RBM Partnership to End Malaria Multi-Sectoral Working Group

3rd Annual Meeting, 6-7 February 2020

Mövenpick Hotel, Geneva

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Coordinator: Konstantina Boutsika
Rapporteur: Erik Blas

Content

List of abbreviations and acronyms

ACT	Artemisinin-combination Therapy
AFRO	WHO Regional Office for the African Region
AIM	RBM's Action and Investment to defeat Malaria 2016 - 2030
ALMA	African Leaders Malaria Alliance
ANC	Antenatal Care
EWEC/APR	Every Woman Every Child / A Promise Renewed
ARMPC	Advocacy and Resource Mobilization Partner Committee
AWD	Alternate Wetting and Drying
BCC	Behaviour Change Communication
BMGF	Bill and Melinda Gates Foundation
BOVA	Building Out Vector-borne diseases in sub-Saharan Africa
C4D	Communication for Development
CDS/NTD	Department of Control of Neglected Tropical Diseases
CHW	Community Health Worker
CMWG	Case Management Working Group
COE	Countries with Ongoing Emergencies
CRSPC	RBM Country / Regional Support Partner Committee
CSR	Corporate Social Responsibility
DHS	Demographic Health Survey
DHSS	District Health Systems Strengthening
DR Congo	Democratic Republic of Congo
EPI	Expanded Programme on Immunization
EQUSIT	Equitable Impact Sensitive Tool
EWEC	Every Woman Every Child
GF	Global Fund to Fight AIDS, Tuberculosis and Malaria
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GFF	Global Financing Facility
GMP	Global Malaria Programme
GNI	Gross National Income
GTS	WHO Global Technical Strategy for Malaria
GVA	Geneva
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
HQ	Head Quarters
HSS	Health Systems Strengthening
IDP	Internally Displaced People
IDRC	International Development Research Centre
IEC	Information, Education and Communication
IPT	Intermittent Preventive Treatment
IPTp	Intermittent Preventive Treatment in Pregnancy

IRM	Insecticide Resistance Management
IRS	Indoor Residual Spraying
ITN	Insecticide Treated Net
IVM	Integrated Vector Management
JHU	Johns Hopkins University
LLIN	Long-lasting Insecticidal net
LLITN	Long-lasting Insecticide-treated Net
M&E	Monitoring and Evaluation
MAAM	Mass Action Against Malaria
MERG	Monitoring and Evaluation Reference Group
MICS	Multiple Indicator Cluster Survey
MiP	Malaria in Pregnancy
MiPTWG	Malaria in Pregnancy Technical Working Group
MiPWG	Malaria in Pregnancy Working Group
MIS	Management Information System
MOH	Ministry of Health
MSAFM	Multi-sectoral Action Framework for Malaria
MSA VBD	Multi-sectoral Approaches for the Prevention and Control of Vector-borne Diseases
MSWG	Multi-Sectoral Working Group
NGO	Non-government Organization
NMCP	National Malaria Control Programme
NTD	Neglected Tropical Diseases
PATH	Program for Appropriate Technology in Health
PMI	Presidents Malaria Initiative
PSI	Population Services International
PSM	Procurement Supply Management
RAM	Rotarians Against Malaria
RAM PNG	Rotarians Against Malaria – Papua New Guinea
RAWCS	Rotary Australia World Community Services
RBM	Roll Back Malaria Partnership to End Malaria
RDT	Rapid Diagnostic Test
RMNCH	Reproductive, Maternal, New-born and Child Health
RMP	Rotarian Malaria Partners
SBCC	Social and Behavioural Change Communications
SBCCWG	Social and Behavioural Change Communications Working Group
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal
SME	Surveillance, Monitoring and Evaluation
TB	Tuberculosis
TDR	Special Programme for Research and Training in Tropical Diseases
TPH	Swiss Tropical and Public Health Institute
UK	United Kingdom of Great Britain and Northern Ireland

UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Emergency Fund
USA	United States of America
USAID	United States Agency for International Development
VBD	Vector-borne Disease
VCWG	Vector Control Working Group
VVE	Veterinary Public Health, Vector Control and Environment Unit
WASH	Water, Sanitation and Hygiene
WG	Working Group
WHO	World Health Organization

1. Opening of the meeting - objectives, and expected results

Konstantina Boutsika (MSWG Coordinator) opened the meeting and welcomed Maisoon Elbukhari Ibrahim of UNDP as ad interim Co-chair and Graham Alabaster of UN-Habitat as Co-chair.

Objectives

1. Engagement with other Working Groups and RBM Partnership
2. Provide an update on the implementation of 2019 MSWG work plan and identify priority activities in 2020
3. Share experiences on implemented multi-sectoral responses to malaria and discuss the technical assistance needs in countries
4. Identification of criteria, procedures and marketing opportunities for bankable projects focused on intersectoral action for malaria
5. Address MSWG business issues e.g. election of the co-chair; available resources etc

Expected outcomes

1. Guidance note on opportunities for coordination and collaboration with other Working Groups
2. A work plan for the next 12 months
3. MSWG technical assistance plan and business case
4. Agreement on the business issues
5. Report of the meeting

Graham then welcomed Maisoon as ad interim Co-chair of the RBM Multi-sectoral Working Group (MSWG) and thanked Robert Bos for serving as Co-chair since the beginning. Graham then set the scene for the two-day meeting by asking the critical question: "*Is the multi-sectoral message getting through*?" His answer was: "Yes and no".

'Yes' because there are several malaria related analyses and activities in individual sectors and by individual actors, including, e.g., water and sanitation, housing, humanitarian action, etc. 'No', because, it has not been consolidated into one voice and it is difficult to pull together good multi-sectoral projects. Therefore, a lot is left to do. It is a challenge to get the big players involved, including the World Bank, The Global Fund, WHO. While there is always inertia in international development work, there are also current opportunities and drivers that can be piggy-backed on. These include, e.g., climate change, that fact that the World is becoming a more insecure place and the 2030 Agenda for Sustainable Development.

Maisoon then introduced the objectives, expected results and the meeting agenda (see annex A) and summarized the vision as sharing experience on multi-sectoral action and the need for collective and evidence-based action. I.e., coming more together, convene, share and act for impact on the ground.

The agenda was approved (see Annex A).

2. Opening address: The role of non-health sector in vector control

Presenter: *Raman Velayudhan, WHO*

Raman described the new roadmap for Neglected Tropical Diseases (NTD) that has linkages with the sustainable development goals (SDGs). The roadmap will be discussed at the WHO Executive Board meeting next week and is based on four pillars of action. Each of these pillars ('*Strengthen inter- and intra-sectoral action and collaboration*', '*Engage and mobilise communities*', '*Enhance vector surveillance, and monitoring and evaluation of interventions*' and '*Scale up and integrate tools and approaches*') have opportunities for multi-sectoral involvement.

As a consequence, the Department of Control of NTDs is slowly expanding the number of partners it is working with in civil society, public and private sectors. Examples of ministries and other authorities included: water and sanitation (WASH), agriculture, environment, livestock, wild life, education, justice, social welfare (human rights), infrastructure and the built environment, and food safety. The many different players require new and different forms of coordination.

Raman further highlighted the close interaction between NTDs and the broader sustainable development agenda. Progress on SDG 6 (Clean water and sanitation), SDG 9 (Industry, innovation and infrastructure), SDG 11 (Sustainable cities and communities) and SDG 13 (Climate action) can facilitate the NTD control goals. In return, successful interventions against NTDs can contribute to the achievement of SDG 1 (No poverty), SDG 2 (Zero hunger), SDG 4 (Quality education), SDG 5 (Gender equality), SDG 8 (Decent work and economic growth) and SDG 10 (Reduced inequalities). The SDGs require strong global partnerships (SDG17) and it is all underpinned by SDG3 (Good health and well-being).

