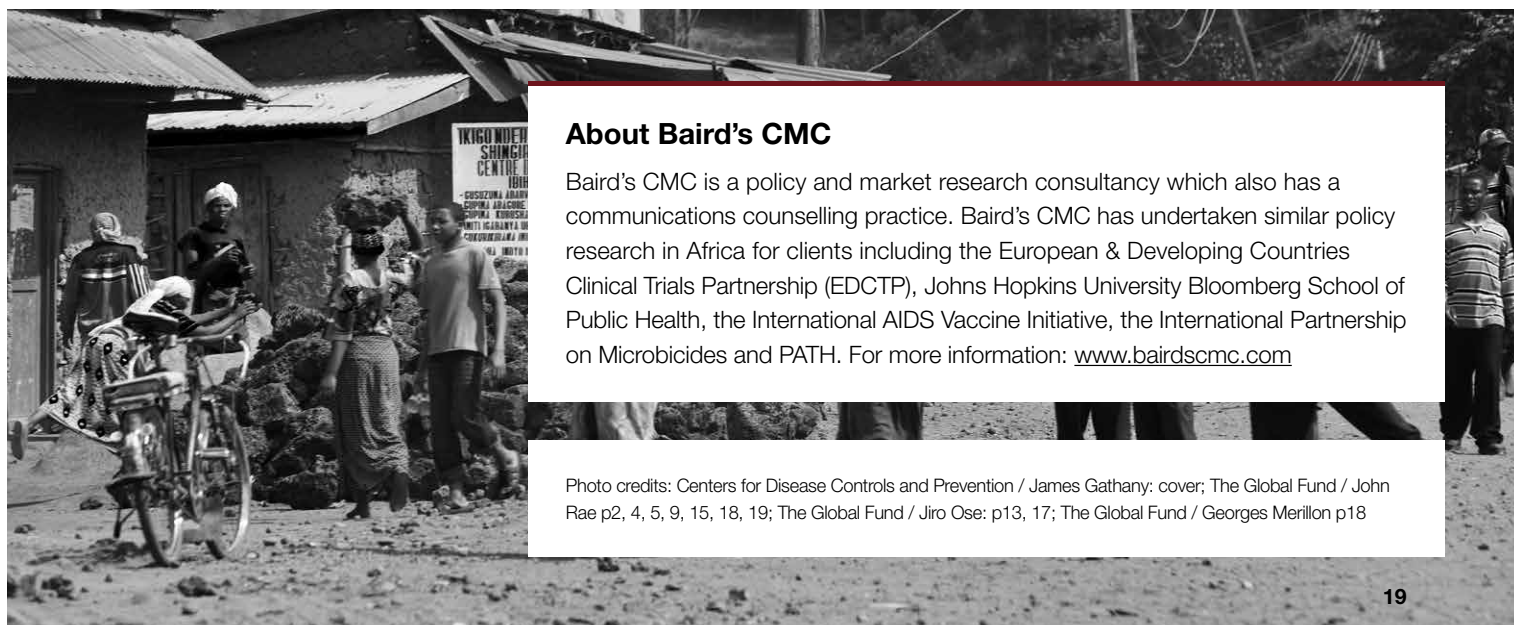
### Increase access to microscopy and rapid diagnostics and trained technicians

Both supplies and qualified staff are extremely limited in many areas, reducing the effectiveness of surveillance and treatment.

6.

### Expand training

Increased knowledge is needed for both healthcare providers and community healthcare workers in order to follow current guidelines and to increase access to accurate microscopy and rapid diagnostic testing both in healthcare facilities and (in the case of RDTs) out in the field. There is a shortage of technical expertise for malaria elimination, and this includes surveillance, entomology and programme delivery/operations.



### About Baird's CMC

Baird's CMC is a policy and market research consultancy which also has a communications counselling practice. Baird's CMC has undertaken similar policy research in Africa for clients including the European & Developing Countries Clinical Trials Partnership (EDCTP), Johns Hopkins University Bloomberg School of Public Health, the International AIDS Vaccine Initiative, the International Partnership on Microbicides and PATH. For more information: [www.bairdscmc.com](http://www.bairdscmc.com)

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