Roll Back Malaria Multi-Sectoral Working Group (RBM MSWG)
2nd Meeting, 4-5 February 2019
Global Health Campus, Geneva, Switzerland

Chairs: Robert Bos & Steve Lindsay
Secretariat: Konstantina Boutsika
Rapporteur: Adriana Rüegger

Day 1: Monday 4 February 2019

Morning: Objectives and Expected outcomes of the Meeting
Chairpersons: Robert Bos & Steve Lindsay

Opening of the Meeting

Robert Bos opened the meeting and welcomed the 37 participants to the second meeting of the Multi-sectoral Working Group. For this meeting, Steven Lindsay[1] acted as Co-chair in place of Graham Alabaster. After a short introduction and welcome by the participants from RBM, Robert gave a brief overview of the agenda and the objectives.

The objectives of the meeting were:

- Consolidation of the scope and focus of the MSWG based on the recommendations made at the first meeting
- Development of draft concept notes that emerged from the first meeting into more elaborate proposals for project activities
- Strengthening of the evidence base for enhanced sustainability and resilience through malaria efforts across sectors in certified malaria-free countries
- Identification of criteria, procedures and marketing opportunities for bankable projects focused on intersectoral action for malaria through a dialogue with donors, and of options for effective multi-sectoral action at the municipal level
- Explore options and opportunities for a clearing house function for the MSWG
- Consider sectoral case studies: extractive industry, tourism, agriculture – and opportunities to support policy formulation, technical cooperation and capacity development.

Since this is only the second meeting of the working group, it is mentioned that the agenda of the meeting should be considered as constantly "in progress" to enable a viable structuring of the group. The main focus in the group is on malaria, but will also deal with all vector-borne diseases. The focus of the meeting will be bankable projects, malaria in tourism, industry and housing. Joshua Levens from the RBM Partnership added that the meeting should also discuss how to create materials to provide feedback in order to bring the malaria process along. Steven would also like to focus on the role of advocacy and how members of this group can spread the information on multi-sectoral actions. Jo Lines mentioned the importance of involving donors.

Opening Address (Robert Bos)

In his opening address, Robert quoted Ronald Ross concluding that malaria control had been prevailing in some years and sometimes it has been lost again. In malaria control it is always important to look at a contextual perspective in which malaria prevails. To grasp the concept of a multi-sectoral approach, one must define sectors. In their definition, sectors or walls create a competition for resources that are limited. Sectors are therefore about power, territory and a target of defined boundaries. If actors in one sector see that collaboration with a different sector benefits them (i.e. through power, money or success in any other

[1] Steve Lindsay is the co-leader of the Vector Control Work Stream on Built Environment and Vector-Borne Diseases.

kind) they become interested. This thought helps to grasp how one can get people from other sectors involved or interested.
He then gave a short historical account on how a multi-sectoral actions had been approached over the centuries with a focus on the last decades, emphasizing the revival of environment approaches in the 1970s, and the increase of VBD transmission in the 1980s. Robert pointed out that multilateral or bilateral agencies were all organized in sectors. Although there had been a strong interest on intersectoral work and environmental aspects in malaria at the Ministerial Conference on Malaria in Amsterdam in 1992, the intersectoral and environmental aspects disappeared in the work after, and were never translated into action. With the development of the millennium development goals in 2000, a new interest in multi-sectoral action had evolved.
RBM established the MSWG to see how we can adapt these lessons learned from the past and find opportunities where one can incorporate multi-sectoral approaches. Many SDGs can be connected to the MSWG (e.g. health, clean water, clean cities, and others). Robert also presented the SDG wheel adapted by the International Council on Mining and Minerals, which had added priorities for their actions, and suggested that these were also useful for the MSWG. He added that the global political landscape is also inducive to intersectoral actions, and thus he asked everyone in the room to be creative about finding good solutions and solving obstacles. Steve added that it had never been a better time for multi-sectoral actions, mentioning the *WHO Strategy for Global Vector Control Response 2017–2030* where the first pillar of action asks for strengthening inter- and intra-sectoral action and collaboration.

Tour de Table and Interests of the Members of the Group

This was followed by a tour de table where all participants stated their various interests in the multi-sectoral group. Many participants mentioned that they would like to learn how to engage with existing structures that are not involved with issues on malaria or vector-borne diseases yet. A recurring question was how one can persuade non-health sectors to collaborate and what does facilitate collaboration on both sides. There was also a strong interest in supporting the implementation of health programs and supporting national capacities. With many representations from national and regional levels, the meeting also promised a platform for sharing experiences and establishing a base to discuss a large variety of issues from agricultural businesses and corporations, bottom-up approaches, as well as water and tourism industries. Jo Lines emphasized that the group should define what the multi-sectoral part of our work will be so that the activities do not become too spread out. Eline Boelee wished that the meeting would bring out a concrete plan of action after the two days to move forward. Valentina Buj pointed out that UNICEF has taken a lead in multi-sectoral actions and wanted to share several entry points for multi-sectoral work during the meeting. Several people in the group also wished that the first actions of the group could be kept simple and not too complex in order move forward smoothly. Mah Talat shared the experience that different actors in Pakistan interact with the same populations with weak interaction amongst each other and a lack of proper distribution; multi-sectoral strategic plans would therefore streamline the same activities and improve the spreading of information.

Recapitulation of the 1st MSWG meeting in October 2018

In his following remarks, Robert gave a short recap of the kick-off meeting that took place in October 2018. In this kick-off meeting, the working group came to the conclusion that while malaria will remain the focus, the group will include all aedes-borne diseases. The first meeting had worked on prioritizing the most important stakeholders that need to be addressed for multi-sectoral actions. Another important take-away from October was to think about persuasive **arguments for other sectors**, for instance **economic aspects**. As the objectives for the working group require, it is vital that more members from all sectors will be included in the future. Further, the first meeting looked at **multi-sectoral bottom-up approaches on a rural and municipal level**.

In the kick-off meeting the group had singled out **parliamentarians** as a specific group to address as they touch upon a large range of issues and would include both a high and a local level of influence. Furthermore, the group had focused on four sectors in the first meeting: **1. Settlement, planning & urban structures, 2. Tourism, 3. Food industries, and 4. Mining industry.**

The first meeting brought up several project proposals, amongst them the *Clean Accra Project*. Contact has been established to this project now, and it is planned to involve the organizers with this group in the future. This project presents a great opportunity to increase domestic resources and contributions. For a detailed account on the first meeting, please consult the MSWG-1 meeting report.

Robert closed his review of the first meeting by concluding that the group now needed a formal consensus statement that would streamline the agility of all actors involved.

An area where multi-sectoral actions might be vital is keeping a country malaria-free indefinitely. An example for this would be Sri Lanka that has become *almost* malaria-free in the 1960s. When the malaria-free status was almost achieved, interest moved elsewhere and malaria spread out again. How does one keep a country malaria-free forever? The contributions of other sectors are necessary so that all factors stay in the interest of a malaria-free surroundings. How this could work was discussed in the following presentation by Xiao Hong Li on the contributions of non-health sectors to the elimination of malaria.

Roles and contributions of non-health sectors in malaria elimination and prevention of re-establishment (Xiao Hong Li)

Xiao Hong Li gave a talk on the **contributions of non-health sectors to the elimination and prevention of malaria at the two examples of malaria-free Uzbekistan and Armenia**. She pointed out that malaria is a pillar of the global technical strategy. Xiao Hong pointed out that the first two goals of the vision of a world free malaria (1. Reduce malaria mortality rates globally compared with 2015, 2. Reduce malaria case incidence globally compared with 2015) had not been doing well enough. However, she then focused on the goals 3 (Eliminate malaria from countries in which malaria was transmitted in 2015) and 4 (Prevent re-establishment of malaria in all countries that are malaria-free): the goal of having 20 countries should be successful, as it should be possible for 21 countries to achieve zero malaria by 2020, Xiao Hong predicted.