Raman then presented some real-life insight into ongoing NTD control efforts following this new model. The Interagency Dengue Task Force in Singapore involves a very large and diverse number of players covering civil society, the private sector, ministries, public agencies, town councils, etc. The Task Force uses a multi-pronged approach with a systematic and comprehensive community engagement strategy combining science and customised communications to address public sentiments, political views and ethical complexities.

Similar approaches are being rolled out in Papua New Guinea, Solomon Islands, the Philippines, and in Bangladesh, though the documentation from these is still in the making. In Dhaka (Bangladesh) particularly two parts of the city were struggling with more than 100,000 cases of dengue last year.

Finally, Raman pointed to The Kigali Summit 25 June 2020 – The first-ever global summit on malaria and neglected tropical diseases. The summit will provide an opportunity to garner all stakeholders in malaria, NTDs and beyond. 22 Heads of State will be present and the message that NTDs are moving from the rural to the urban needs to be clear. He suggested that RBM-GMP-NTD could organize a side event with a special focus on the role of all sectors (multi-sectoral coordination).

Floor discussion

The importance of good case studies to elucidate "how it works and how it fails" was stressed. It would also be important to get beyond preaching to the converted. Currently we are not getting to the people who, e.g., are planning our cities for the future and we need to join-in with other communities that have not got the message.

Several of the participants mentioned that they had experienced competition for resources among sectors and a habit of criticising each other. An understanding of co-benefits and a culture of mutual accountability for both budget and results has to be built for multi-sectoral action and coordination to succeed. In this respect, political commitment and leadership plays a central role.

With respect to The Kigali Summit in June, Josh Levens (RBM) committed to seek stage-time as well as pushing for a side-event in collaboration with the MSWG.

3. Round of introductions

Presenter: *All*

Each participant introduced her / himself, briefly explaining background, experience and particular interest in multi-sectoral action.

69 participated in the meeting – the highest number ever. Participants came from 24 different countries, representing five of the WHO regions (Africa, The Americas, South-east Asia, Eastern Mediterranean, and Europe) – see annex B.

A number of the participants had also participated in the RBM Vector Control Working Group meeting that had taken place immediately before the MSWG meeting – thus benefiting from the crossover between malaria and vector control with respect to multi-sectoral action.

4. Introduction to RBM Partnership to End Malaria

Presenter: *Joshua Levens, RBM Partnership to End Malaria*

Josh started pointing out that the current RBM strategy is in its third and final year. During 2020 there will be a series of consultations with stakeholders to shape the future strategy. The current strategy has three strategic objectives:

Strategic Objective 1: Keep malaria high on the political and development agenda to ensure continued commitment and investment to achieve the GTS and AIM milestones and targets

Strategic Objective 2: Promote and support regional approaches to the fight against malaria anchored in existing political and economic platforms such as regional economic communities; including in complex humanitarian settings

Strategic Objective 3: Increase the financing envelope for malaria

All three strategic objectives are relevant with respect to multi-sectoral action for malaria. As a result, the RBM Partnership has a number of important roles in the multi-sectoral response.

The RBM Multi-Sectoral Working Group (RBM-MSWG)

The RBM Partnership to End Malaria established the Multi-Sectoral Working Group to:

- Provides guidance in the work of engaging global stakeholders, build consensus, convene and coordinate partners in order to identify, prioritize and implement initiatives to control and eliminate malaria across all sectors.
- Set priorities based on an assessment of countries' existing and potential multi-sectoral activities to fight malaria.
- Activate the Partnership to identify and empower research and implementation partners to represent and coordinate the broader Partnership for multi-sectoral initiatives in which leadership has not yet been identified or unified. Serve as an information hub for data and analysis which fall outside the scope of the health sector, to align Partners in their analysis, foster dialogue, and reach mutual consensus for decision making and action.
- Act as an envoy on behalf of the Partnership - the Secretariat can follow up on recommendations of the Working Group and act as the coordinating partner, leveraging its own resources and expertise to build momentum and drive key initiatives.

The Advocacy and Resource Mobilisation Partner Committee (ARMPC)

The ARMPC work plan for 2020 includes:

- Proactively engaging with businesses, including those outside the health sector, to support multi-sectoral initiatives against malaria, through adoption of specific policies and targeted investments. This will be achieved through putting malaria on the political and developmental agenda at selected multi-sectoral convenings, particularly those outside of the health sector, including agriculture, energy, infrastructure, mining, and tourism.
- Using the Multi-sectoral Action Framework for Malaria, working with partners to promote malaria-smart investments and anti-malaria interventions outside of the health sector.
- Developing supplemental multi-sectoral advocacy materials for use by ministers of health and other high-level decision makers.
- The ARMPC will engage the RBM Multi-sectoral Working Group throughout the year on joint areas of work.

5. Engagement with other Working Groups and RBM Partnership to End Malaria

Updates from the Co-chairs / Representatives of the other RBM Working Groups and RBM strategic direction.

5.1 Case Management Working Group - CMWG

Presenter: *Valentina Buj, UNICEF*

Valentina presented on behalf of the co-chairs Elizabeth Juma (WHO/AFRO) and Larry Barat (PSI).

The CMWG aims to minimize wasteful duplication, maximize synergies, and encourage harmonization and pooling of efforts for faster uptake and scale up of malaria case management strategies and interventions. The main objectives of the CMWG include to:

- provide a forum for the dissemination of the normative and policy-setting guidelines of WHO and for sharing best practices for adaptation and implementation by international and country-level partners
- support the scale up and implementation of policies and strategies to ensure universal coverage and access to quality malaria case management in endemic countries
- coordinate, align and facilitate collaboration between partners to avoid duplication and inefficiencies; sharing experiences and best practices; and identification of challenges or bottlenecks for discussion by the Working Group.

The short-term priority deliverables for 2019 were:

1) Development and sharing of tools and best practices
   - Compile and disseminate existing tools for achieving quality in case management
   - Identify and document lessons learnt from success stories in malaria service delivery around the world for dissemination
   - Develop a plan for sharing tools to improve supply chain management for malaria commodities
   - Update CMWG webpage to link to resources, partners contacts, partner activity map and project resource pages
2) Advocacy at both global and country level (concept memo to BMGF)
3) Coordination with other Working Groups and committees

The next (the 11th) annual CMWG meeting will take place **in Kigali, Rwanda on September 8-10, 2020**. The CMWG welcomes participation as well as topics for the annual meeting as well as issues to be brought to the attention of the Working Group.

https://endmalaria.org/our-work-working-groups/case-management

5.2 Monitoring and Evaluation Reference Group – MERG

Presenter: *Molly Robertson, PATH*

Molly presented on behalf of the co-chairs Arantxa Roca-Feltrer (Malaria Consortium, UK) and Médoune Ndiop (NMCP, Senegal).

The purpose of the MERG is to facilitate alignment of partners on strategies and “best practices” in surveillance, monitoring, and evaluation (SME) of malaria control and elimination programmes. It also identifies emerging questions and needs related to the implementation of SME initiatives, communicates these to appropriate partners, and brainstorms solutions. The main objectives of the MERG include to:

- bring together individuals and partners who are well versed in SME and have the ability to advise on, advocate for improved SME for the RBM Partnership
- provide a forum to coordinate efforts in malaria SME
- provide a forum for communication and mutual learning.