Xiao Hong further talked about the **general activities of the Global Malaria Programme** and mentioned that they have global forum in a different country every year to exchange ideas

and experiences, report on progress towards elimination, share updates on WHO guidance and celebrate milestones. The next global forum will be in Wuxi, China in June 2019.
Xiao Hong pointed out that between 1987 and 2007 there have not been any malaria-free certifications, since the strategy had moved from elimination to control. Regarding challenges of malaria elimination today, she mentioned border malaria and expanding access to malaria prevention, diagnosis, treatment, as well as surveillance to mobile, migrant or indigenous populations as the two biggest issues. She indicated out that a multi-sectoral approach might help tackling these particular challenges.
As of December 2018, 36 countries and territories have been certified malaria-free. The criteria to be certified as malaria-free are the following:

- local malaria transmission by Anopheles mosquitoes has been fully interrupted, resulting in zero incidence of indigenous cases for at least the past three consecutive years, and
- an adequate surveillance and response system for preventing reestablishment of indigenous transmission is fully functional (in particular the curative and preventive services and the epidemiological service) throughout the territory of the country

In order to prevent re-establishment of malaria transmission in a malaria-free country, the following prerequisites have been defined by the GMP in the framework for malaria elimination 2017:

- An adequate system for early recognition and rapid response to malaria epidemics;
- inter-country information-sharing and functional border coordination, where relevant;
- an efficient malaria surveillance system (which may be integrated into systems for other communicable diseases);
- effective mechanisms for cooperation among all ministries and agencies involved in malaria prevention;
- a high-quality system for entomological surveillance, including monitoring of resistance of malaria vectors to insecticides, especially in areas with high receptivity; and
- services to raise awareness and provide practical advice on prevention and early detection of imported malaria (for nationals travelling to or returning from malaria-endemic countries).

Xiao Hong stated that at least three parts of these prerequisites have multi-sectoral components: intercountry sharing information, effective mechanisms for cooperation, services to raise awareness and to provide practical advice. These activities cannot be performed by the health department alone and need to be approached from a multi-sectoral angle.

Uzbekistan was highlighted as a recent example of a certified malaria-free country (certified after three GMP missions in September 2018). Xiao Hong gave a brief historic account, pointing out that in the 1980s many neighbouring countries brought in new malaria cases to Uzbekistan. The last indigenous cases were registered in 2011, and Uzbekistan has been malaria-free since then. A multi-sectoral collaboration mechanism has then been established

with an annual coordination meeting with the Ministry of Health and healthcare services in the Defence Ministry, MIA, the National Security Service, national railways and airlines on issues of malaria at the base of RepCSSES. Additionally, there have been round tables with representatives from agriculture, border control, pharmaceutical workers and migration. Specialists of the entomological service of the CSSES together with branches of Ministry of Agriculture and Water Resources carry out annual raids to detect and liquidate economically unnecessary water bodies in the majority of regions, in order to reduce breeding grounds of malarial mosquitoes. In collaboration with the NMEP, Mahalla organizes visits and education for households, as well as anti-malaria activities in neighbourhoods. Mahalla also assist the NMEP to carry out mass drug administration activities whenever indicated. Furthermore, there are check/entry points in collaboration with border control and airlines to screen and detect migrating malaria cases, especially at the borders to Tajikistan and Afghanistan.

Armenia presents the same historic structure as Uzbekistan, following economic and political collapse in the 1980s and 1990s that brought forth new malaria cases that went down again in the 2000s. The decrease of malaria cases in the 2000s was strongly connected to multi-sectoral collaboration. Following a presidential order in 1999 and an approval of several documents regulating collaboration efforts, including a plan of action in 2005, a joint order brought together for ministries for collaboration. This collaboration was extended to partners, among others including the police, aviation and the private sector, with determined active responsibilities for each partner.
Xiao Hong elaborated that this partnership of several sectors helped on the impact to achieve elimination. As an example, the Ararat Valley, previously one of the biggest problem areas for malaria cases, was mentioned. With the combination of drainage, canal cleaning, land management, strengthened surveillance and health education, the area managed to achieve elimination.

There are common factors between Armenia and Uzbekistan that led to the elimination of malaria included successful multi-sectoral collaborations, especially involvement of the highest level of leadership, as well as functional coordination mechanisms and funding on a national level and sub-national level.

Questions and Feedback to the Presentation

- In feedback to the presentation, it was mentioned that it would be very interesting to receive the details on how exactly the collaborations took place. It was suggested that the MSWG can work with the GMP to get access to these details (that are most likely archived on a national level) and document them for future reference. Melanie Renshaw informed that documents on multi-ministerial approach already exist and will share them with the group.
- In regard to the check points and entry points, it was asked how the strategy dealt with asymptomatic carriers. Xiao Hong stated that proper surveillance is key so that the responsible actors are able to manage and respond.
- It was also pointed out that this presentation showed that the GMP mostly focused on multi-sectoral approaches within the government, with the involvement of the private sector as a second step. Leadership plays an important role in this; when it comes from above, the ministries have to follow. Cuba is an example of this course, where health was dealt with on the highest level.

How can we adapt these inputs to our needs?

- Many countries have national development programmes that boost different development issues in different sectors. That would be a good place to connect for this group and discuss issues on interdisciplinary levels.
- It was suggested that the MSWG should monitor country-specific and regional-specific missions and trips, as well as global events to find out where to pick up information. It would be useful to map out what is already happening outside the group, for instance ZeroMalaria has multi-sectoral plans.
- Another idea was setting up a list of consultants from other technical areas with special expertise, which could be tailored to nation or sector-specific requests. However, a concern would be that it would be impossible to cover everything and too difficult to have a specific consultant for each issue.
- As already mentioned in the first meeting, there is a strong interest in supporting the revision of the 2015 Multi-sectoral action framework by RBM.

Updates from the Co-Chairs of the other RBM Working Groups

Melanie gave an overview on the RBM working groups and their objectives. There are quarterly virtual coordination meetings with the co-Chairs. Recently, RBM increased focus on subdivisional level and engages more with subregions, as this is often where decisions are made. RBM also tries to engage more with domestic resources. This has to happen on a broader level than malaria or health to completely grasp it.
She mentions several opportunities where the MSWG could be involved and reach out to potential partners, for instance the country regional support partner committee, the strategic communication partner committee.
She also highlighted the importance of the Global Fund Replenishment Year 2019, and urged everyone to support advocacy at every opportunity, as more resources have to be secured than previously.
Furthermore, she spoke of RBM's involvement to end malaria in refugee situations, and pointed out that CRSPC included the issue in their Global Fund application. IDPs and refugees are currently mapped within the country they are in, so they are included in the resources of the emergency funds within the specific countries. Countries that are affected by emergencies are on the RBM priority list for 2019.

Vector Control Working Group (Justin McBeath)

Justin introduced the VCWG and its six work streams and gave an overview on the meeting that had happened in the previous week, at the 14th annual meeting of the VCWG. The emergency and humanitarian issues were a major discussion at the meeting and the co-Chairs will work out where to position the issue in the following months. There was also a lively discussion on inventions and developments in vector control, as well as a key note speech on gender balance in vector control. Justin pointed out that the working group is very diverse within the private sector. The working group continually works on the challenge to not only be a policy-thriving group but also an action-taking.

Steve suggested at the meeting that the *Vector Borne Diseases and Built Environment Work Stream* could move to the MSWG, so that there be room for a humanitarian work stream in VCWG.
It was a wish by several participants that the VCWG and the MSWG annual meetings should continue to take place back-to-back but without a weekend in between. It was pointed out that so far **the VCWG and the MSWG have different ambitions, as the MSWG is mainly interested in policy-change or a change of thinking**. Robert pointed out that this question on ambitions of the group should be discussed.

Malaria in Pregnancy Working Group (Valentina Buj)

Valentina, member of the MiP working group, gave an update of the most recent activities on Malaria in Pregnancy. The MiP working group will have their annual meeting later in February 2019 as well where they will discuss their most recent updates.

Case Management Working Group (Konstantina Boutsika)

Konstantina presented the newest changes of the CMWG. The 10th annual meeting of the CMWG was taking place right after MSWG-2, and Konstantina pointed out that the group will crystallize their work plans later that week.

Social and Behaviour Change Communication Working Group (Konstantina Boutsika)

Konstantina gave a brief update on the SBCCWG. The SBCCWG had its annual meeting in Lusaka in September 2018 with 125 participants. Recent large efforts of the working group included the Strategic Framework for Malaria SBCC 2018-2020, as well as the 2nd Edition of the Malaria SBCC Indicator Reference Guide that is now available on the RBM website.