Recent products include:

1) Framework for Evaluating National Malaria Programs in Moderate and Low Transmission Settings
2) Framework for Evaluating National Malaria Programs in Moderate and Low Transmission Settings: Aide Memoire
3) Household Survey Indicators for Malaria Control, April 2018

The next (31st) annual MERG meeting will take place in **Thailand, Bangkok on April 29 to May 1, 2020**. The anticipated themes include discussing *Plasmodium vivax* and elimination, and how to transfuse lessons learned in low transmission areas to the Africa region. The MERG welcomes participation.

https://endmalaria.org/our-work-working-groups/monitoring-and-evaluation

5.3 Malaria in Pregnancy Working Group - MiPWG

Presenter: *Valentina Bui, UNICEF*

Valentina presented on behalf of the co-chairs Maurice Bucagu (WHO) and Elaine Roman (Jhpiego).

MiP always falls off the radar. But this is really where we need multi-sectoral work to harmonize vector control, case management, nutrition, emergency action, poverty, education, etc. MiP should be a tracer issue not to fall through the cracks. In 2018 11 million pregnancies were exposed to malaria infection in moderate and high transmission SSA countries, delivering 872,000 children with low birthweight; only 61.3% of pregnant women slept under an ITN; 31% of eligible pregnant women received the recommended three or more doses of IPTp; and 18% of women attending ANC do not receive any IPTp.

The MiPWG priorities for 2019-20 include:

1) Policy
   - Continue to support WHO in the country application of new ANC guidelines
   - Support 4 countries to implement and document process of ANC guideline adoption
2) Advocacy
   - Support dissemination of brief on use of ACTs in 1st trimester
   - Promote platform for sharing of best practices in community engagement
   - Collaborate with SBCCWG on SBCC messages for MiP around early ANC attendance
   - Support updates to brief on GF grants in the context of RMNCH services including MiP
3) Programmatic Initiatives, Products and Tools

- Support establishment of country MiP TWGs
- Compile country feedback on MiP tools and harmonize/disseminate accordingly, hold webinar to reinforce tool utilization and value
- Reorganize MiPWG webpage for easier tool/product accessibility. highlight MiPWG resources through regular WG communications

4) Research
   - Share research activities and key findings through teleconferences and other opportunities throughout the year as appropriate
5) Coordination
   - Identify country MiP TWG focal points and include in WG teleconferences, track country MiP TWG meetings
   - Continued collaboration with RBM, CRSPC, other RBM WGs
   - Coordinate a technical discussion with PMI, WHO and WG Co-chairs on MiP technical issues that require additional guidance and/or support

The next (the 21st) annual MiPWG meeting will take place **in Switzerland, Geneva on April 29 to May 1, 2020**. The MiPWG welcomes participation as well as topics for the annual meeting and issues to be brought to the attention of the Working Group.

https://endmalaria.org/our-work-working-groups/malaria-pregnancy

5.4 Vector Control Working Group – VCWG

Presenter: *Justin McBeath, Bayer*

The co-chairs of this Working Group are Keziah Malm (NMCP, Ghana) and Justin McBeath (Bayer).

The purpose of the VCWG is to align RBM partners on best practices to reach and maintain universal coverage with effective vector control interventions. The main objectives of the VCWG include to:

- provide a forum for the dissemination of normative and policy-setting guidelines of WHO and best practices for adaptation and implementation by international and country-level partners
- support the generation and interpretation of evidence to inform global policy and guidelines
- protect the efficacy of existing tools and stimulate the development of new tools
- aim at coordinating the support to malaria-affected countries
- diverse partners reach a common understanding of the threats and opportunities, learn from each other and develop the necessary networks and activities to overcome these challenges.