Monitoring and Evaluation Working Group (Mark Hoppé)

Mark, member of MERG, gave a quick overview on this working group. It was pointed out that **we could get in contact with MERG to produce an M&E framework for multi-sectoral actions and workings**, as a framework is necessary in order to receive funding. Robert pointed out that building an M&E framework would be a good task for the MSWG. Konstantina added that we should get back to MERG to see if they can share any data with us. Flemming also suggested to collect data from monitoring private sector distribution systems (for instance Google) and that the MSWG could think of innovative ideas to catch data.

Feedback and Inputs on Funding Agencies and Donors

In connection to the case studies on agriculture, urban management and private sector that had been discussed in the first meeting, Robert added that Graham had worked out who would be receptive for funding in these projects. Many funding agencies are much more receptive to intersectional projects than in earlier days.
Bilateral agencies have decentralized since the 90s and decision-making often happens at embassies or are connected to global agencies like the Global Fund. Justin suggested commercial entities that make profit, for instance extractive industries. Flemming brought up the example of environmental management where funding can be increased when connected with other environmental issues. A good place to expand would be climate donors when you point out to them that for instance dengue is a climate change driven disease. Further potential donors could be involved with water supplies and components. Investing in water supply systems helps malaria control.

Afternoon
Small Group Discussions on Prototype Proposals and a Consensus Statement

For the afternoon, the co-Chairs planned a work in four smaller groups to build prototype proposals, think of a consensus statement and what are criteria indicators to M&E.
After an hour, the groups reconvened to present their results.

Results from the Group Discussion

Group 1 (Fiona Shenton)
The first group pointed out the importance of clustering and suggested a holistic approach to present the issue to stakeholders. Fiona used teaching in hospitals as an example, and pointed out that we need to show the stakeholders the benefits of our work instead of telling them what to do. There were many elements involved already discussed in the first meeting. An input from the group suggested we need to present conflicts to stakeholders.
With the consensus statement the group would like to answer the following questions and challenges:

1. Why is it important? What sectors can help? What's in it for other sectors that create a win-win situation?
2. Key health messages
3. Where are knowledge gaps that the MSWG still has?

Steve suggested that some members of the working group could start on creating a consensus statement soon.

Group 2 (Justin McBeath)
The second group discussed several proposals on moving ahead and thought of different scenarios of funding. Justin pointed out that the context always needs to be taken into account: are there domestic funding, private sectors or international donors already involved?
The second step would be to create a win-win motivation that might also happen during the course of a project. A clear structure or mapping of leadership is also needed, as it is important for resource allocation and all the nuances where the money is coming from.
A further step would be identifying key actors, their evidence of impact and spreading of visibility.
The group suggested making project proposals as local as possible and reaching for the low-hanging fruits first.

Group 3 (Vijay Nehra)
Group 3 states that projects needed to be profitable and beneficial for all stake-holders, and mentioned an example from MSWG-1 on agricultural food production. Banana plantations need healthy workers and create value, which is a proposal that can be made to plantation managers. It should be in the interest of plantation managers (and us) to create a self-fueling system that is a working system based on health measures.

The group suggests creating the densest knowledge on vector control and health issues, and giving this to stakeholders. It was suggested from the plenum that CMWG and VCWG should be involved in this. Jo pointed out that one needs to define who this proposal would like to protect (e.g. workers?, their families?). Justin added that an action like this would need to be implemented within the NMP in any case.
In regard to plantations, this also creates an interesting link to value chain. Supermarkets are probably not willing to pay more products, but we might be able to link with other benefits that can be certified (compared to FairTrade). Collaboration with Rainforest Alliance was suggested.

Group 4 (Josh Levens)

Josh pointed out that we should recognize opportunities in the existing RBM calendar to get feedback and connect with stakeholders. Whenever within RBM someone meets ministers in countries we should tap in and present our case and network. However, for this we would need materials we can present. The group brought up the one-pagers or advocacy briefs that had been planned in the first meeting. If we know who we meet beforehand, key interventions that are valuable can be adapted to the circumstances within the respective country or sector. This might be a way to provoke and create a base for a fruitful discussion later-on.
A practical approach would be to think what will happen in the calendar year 2019 and look for opportunities of engagement. For instance, there is a meeting in Ghana planned. As we already had Accra on the list from the first meeting, this would be a good place to start. Further suggestions included high burden issues in Uganda and Tanzania, or malaria investment cases in Mozambique, Zambia or Republic of Congo.

Advocacy message / One-Pagers

The discussion brought the group back to the planned activity of advocacy messages from the first meeting. The consensus of the group was that these advocacy messages should include things that we want to change on the big scale, comparable to the UNDP NCD toolkit and their one-pagers on sectors.
It was suggested we could start with an agriculture one-pager that could be brought along to the spring meetings in Ghana.
The one-pagers should incorporate the following:
What needs to be done / what is not being done at large at the moment
Impact and factors:

- Intermittent irrigation; higher yield, less water use, malaria control, tailored to context (crop, field level, etc)
- Livestock and pest water management
- Urban farming practices
- Crop Choice

A similar document could be prepared for urban built environment / cities addressed to infrastructure ministry or community constructors, with the following factors:

- Source reduction, removing standing water
- Minimal standard for malaria safe houses, housing design and quality
- Reliable water supply

Furthermore, a mining one-pager can be prepared with the following factors:

- protect and mitigate shallow (illegal) mining
- provide resources to municipalities

There is already a water policy brief that could be included in this.

It is pointed out that all one-pagers need to mention behaviour change, and which factors are already included in the sector's budget but could be allocated differently. The group concluded that there needs to be consensus on the working group on which the advocacy briefs can be built on. Then the advocacy briefs can be skinned down right to the key points.

Panel of Mayors and Representatives

The remaining afternoon was devoted to the panel of representatives from Pakistan, India and Kenya and their experiences with efforts against malaria and multi-sectoral cooperation. Vijay Nehra first gave a presentation on the Ahmedabad Municipal Corporation in India and his experiences. According to WHO, there are 8 million malaria cases per year in India and in continues to present a big challenge for the stakeholders. Vijay then presented one case of multi-sectoral intervention: on the level of city government, all important stakeholders are involved and work towards stronger community participation. However, Vijay pointed out that interventions on community level still need to be improved, although there has been an increase of blood smear tests.
There are further challenges that need to be addressed:

- migratory population
- urbanization
- construction sites and open plots
- incomplete treatment
- lack of awareness and behaviour changes

Furthermore, there has been no decline in dengue prevalence in recent years.
As counter-measures, the Ahmedabad Municipal Corporation went to schools and gave live demos of mosquito life cycles. This awareness at school was then brought back to households. Additionally, a household survey for fever detection was made.
The main strategies included massive indoor fogging and preventing larvae breeding in containers. For this area, it has been a successful approach and decreased new cases to zero in this zone. Vijay saw the success in this by moving away from malaria-only control towards all vector-borne diseases, and by taking away the decision from leaders and instead involving the community.

Samuel Okello and Lawrence Gumbe gave a brief introduction to the City Board of Kisumu in Kenya and their experiences. Samuel pointed out that malaria is still a huge challenge in the city, but other diseases and issues are given more visibility since malaria has been there for a long time and thus people tend to forget about it. It is therefore important that we make sure we speak about it. Samuel also mentioned the importance of announcements on the radio, as many people in Kisumu listen to it. Further issues result from competing interests and duplication of resources. And it is mentioned that a lot time is wasted for allocation of resources. The Kisumu City Board exists since 2018 and has received enhanced management and funding. They are included in the Health Department within the city. Within the city,

CDC Atlanta also does research on various diseases (with a focus on HIV) and the Lake Victoria Basin Commission is also active. The Kisumu City Board is now especially tackling malaria and infrastructure in regard to malaria control. They now need physical means (infrastructure), biological means (research and vector control) and chemical needs (spraying). The KCB also puts special emphasis on solid and liquid water management to reduce breeding sites and is working human resource capacity at the moment. The representatives hope that at the end of this meeting there can be put a structure in place for collaborative efforts.
Mah Talat then gave a brief overview on the efforts in Pakistan. On a national level, she states, malaria programmes are only used for coordination. Decisions are mainly made on a provincial level. However, the district level is the most important, where the stakeholders can work on nuances for decisions regarding rural and city areas.

Questions and Inputs from the Plenum

- It is asked where the funding for these programmes is coming from. In Pakistan, funding is mainly allocated at a national level. In India, through the Vector Borne Diseases Programme on a national level fundings are allocated, which then flow from central to provincial governments. According to Vijay, allocating resources in India for malaria control is not a big issue. In Kenya, large projects receive funding at a national level. To maintain programmes on a city level, funds from elsewhere are often also often from different sources.
- It is asked if the success of the programme depends on staff on the ground, training programmes and capacity building. In India, this issue has been improving in the last years, but there is still a long way to go. Also, there has been an interesting development in that regard: social health activists can now be accredited. In Kisumu, there are two universities that offer medicine. Lawrence emphasizes the public participation and public involvement for every project they do. Civil societies and private and public sectors contribute a lot to the capacity building factor, and achieve faster results. In Pakistan, there is a scholarship for vector control training by the Global Fund. However, it is a difficult situation because there are no placement jobs for these people within the existing structure.
- Another question on domestic water storage tanks inquired about the quality of different tanks and if this changes the demand. In India, tanks are secondary storages for water supply. If there were a bigger emphasis on primary water supply and pumps it would reduce the need for these secondary storages. More containers mean more possibility for breeding sites. In Kenya, the water supply situation has improved in the recent years, which reduced problems with water tanks. However, pumping and treatment costs are high, and an easier direct supply chain would improve the situation.
- Are there 10-year or 20-year-city plans for reliable pipe water? How is a growing population factored into this? In Kisumu, Lake Victoria offers a big water supply. A 10 year plan has been currently developed. However, coordinators that are involved in the whole plan throughout the process are still needed. In Kenya, cities require a one-year plan that fit into the annual budget and a five-year plan. There is a process underway of planning for the next 50 years and beyond. In Pakistan, development is mostly driven by political terms, which can hinder process. Under these plans, all

sectors come in. Sectors are asked to give priority to the political will. In India, there is a plan formulated until 2030.

- It is asked if there are national steering committees or similar structures on malaria where the MSWG could pick up on. In India, there are malaria steering groups on district and city level. On the city level it is very easy to reach out. In Pakistan there is a technical board but it is not very functional. There are also national steering committees on a provincial level that do have incorporates any multi-sectoral approaches yet. For Kenya, Samuel agrees that cities are the easiest level to reach out to. Additionally, there is coordination among all sectors for technical issues required. A multi-sectoral approach thus is not impossible. According to Samuel, three key points need to be considered to get this working: coordination, technical aspects in place and economy.

Day 2: Tuesday, 5 February 2019

Morning
Sector Focuses on Tourism, Extractive Industry and Agriculture

Recapitulation of Day 1, Update for Day 2

Robert welcomed the group for the second the day and gave a brief overview on the day to come. A major decision will be if the group would like to start work streams. There are lot of opportunities for this group to participate within RBM. He recapitulated what happened on day one. He pointed out that **expanding participants within the industry** seemed to be in the interest of the group.

Sector Focus: Malaria, Other Vector-Borne Diseases and Tourism

The second day brought up intersectoral issues in regard to tourism. Robert stated that this was the first time tourism would be discussed within this setting, although it had been on the agenda for a long time. Apart from links to hotels and tourist attractions, there is also the feature of sustainability and "healthy" resorts. There is also willingness from tourists and tourism in general to contribute to sustainability, which is an angle the MSWG can connect in their work.

Robert prepared a flip chart on **transport in relation to tourism** and where one can think of interventions. Transport gives responsibilities, for instance frequent flyer programmes. Hotel chains as corporations have corporate guidelines. It would be interesting to figure out if they have a health policy that could be adapted for the malaria agenda. The co-Chairs had previously tried to establish contact to corporate hotel chains, but so far without success. Furthermore, tourist attractions, cruise ships, beaches and sea and mountain areas also present health issues and dangers, which could become important for our work.

Malaria and Tourism:
The Experience of the Sumba Foundation (Claus Bogh)

Claus Bogh from the **Sumba Foundation in Indonesia** gave a presentation on his experiences on **malaria control and hotel industry**. The Sumba Foundation is an NGO since 2001 working on Sumba island (covering 5% of the island) in Eastern Indonesia. In 2017, Eastern Indonesia accounted for 80% of all malaria cases in Indonesia (262'000 cases in total). The foundation has a hotel partner, Nihiwatu Resort. The work today has resulted mostly on the surveys and research done by MOH/ADB in Eastern Indonesia in 2003. The survey in 2003 observed mosquito breeding, simplistic living, and carried out all night mosquito catches. The survey brought forth that mortality of malaria was very high, and that age distribution showed that children were proportionally highly affected. Since then, through the SF Health Program, clinics and training centres have been opened where diagnosis is freely available. The SF clinics now see around 20,000 patients per year; of these around 4,000 are malaria patients. Village surveys screen another 10,000 people per year.

The **SF Malaria Program** has the following main intervention components:

- Make high quality malaria diagnosis freely available

- Provide the most effective malaria treatment for all malaria species
- Conduct mass screening of the target population to wipe out the malaria parasites
- Reduce malaria transmission by providing high quality LLINs

Since the implementation of these measures, 50,000+ malaria cases treated and there has been a 93% reduction in malaria prevalence in the core intervention area.

The Malaria Microscopy Training Center of the Sumba Foundation provides international level training in malaria microscopy, treatment and control. It includes a 4 weeks training program including field work and WHO and National standard certification. Like this 410 students have been trained to national level certified standard.

Claus then elaborated on the management on the Sumba Foundation. The foundation has overlapping management boards in the USA and Indonesia and has an annual budget of ca. $700'000. In this included, the owner of the Nihiwatu donates $180,000 annually to cover the Sumba Foundation's operating expenses. Donations go directly to projects, because the overhead is already included in the annual budget. The Sumba Foundation also covers other programmes, such as the Sumba Eye Program that prescribes free glasses and offers free cataract operations, and the Maternal Health Program, which offers free ultrasound scans to reduce maternal mortality. Furthermore, the School Lunch Program, the Malnutrition Program and the Water Program support more issues of the area.

The Nihiwatu Resort opened in 2000 and had since won many hotel awards due to the link with the foundation. The hotel benefits strongly through its involvement with the foundation: The local community's well-being and perception of the resort is essential for its operation, recruitment and safety, and the local government is very supportive of the resort due to this link. Additionally, many guests want to be part of the support (not just donations) and help out during their stay. This has become a big part why guests return to the resort. Additionally, the foundation tests all hotel staff for malaria once a month.

How can this be scaled for other projects? In the model that worked well for the Sumba Foundation it was very important work close with the Health Ministry, and a MOU was created with the Province Health Office. An organization stationed in Papua has now shown interest in learning from Sumba Foundation to copy their model for a different area. Also other hotels, as well as government and hotel officials from Sumbawa, have shown interest in contributing to a project the same way Nihiwatu Resort does, and the resort is happy to share its model with others. Claus pointed out that there were many reasons why hotels are motivated to join a model like this, as it protects guests and staff, raises corporate responsibility and local perception, and improves their status in responsible travels. In addition, the motivation for politicians is strong as tourism is the biggest hope for a thriving industry and development.

Questions and Feedback

- For scaling, it would be important to know where the money is exactly going and what would be the cost per person protected. In response, protecting personnel does not cause much extra cost. The government also covers part of the costs in the community. The most important activity presents spreading information and

knowledge, and thus the training is considered the most valuable part of the foundation.