The work streams of the VCWG are:

1) LLIN Priorities
2) IRS IRM Priorities
3) Larval Source Management
4) New Tools, New Challenges in Vector Control
5) IVM, Evidence and Capacity

6) Vector Borne Diseases and the Built Environment

The 15th annual meeting of the VCWG took place in Geneva 3 – 5 February 2020. Justin welcomed the opportunity created by holding the annual meetings of the MSWG and the VCWG back-to-back for best-practice sharing, aligning constituencies on challenges faced in malaria vector control, and information dissemination and networking.

https://endmalaria.org/our-work-working-groups/vector-control

5.5 Social and Behavioural Change Communications Working Group – SBCC-WG

Presenter: *Gabrielle Hunter, Breakthrough ACTION*

Gabrielle (Secretariat) presented on behalf of the co-chairs Anna McCartney-Melstad (JHU CCP) and Guda Alemayehu (USAID, Ethiopia)

The SBCCWG is a forum to exchange malaria SBCC best practices and experiences; mobilize political and technical resources to position SBCC as a core component of malaria control; and promote the development of theory-informed, evidence-based SBCC programming at the country level. The core objectives of the SBCCWG include:

- Coordination and networking: Forum for exchange of malaria SBCC best practices and experiences
- Technical guidance: Promote theory-informed, evidence-based programming focused on behavior change at the country level
- Making the case: Be a voice for allocating political, social, and financial resources to SBCC as a core component of malaria control that cuts across all technical areas.

The SBCCWG work streams for 2019 – 2020 are:

1) Community health worker toolkit for malaria SBCC
   - For training CHWs in SBCC for case management, vector control, and malaria in pregnancy
   - Status: Toolkit modules currently being drafted by work stream
2) Guidance for SBCC strategies across different malaria transmission settings
   - Status: Collecting country experiences in stratified SBCC to inform this guidance (vector control inputs are important, i.e., new nets)
3) Standardized malaria SBCC module for MIS/DHS
   - Status: Optional 10-question module approved by DHS programme. Countries need to request it during the questionnaire design phase and ensure that the NMCP SBCC focal person is involved for in-country discussions.

The next meeting of the Working Group will take place in Marrakech, Morocco on the 29th of March, 2020 immediately prior to the International SBCC Summit 2020 (March 30 – April 03).

https://endmalaria.org/our-work/working-groups/social-and-behaviour-change-communication

Floor discussion

Before opening the floor, Maisoon El noted that the other Working Groups are mature and have a lot of tools and experiences that could benefit the MSWG. Moreover, the MSWG would contribute to the design and coordination of the multi-sectoral actions in the other Working Groups.

This triggered a suggestion to RBM of not having these Working Groups meet separately in order to capitalize on synergies and joint work plans – and possibly have cross-representation in the groups. Josh Levens explained that such practice is actually starting this year – the Advocacy & Resource Mobilisation, Country/Regional Support and Strategic Communications Partner Committees are meeting at the same time and place, i.e., next week in Nairobi. This is the same time as the GF meeting for the next round of funding.

As a related issue, it was noted that we have to be mindful that we are working with existing structures. With our guidelines and processes – we should be ensuring not obstructing what already exist and should not create more work for people who in some cases are already overburdened. Josh Levens responded that it is part of the multi-sectoral incentive to unlock resources. However, funds from the GF can only be released if included in the national strategy. In order to ensure that, the NMCP must own multi-sectoral action. Politics in this respect will vary from country to country.

It was noted that the planning for multi-sectoral national strategies is already included in the current WHO Global Malaria Programme planning guidance.

A representative of DR Congo raised the question of how to make multi-sectoral councils work. Despite everything they had done and tried in the country – it still not really works. She asked if there could be a meeting in DRC on how to mobilize other sectors. It was mentioned that consultant support could be requested from CRSPC and that the path-finding in connection with roll-out of the updated Multi-sectoral Action Framework for Malaria would eventually also address the issue (see session 11).

The observation of an incredible wealth of data including across of sectors and in relation to, e.g., emergencies and food insecurity was made. The question is if we can begin to link the many data and analyse them in a more holistic way. The answer from MERG was given as “for sure we can”. There is so much information out there. However, it will take a long time and require more human and financial resources to do it. Further, even if so, there will be a point where you will not be able to get the data details you want.