- It was asked if there are any other diseases in the area. In Sumba there is also dengue and Zika; and Japanese encephalitis is very likely occurring as well. The Gates Foundation is currently planning research on the latter.
- Someone asked if a project like the Sumba Foundation needed a visionary leader with a new concept or if this could also be copied by a corporate, more anonymous hotel. To succeed it is necessary to have personal connections to local government and people. Primarily, one needs to build friendships in the area.
- In regard to the other programmes, are there any government or agricultural programmes on malnutrition that might change these issues in the long run? Claus pointed out that once you stop malaria, children start surviving. This is why it is important to teach parents what is nutritious for their children, which is why they have the Malnutrition Program. Sumba has a lot of issues, and the Sumba Foundation has set some priorities. For instance, there is no capacity to do birth control as well, except if there is a lack from local necessities. Government should do more on that.
- It was asked if there was any resistance building in the parasite building within this kind of programme. The Gates Foundation had tested for resistance within the last 5 years, but so far there has been no occurrence of resistance. Insecticide use is very limited on Sumba because farmers cannot afford it.
- What does it take to eliminate malaria in Sumba? What else would the foundation need? Sumba is a high transmission area with many carriers. Mosquito nets are very much needed but harder to be attained than in Africa. Additionally, there is about 50% transmission occurring outdoors. Claus states that the key for their success will be solid diagnosis and solid treatment.
- In the training at the MTC it has been mentioned that there used to be 50% failure rate. How come? The people that succeeded back then already were excellent in training beforehand, and newcomers had no chance. Instead, SF has now built a training center that includes a pre-test before training. Some people applying have never touched a microscope before, and it is therefore useful to know where one must start training them. The training now takes 4 weeks and the test can be repeated once. There is now a success rate of 97% and some people are already trained from previous graduates!
- Are the guests at the resort also protected from malaria? Claus explained that when the staff is clean, there is no source of transmission in the resort. Guests often bring prophylaxis that has side-effects. During dry season the infection rate is extremely low, and it should be fine to use repellent only.
- In regard to microscopy at the MTC, are also RDTs used? RDTs are not a particular need for their work, and microscopy is used for all surveys in the area.
- Someone asked if reforestation is also an issue in the area, and if that would make it harder to control malaria in Sumba. Claus only sees tick dangers in connection with reforestation in Sumba (mainly sandalwood trees and parasitic trees on other trees' roots systems). Forest malaria is not a big problem, as people do not live in the forest. A major issue however is farming.

Discussion: Malaria and Tourism

After the presentation, the working group moved back to the flipchart considering the different areas that tourism touches upon. There are also connections to other health issues, like food safety and drug issues, as Robert pointed out. And the group is asked if anyone sees a particular feature the MSWG could pick up on?
Steve asked Ballah Kandeh if this model could be in any way adapted to the Gambia, as the Gambia also relies heavily on the tourism industry. Ballah pointed out that there is a tourism board. However, he added that tourists and donors in this area might not be willing to pay more. But eco- and health tourism might attract a different group of tourist when it would be presented as an option. Someone also suggested that the group should get into contact with the World Tourist Organization.
Robert also reminded that we should not forget about the corporate chains. For instance, it would be interesting to learn more how corporate foundations, like the Hilton Foundation work with tourism in relation to health issues. Robert will follow up on that.
A suggestion for the group would be to develop a white paper between RBM and WTO to define what the best practices for malaria prevention are and what would be the most effective routes to achieve these objectives. This would be a very practical output to follow up.
The general impression in the room was that everyone was very interested in following up on a health and tourism strategy, and the group would to create a list of corporate hotel chains and big hotel associations (i.e. Sun in Africa, Marriott, Hilton, etc.). Someone raised the concern of having too many individual hotel chains, where nobody wants to be the first without knowing the ramifications and extent of where the work with the MSWG is going to take. Sumba was a special case because the hotel there has been on its own, while for instance in Gambia, there are many next to each other.

Extractive Industry & Malaria and other VBDs

The second sector focus of the day was on extractive industry and malaria and other VBDs where representatives from Anglogold Ashanti Malaria Control Ltd in Ghana and the National Department of Health in South Africa discussed their experiences.

Anglogold Ashanti Malaria Control Ltd (Malik Assan and Kwame Desewu)

Malik gave a short introduction on Anglogold Ashanti and its situating within Ghana. The Anglogold Ashanti Malaria Control Programme is a result of the mining company's efforts to reduce malaria in mines and to create a sustainable environment for their workers. Before 2004, in this particular environment there has been a high level of malaria, which brought forth a strong interest this in the mines. Starting in 2004, the uses of bed nets and IRS have continually helped to reduce malaria cases by 70%. Malaria cases with miners create high costs for the mining companies, which is why it was also in their interest to work on interventions. These interventions now save $500'000 per year. In 2013, the Global Fund began to support their project and scaled up to other places in Ghana, especially in the northern part of Ghana. Malik pointed out that there is a continuous collaboration with the Minister of Health and entomologists. There is also a platform in place with PMI staff to

exchange issues. What now is still needed is more research and support from health centres and universities. Malik would like more research so they can up the project further. Malaria is one of the biggest threats in Ghana and they are working towards elimination stage. Malik wished for the company that it would reach the status malaria-free s a mining company.
Different projects are currently trying scale up in Ghana (Clean environment campaign, destroying the breeding sites), but are plateauing at the moment. A provision assembly would improve the interactions between projects and how they could help each other.
Furthermore, there is an effort at Anglogold Ashanti to bring in other mining companies, and Malik states they are currently meeting other mining companies on this issue. The biggest issue at the moment is funding.

Questions on extractive industry in Ghana

- How is malaria treated in the districts, outside the mines? Malik states that there is malaria treatment in the entire environment, including the communities.
- The issue of environmental management was raised, and how environmental management contributes to habitat breeding sites. There has been a combination of clean environment and breeding sites.
- Has there been interaction or collaboration with NMP? Anglogold Ashanti collaborates with NMP on most issues. They sometimes have complementation measures (not instead), i.e. bed nets and some technical aspects that are added additionally by Anglogold Ashanti.
- It is always useful to produce success stories in such areas that can be used as an example. Someone in the plenum asked if this had been done at the example of Anglogold Ashanti? Anglogold Ashanti has collected its data pretty well, but had not had any great outputs yet. They are looking for ways of publications at the moment.
- Is there competition among mining companies that threatens malaria efforts? The company thinks of the end results, which also includes the health for people live in the area. They would like to influence other companies with the same way of thinking.
- It was pointed out that since the Global Fund supports Anglogold Ashanti, it triggers a discussion with other mining companies that might want to rise to the same standard, which is a good progress.

National Malaria Programme and Extractive Industries in South Africa (Eunice Misiani)

Eunice shared her experiences at the NMP with extractive industries in South Africa. She stated from the beginning it was important to have a win-win situation for both parties. While most mining industries are within the non-endemic areas, you can see cases of secondary transmission through moving and travelling. On their way to the mining areas, migrant miners leave the transmission along the way. This is why surveillance in non-endemic provinces was needed, as there were more malaria cases in these areas than in endemic provinces because of those movements. Eunice stated that 99% of imported malaria cases come from employees of the mining sector. As Eunice pointed out, it is however difficult on how to approach these people, as they do not work on guidelines on health or malaria issues. Mining councils are mostly only aware on TB and HIV issues that are more prominent in the area. The NMP created a malaria strategy for the mining sectors without the contribution of the sector first. Advocacy was very important, as Eunice emphasized, because there are

usually people that are willing to help out. The areas of engagement have been: vector control, environmental issues, case management and migrant workers. In regard to migrant workers, they paid special attention to any outdated drugs and therapies that were used in their home countries, and advocated for personal protection and prophylaxis. For workers' benefits, they consider malaria as an occupational disease. A new issue that has come up now are branches outside the countries in high-endemic areas to where worker are sent, which is something NMP is working on at the moment.
In the case of the NMP in South Africa, they engage on a high level. The E8 Initiative is also involved and works for advocacy in mining companies on how malaria is different from other diseases and what measures need to be taken. Eunice would also like to further involve the Ministry of Foreign Affairs in the future to work on the issue of migrant workers. There is already a border control committee in place (including police, army, health officials and immigration) that should be further involved on the malaria issue.

Questions on the mining industry in South Africa

- Is there a permanent surveillance programme for mosquito population in place? Eunice replied that vector surveillance is done by NMP, as well as training of some of the health care workers in areas with a high amount of vectors.

Panel on Agriculture & Malaria and other VBDs
(Priyanie Amerasigne, Eline Boelee, Jo Lines, Michael Okal)

Malaria and agriculture has been an issue of discussion for many years and the following panel shared its experiences in their different expertises touching upon agriculture.
Pryanie talked about her work on rice fields, irrigation and malaria in Sri Lanka with the *International Water Management Institute*. A lot of work in this project had been done together with the Sri Lankan government. Activities were on a central provincial level where each province had its own tailored plan. Today, there is still a strong anti-malaria programme active and a working system. When new cases come up, the provincial administration and the health sector are notified. At the moment, the emerging problem in Sri Lanka is dengue.
Jo gave a short overview on his current rice research work in West Africa with *AfricaRice*. He emphasized that there should be an endgame strategy for Africa without spraying. How can it become a sustainable malaria-free environment on its own? For Jo, the solution is landscape change, which is especially difficult for rice fields. However, rice fields are not a primary breeding site. Currently, there is work on a pitch for the Climate Change Grant for AfricaRice to find an anti-methane and anti-mosquito way of growing rice. Additional mosquito monitoring is happening at the moment in any case, and if they receive the grant (there should be feedback in May), then they can further the project.
Eline added to this discussion by talking about Water and Health, especially her work on Dams and Health, referring to her presentation from the first meeting. In their work, they are looking at VBDs in general and how we can influence VBDs by changing the water management itself. Water quality has become a very important part of this issue. There is also a PhD working on drainage and the influence on malaria. For the project *Dams and Health,* funding has come through since the last meeting, and the project is currently expanding manpower.

Michael talked about his work at the International Center for Insect Physiology and Ecology in Kenya, where they focus both on human health (malaria and VBDs) and animal health (also including tick-borne diseases), as well as plants and environmental health. Michael pointed out that it is getting harder to separate the teams and that their work began to overarch. When they receive grants, usually all teams are involved. They have also incorporated a multi-sectoral approach when receiving a grant from the World Bank in order to find engineers and actors from other sectors. A good example for a multi-sectoral issue was the following: At the coast of Kenya, they needed to build fences around parks that controlled the movement of animals, which also lowered the movement of vectors. This then reduced the transmission for VBDs. Additionally, they created a colouring system for cattle to control their movements. At the institute there continues to be an interest for more overarching issues.

Inputs and Questions to the Agriculture Panel

- In regard to agriculture and rice research, it is pointed out that malaria and agriculture have been tightly interwoven, and that agriculture should stay an active partner for MS work. Intermittent irrigation might be very effective to increase rice output (in Africa it has never been implemented). Could other rice varieties be considered that need less water? Jo pointed out that irrigation systems and flow tend to be unreliable in these areas. Intermittent irrigation is particularly difficult because the fields are uneven and create pools. According to Jo, it is up to the national systems how this will be adapted. In the case of methane, you do not let water flow away, you do not just replace it. Farmers need a lot of confidence to let the water go away, as it might be difficult to make sure they have enough. Jo concluded that there is still a lot of room for research in this field.
- Urban agriculture and urban food security has not been mentioned yet, and the question is raised if this is something else the group needed to look at. The panel pointed out that there is no urban malaria emerging in Sri Lanka and India. Globally, cities become more resilient (through the project 100RC for example) and they have different approaches and structures. Designs and city planners for green spaces approach this with having health risks in mind.
- Another input was to collect experiences on livestock management and reaching out to marketing studies.

Stratification and higher resolution data: what is the indicator we should track in agriculture?

The group then discussed stratification and higher resolution data with the question in mind what the indicator should be that we can track in agriculture. Someone suggested figures and maps and single cluster samples. The model should include issues that the health care sector cares about, for instance rice, where rice fields are on the map, and epidemiological feedback on rice. Pryianie emphasised that in Sri Lanka, where other diseases are emerging, it is important to compare and put VBDs in context of current issues. It was pointed out that by 2050 there will be 1.2 billion more people in sub-Saharan Africa, which needs to be addressed in regard to agriculture and its influence on VBDs. What does more agriculture mean for health and VBDs?

The example of reintroduction of malaria in wetlands was briefly discussed and the concern of growing of vectors. In Petite-Camargue, a prototype wetland for controlling diseases (including malaria) was created, and we could figure out if this project could be applicable to

other areas. The context for these is always important, particularly if there are any predators for the mosquitoes.
Eventually, the concern was raised that this discussion has too much focus on vector biology. What is the multi-sectoral engagement in this and how can it improve this work? The issue of the seasonal and migrant worker should become a bigger issue as well, as it has an influx during specific seasons.
The co-Chairs concluded that in the light of the discussion so far, the focus on the following sectors has continually crystallized: tourism, extractive industry and agriculture.

Afternoon
Activities for moving forward

The afternoon was designed to bring forth graspable goals and activities that this working group do while moving ahead.
As a starting point, Steve presented several points to consolidate our ideas:

- A consensus statement addressing the following questions: What is a multi-sectoral collaboration doing better than what the work on malaria and VBDs is doing at the moment? Why are we important? How can sectors can help and what is in it for them? What are the key health messages and research questions?
- Multi-sectoral work streams (smaller groups) with two leaders and other members.
- Delivery: education (i.e. getting our agenda into the curriculum of schools and trainings), capacity building and advocacy (how to reach other sectors)

There has been some concern in the group to divide into work streams. Robert instead suggested steering committees for now that get specific tasks done that lead us into the right direction. The output and delivery could stay in the plenary to keep everything more streamlined. There was also interest in adding tool development to delivery.

On the Possibility of Work Streams and Task Forces

No conclusion was reached to the question if the "Vector-Borne Diseases and Built Environment Work Stream" from VCWG should be moved over to MSWG. While members of the work stream were very interested in the move, the group came to the general consensus that it might be too early to establish work stream within MSWG, but does not rule it out for the future.
For now the group concluded that it would prefer a more flexible task force approach, as this also encourages a more flexible grouping that multi-sectoral actions entail. Work streams, like sectors, with their traditional framing with clear boundaries seem counterproductive. When a consensus statement is reached and the working group has established some activities, a structural framing could still be taken into account.

One-Pagers

The following people volunteered to prepare a one-pager for a sector. Dudley Tarley had shown everyone an example of one-pagers created by the NCD (they were leaflets with 2-3 pages), and everyone agreed that this would be a good form for the multi-sectoral one-pagers as well. The clear structure of the one-pagers will be defined by the co-Chairs. Jo Lines

volunteered to prepare a one-pager for agriculture, Steve Lindsay and Anne Wilson for built environment, Claus Bogh for tourism, and Gary Krieger who had not been attending the meeting will be asked to prepare one for extractive studies.
It was suggested that we should also prepare a one-pager for local governments, and it was decided to first consult back with Graham Alabaster on this topic.

Priorities for the next 12 months (and beyond)

In the light of the discussion so far, Robert asked the group what activities they would like to do until the next annual meeting in 12 months, and what they believed were the most urgent priorities. He asked everyone to write down 4 activities they believed should be prioritized in that time frame. After we figured out a list of priorities, we could take a clearer form of actions, for instance through virtual meetings every 3 to 4 months. He also suggested sending out information for activities and works of the group to everyone as it comes along, so everybody could have an input.
After everybody thought of their priorities, everyone's top priorities were collected on the flipchart. Then, in a second round, the group could vote on those 30-40 activities to prioritize them again in the plenum. Robert and Konstantina then agreed to work out these results after the meeting and decide where the primary focus should lie. The results are presented on the next page.

Closing of the meeting

In his closing remarks, Robert implored everyone to reach out to their network to find people outside the health sector who could be part of this working group. At the moment the group is still very inward looking, and heavily relying on vector control. Robert stated it would be useful to have interested counterparts from other sectors that the group can move beyond discussions only. He also asked the group to think of new venues and opportunities where the MSWG can reach a new audience.

Finally, he thanked everyone for their lively participation and their ideas. There had not been much action after the first meeting, but the co-Chairs will now push for more to happen within the next 12 months. Josh added that the partner committees at RBM are committed for global level advocacies (e.g. Malaria Day) where members of this group are always welcome to contribute. The co-Chairs would also like to see that members reach out to them when they have an idea or proposal for multi-sectoral action, so that next year we will have a full programme full of wonderful activities.

Annotated list of activities

Annotated list of activities prepared, categorized and prioritized by the Working Group on the afternoon of 5 February 2019. The top ten priority list was worked out by the co-Chairs and the secretariat after the meeting. The numbers in the annotated list present the number of people interested in making this topic a priority. Where malaria is mentioned this refers to malaria as the flagship disease for all vector-borne diseases, and especially also for the Aedes-transmitted viral infections.

Top Ten Priority List of MSWG activities

1. Formulate a Consensus Statement for the MSWG
2. Brief messages for specific audiences (two- to four-page briefing notes, policy or technology/tool oriented; aimed at stakeholder groups at different levels)
3. Promote strategy development for private sector engagement
4. Recommend revision of the WHO Manual on Environmental Management for Vector Control, with special reference to malaria (WHO Offset publication 66, 1984)
5. Design and implement mechanism to generate feed-back to the MSWG
6. Make Multi-sectoral Action for the Elimination of Malaria the 2020 World Malaria Day theme
7. Develop a strategy to invite key speakers from other sectors to the MSWG meetings
8. Update the Multi-sectoral Action Framework
9. Organize information disseminations events (stand-alone, at relevant conferences)
10. Promote mapping of relevant non-health sector stakeholders by country

Categorized, annotated list

Advocacy

Brief messages for specific audiences (two- to four-page briefing notes, policy or technology/tool oriented; aimed at stakeholder groups at different levels) – for example sector specific briefing notes on agriculture (irrigated rice, livestock, aquaculture) and malaria; extractive industry (mining, minerals, oil/gas industry) and malaria; urban planning, development and management (housing regulations, the built environment, urban land use, urban water management, urban resilience) 16

Key messages to other sectors (brief one-liners on specific issues with very specific target groups in non-health sectors) 7

Organize information disseminations events (stand-alone, at relevant conferences), requires development of information materials 13

Design and implement mechanism to generate feed-back to the MSWG (information, experiences, different perspectives, policy/legal requirements) from non-health sectors. 14

Specific advocacy for the agriculture sector (case studies, syntheses of past research, R&D questions/agendas, capacity development, IVM/IPM, agriculture extension workers & Farmer Field Schools, livestock distribution & management) 11

Introduce the Multi-sectoral Malaria theme at the regional WEF Conference

in Capetown, South Africa, 4-6 September 2019	8
Assist in translating the global briefs on the Multi-sectoral approach to malaria prevention and control to briefs for use at the national level	7
Make Multi-sectoral Action for the Elimination of Malaria the **2020 World Malaria Day theme**	14
Case studies	
Peer-reviewed case studies (i.e. case studies reviewed by an independent group of experts) on multi-sectoral approaches to malaria prevention, control and elimination	11
In the **Kisumu, Kenya: formulate a multi-sectoral policy and strategy** for malaria prevention and control as a case study	11
Knowledge management and research	
Identify knowledge gaps in the context of multi-sectoral approaches to malaria elimination and translate these into a research agenda	7
Promote a greater focus on malaria surveillance integrated in broader monitoring activities in specific settings	2
Country support	
Organize country needs consultations for the promotion of intersectoral action for malaria control	10
Prepare key awareness messages for low-incidence communities	5
Assess the quality of agricultural advice to small scale farmers in terms of opportunities to strengthen multisectoral malaria messages	5
Promote mapping of relevant non-health sector stakeholders by country	12
Test multisector policy concepts in operational settings in Kisumu, Kenya	5
Education and training	
Develop messages on core mosquito facts for life for use at the household level	8
Enhance the capacity for the application of skills, knowledge and experience in different settings	3
Promote generic curriculum development and use in the programmes of: primary schools, schools for engineering, schools for architecture and agricultural colleges	8
Policy and strategy development	
Promote policy formulation and strengthening for the extractive industries	6
Promote strategy development for private sector engagement	16
Formulate a Consensus Statement for the MSWG	17
Develop a **strategy for out-reach to non-health sectors**	10
Develop a strategy to **invite key speakers from other sectors** to the MSWG meetings	14
Contact Fair Trade accreditation organizations (or: eco-tourism certification Organizations) about including malaria and public health criteria	6
Tools	
Recommend revision of the WHO Manual on **Environmental Management for Vector Control**, with special reference to malaria (WHO Offset publication 66, 1984)	15

Carry out a comprehensive **mapping of relevant non-health sectors**	9
Update the Multisectoral Action Framework	14
Develop a **compendium of resources** (Health in all Policies, Water, Sanitation, Hygiene; Vector Control Needs Assessment; Global Vector Control Response)	5
Analyse lessons learned in intersectoral action for malaria control as a basis for the development of a guideline for multi-sectoral action	4
Develop indicators for the **monitoring and evaluation of multi-sectoral efforts** for malaria control	8
Mapping national capacities for multi-sectoral action and build scenarios for capacity strengthening	4
Codes of practice for private sector vector and pest control operations	1

Agenda

2nd Meeting of the Multi-Sectoral Working Group
Concept Note and Proposed Agenda

Forum, Global Health Campus
Chemin du Pommier 40, 1218 Le Grand-Saconnex, Geneva
4 - 5 February 2019

Co-chairs: Robert Bos & Graham Alabaster
Coordinator: Konstantina Boutsika
Rapporteur: Adriana Rüegger

Objectives:

- Consolidation of the scope and focus of the MSWG based on the recommendations made at the first meeting
- Development of draft concept notes that emerged from the first meeting into more elaborate proposals for project activities
- Strengthening of the evidence base for enhanced sustainability and resilience through malaria efforts across sectors in certified malaria-free countries
- Identification of criteria, procedures and marketing opportunities for bankable projects focused on intersectoral action for malaria through a dialogue with donors, and of options for effective multi-sectoral action at the municipal level
- Explore options and opportunities for a clearing house function for the MSWG
- Consider sectoral case studies: extractive industry, tourism, agriculture – and opportunities to support policy formulation, technical cooperation and capacity development

Expected outcomes:

A framework document on the MSWG's scope and focus for posting on the RBM web site

Proposals for technical cooperation, R&D and capacity development activities in different settings, involving different sectors

Criteria and procedures for bankable intersectoral projects; a rough landscape of donor interest

A concept note on a potential clearing house function of the MSWG

Draft position papers on the issues of malaria and tourism, and malaria and the extractive industry

A framework for municipal multi-sectoral action for malaria prevention and control

An analysis of the roles of and contributions by non-health sectors to the process of making Uzbekistan malaria-free

A work plan for the next 12 months

Report of the meeting

Proposed agenda

1. Opening of the meeting, objectives, expected outputs, round of introductions
2. Keynote address
3. Recapitulation 1st MSWG meeting
4. Non-health sectors' role and contribution in certified malaria-free countries
5. Bankable multi-sectoral action for malaria elimination: donor and recipient perspectives; mayors' perspectives
6. Proposal formulation
7. Sector focus: tourism; the extractive industry
8. Clearing House role
9. Approval of the work plan 2019
10. Closure of the meeting

Day 1 Monday 4 February 2019		
8:30 – 8:45	**Arrival and registration**	
8:45 – 9:00	Opening of the meeting Objectives and expected outcomes of the meeting Approval proposed agenda and programme of work Documents: inception note, proposed agenda/programme of work	Robert Bos Graham Alabaster MSWG Co-Chairs
9:00 – 9:20	Opening address: The role of non-health sectors in efforts to end malaria in the third decade of the 21st century	Robert Bos Co-Chair former Exec. Secretary Joint WHO/FAO/UNEP/UNCHS Panel of Experts on Environmental Management for Vector Control
9:20 – 9:30	Quick round of introductions	All
9:30 – 10:00	Recapitulation of the 1st MSWG meeting, October 2018, including a brief introduction to the Partnership and main conclusions/recommendations Documents: RBM reports/strategy/plan/WG ToR and the Report of the first RBM MSWG meeting Q&A	Robert Bos Graham Alabaster MSWG Co-Chairs Joshua Levens Konstantina Boutsika RBM Secretariat
10:00 – 10:30	**Break for refreshments**	
10:30 – 10:55	Roles of and contributions by non-health sectors to the process of making Uzbekistan malaria-free Documents: A brief report on the topic Q&A	Dr Xiao Hong Li, Technical Officer, Malaria Elimination Unit, WHO With support from Dr Anatoly Kondrashin (Member of WHO's Malaria Elimination Certification Panel)
10:55 – 11:15	Roles of and contributions by non-health sectors to	

	sustain the malaria-free status of countries certified by the WHO. Discussion: how can the MSWG promote engagement of non-health sectors to efforts to maintain the malaria-free status of countries?	All
11:15 – 11:45	Updates from the Co-Chairs of the other RBM Working Groups	(Co)-Chair or representatives of Vector Control; Malaria in Pregnancy; Case Management; Social and Behavioural Change; Monitoring and Evaluation
11:45 – 12:30	Bankable multi-sectoral action to support the reduction and elimination of malaria: introduction Brief reflection on some donor perspectives as they emerge from the web Panel discussion: what makes multi-sectoral initiatives attractive to donors? What are the hurdles and pitfalls?	Graham Alabaster Panel
12:30 – 13:30	**Group photo** **Buffet lunch**	
13:30 – 14:40	Small group discussions on criteria and procedures for the development of bankable projects; reconsideration of the draft concept notes that emerged from the first meeting	All (leads of the three working groups at the first meeting to present the concept notes)
14:40 – 15:00	Feedback from the small groups	All
15:00 – 15:30	**Break for refreshments**	

15:30 – 16:15	Panel of Mayors Challenges and obstacles to multi-sectoral action for malaria at the municipal level; options and opportunities to overcome these challenges; what are bankable proposals at the city level?	Panel of Mayors
16:15 – 17:00	Bankable multi-sectoral action to support the reduction and elimination of malaria: the road ahead Plenary discussion	All
End of day 1		

Day 2 Tuesday 5 February 2019		
8:30 – 9:00	**Registration**	
9:00 – 9:15	Recapitulation of the day one, update for day two	Robert Bos Graham Alabaster
9:15 – 10:15	Sector focus: malaria, other vector-borne diseases and tourism Introduction The experience of the Sumba Foundation Plenary discussion: options, opportunities, priorities	Robert Bos Graham Alabaster Claus Bogh All
10:15 – 10:30	Sector focus: malaria, other vector-borne diseases and the extractive industry HIA and the extractive industry	Robert Bos Graham Alabaster Malik Kofi Assan Eunice Misiani
10:30 – 11:00	**Break for refreshments**	

11:00 – 11:40	Sector focus: malaria, other vector-borne diseases and the extractive industry (continued)	All
11:40 – 12:30	Sector focus: malaria, other vector-borne diseases and agriculture Panel discussion	Panel All
12:30 – 13:30	**Buffet lunch**	
13:30 – 15:00	Options and opportunities for a clearing house function for the MSWG Proposal for the creation of a MSWG Steering Committee Presentation concept note The position of the RBM Secretariat Plenary discussion	Graham Alabaster Robert Bos Konstantina Boutsika/ Joshua Levens All
15:00 – 15:30	**Break for refreshments**	
15:30 – 17:00	Agreement on the work plan for the MSWG for 2019 Conclusions and further action	Robert Bos Graham Alabaster All
End of day 2		

Sponsorship of endemic-country participants is provided by *the Swiss Agency for Development and Cooperation (SDC) and Swiss Tropical and Public Health Institute (Swiss TPH).*

List of Participants

2nd RBM MSWG Meeting
Global Health Campus
Chemin du Pommier 40, 1218 Le Grand-Saconnex/Geneva, Switzerland
4 - 5 February 2019
Participants list

#	Family name	First name	Name of the employer	Country	Email
1	Amerasinghe	Priyanie	International Water Management Institute	Sri Lanka	p.amerasinghe@cgiar.org
2	Assan	Malik Kofi	Anglogold Ashanti Malaria Control Limited	Ghana	kofas75@yahoo.com
3	Boelee	Eline	Deltares	The Netherlands	eline.boelee@deltares.nl
4	Bogh	Claus	The Sumba Foundation	Indonesia	cbogh@cbn.net.id
5	Bos	Robert	Consultant	Switzerland	Robert.Bos53@gmail.com
6	Boslego	Matthew	RBM Partnership to End Malaria	United States of America	matthew.boslego@endmalaria.org
7	Boutsika	Konstantina	Swiss Tropical and Public Health Institute	Switzerland	konstantina.boutsika@swisstph.ch
8	Buj	Valentina	Unicef	United States of America	vbuj@unicef.org
9	Desewu	Kwame	Anglogold Ashanti Malaria Control Limited	Ghana	desewu@yahoo.com
10	Elbukhari Ibrahim	Maisoon	United Nations Development Programme	Switzerland	maisoon.elbukhari@undp.org
11	Gumbe	Lawrence	Kisumu City Board	Kenya	lgumbe@logassociates.com
12	Hasler	Layla	Swiss Tropical and Public Health Institute	Switzerland	layla.hasler@swisstph.ch
13	Hoppé	Mark	Syngenta	Switzerland	mark.hoppe@syngenta.com
14	Kandeh	Balla	Ministry of Health and Social Welfare	The Gambia	ballakandeh@yahoo.co.uk
15	Konradsen	Flemming	Københavns Universitet	Denmark	flko@sund.ku.dk
16	Levens	Joshua	RBM Partnership to End Malaria	Switzerland	Joshua.Levens@endmalaria.org
17	Li	Xiaohong	World Health Organization	Switzerland	lixia@who.int
18	Lindsay	Steve	Durham University	United Kingdom	s.w.lindsay@durham.ac.uk
19	Lines	Jo	London School of Hygiene & Tropical Medicine	United Kingdom	jo.lines@lshtm.ac.uk
20	McBeath	Justin	Bayer	United Kingdom	justin.mcbeath@bayer.com
21	Misiani	Eunice	National Department of Health	South Africa	Eunice_misiani@yahoo.co.uk
22	Nehra	Vijay	Government of Gujarat	India	vijaynehra.office@gmail.com
23	Okal	Michael	International Center for Insect Physiology and Ecol	Kenya	mnyanganga@icipe.org
24	Okello	Samuel	Kisumu City Board	Kenya	okellosamuel11@gmail.com
25	Prytherch	Helen	Swiss Tropical and Public Health Institute	Switzerland	helen.prytherch@swisstph.ch
26	Raeisi	Ahmad	Tehran University/Ministry of Health&Medical Education	Islamic Republic of Iran	raeisia@tums.ac.ir
27	Reddig	Achim	BASF SE	Germany	achim.reddig@basf.com
28	Renshaw	Melanie	African Leaders Malaria Alliance	United Kingdom	melanie@alma2030.org
29	Ruegger	Adriana	United Kingdom	Switzerland	adriana.rueegger@swisstph.ch
30	Shenton	Fiona	melanie@alma2030.org	United Kingdom	f.c.shenton@durham.ac.uk
31	Takken	Willem	Wageningen University & Research	the Netherlands	willem.takken@wur.nl
32	Talat	Mah	The Indus Hospital	Pakistan	mah.talat@ghd.ihn.org.pk
33	Tarlton	Dudley	UN Development Programme	Turkey	dudley.tarlton@undp.org
34	Van Hulle	Suzanne	Catholic Relief Services	United States of America	suzanne.vanhulle@crs.org
35	Velayudhan	Raman	World Health Organization	Switzerland	VelayudhanR@who.int
36	Wayessa	Daddi	RBM Partnership To End Malaria	Switzerland	daddi.wayessa@endmalaria.org
37	Wilson	Anne	Liverpool School of Tropical Medicine	United Kingdom	anne.wilson@lstmed.ac.uk

List of Abbreviations

100RC	100 Resilient Cities
ADB	Asian Development Bank
CDC	Centers for Disease Control and Prevention, Atlanta
CMWG	RBM Case Management Working Group
CRSPC	Country/Regional Support Partner Committee
CSSES	Centers of State Sanitary-Epidemiology Surveillance
E8	Elimination 8 Initiative
GHC	Global Health Campus
GMP	Global Malaria Programme
HIV	Human Immunodeficiency Virus
IDP	Internally Displaced Person
IPM	Integrated Pest Management
IRS	Indoor Residual Spraying
IVM	Integrated Vector Management
KCB	Kisumu City Board
LLINs	Long Lasting Insecticidal Nets
MERG	RBM Monitoring and Evaluation Working Group
MIA	Ministry of Internal Affairs
MiP	RBM Malaria in Pregnancy Working Group
MOH	Ministry of Health
MSWG	Multi-Sectoral Working Group
MSWG-1	First meeting of the Multi-Sectoral Working Group
MTC	Microscopy Training Center
NCDs	Non-Communicable Diseases
NMEP	National Malaria Eradication Programme
NMP	National Malaria Programme
PMI	President's Malaria Initiative
RBM	Rollback Malaria Partnership to End Malaria
R&D	Research and Development
RDTs	Rapid Diagnostic Tests
SBCC	RBM Social and Behaviour Change Communication Working Group
SDG	Sustainable Development Goal
SF	Sumba Foundation
TB	Tuberculosis
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund
VBD	Vector-Borne Disease
VCWG	RBM Vector Control Working Group
WEF	World Economic Forum
WHO	World Health Organization
WTO	World Tourism Organization