In parts of Africa, it had been noticed that malaria is shifting from the under-fives to the 5 – 15 year old and the question was raised on how MERG can help in tracking this shift as the current key performance indicator standard measure focus on the under-fives. The Gambia NMCP informed that they do not limit MICS to the under-fives. The MERG responded that the tools are not age specific.

The issue of how we communicate was brought up again. "*A lot of wording is about what malaria get out of this. We should say what malaria programmes offer - beyond better health. If not, we are going to fail*". There are competing interests and demands for attention and resources.

The availability of data on malaria and food security has also an interest for the food industry. The food industry is not fully aware of the impact of malaria on food production. However, we must not forget that in many environments, mosquitoes are man-made. We need to put that into the broader context and get the messages right.

Josh Levens informed that the Institute of Global Health in Geneva is currently updating the Jeffrey Sachs paper from 20 years ago on the economic impact of malaria. Further, work is ongoing on impact of malaria, remote sensing and layering data sets on top of each other. This could assist in getting the multi-sectoral malaria messages better across.

In concluding the session, Maisoon stressed that the multi-sectoral response – not only in vector control – is in all the three pillars (objectives) of the RBM Strategy (see session 4).

6. Malaria control in humanitarian emergence, an example of multi-sectoral response

Presenters: *Allen Maina, UNHCR and Valentina Bui, UNICEF*

Disease risk in countries with ongoing emergencies (COE) (especially among refugees) – top killers are: diarrhoea, malaria, malnutrition, measles and pneumonia.

Forcibly displaced populations are often at greater risk of disease due to:

- High levels of mobility
- Poor living conditions which increase exposure to disease or disease vectors
- Decreased access to health services often caused by ongoing conflict, collapse of health system, ethnic, cultural, linguistic or other barriers
- Weakened immunity because of multiple infections and malnutrition especially during the 1st phase of displacement
- Poor water container water management and flooding / surface water = increased insect numbers and disease transmission
- Open defecation sites and poorly maintained latrines increase flies numbers and disease transmission
- Movement from low to high transmission zones. Majority of refugees live in areas in which malaria is endemic or occurs in seasonal epidemics
- Women of reproductive age and children constitute a majority of refugee populations

Challenges

- Access to the population
- Local capacity
- Supply systems
- Global stocks – availability of stocks

- Financing
- Strength of the health system: resilience and response planning; reallocation of staff and resources according to need
- Availability and transmission of data
- Social norms/cultural practices
- Fears/Rumours
- Socio-political context

Multi-sectoral Work

- Collaboration with Protection/Registration unit. Protection needs, Community work, Population projection/planning figures.
- In order to help retention and use of LLITNs, it is important to address the refugees' basic needs e.g. food and non-food items, cash based intervention**,** etc.
- Country public health teamwork with field teams and health partners on planning and implementation of LLIN mass distribution, targeted distribution and post distribution monitoring.
- Close collaboration with WASH and environment sectors e.g. outbreak management, vector control, environmental measures.
- Site selection and shelter arrangement for the refugees need special attention considering environmental factors e.g. swampy areas and shelter design to allow for effective LLIN hanging. Sleeping on mats or beds (former being difficult to ensure nets are held secure).

Previous WHO technical guides: "*Malaria control in humanitarian emergencies – an inter-agency field handbook*", "*Mass drug administration for falciparum malaria*" and "*Management of severe acute malnutrition in children – working towards results at scale*" are being updated and synthesized.

The aim of the revised guide includes:

- A concise guide to effective malaria control responses in humanitarian emergencies. Particular focus on the initial acute phase when reliance on international humanitarian assistance is greatest.
- Provide WHO and UNICEF recommendations and practical advice on designing and implementing interventions to reduce malaria morbidity and mortality during anthropogenic (e.g. conflict) and natural (e.g. flood, earthquake) disasters.
- Revisions to reflect changes in best practices, improvements in technologies, availability of tools, and changes in WHO and UNICEF recommendations.
- Each chapter includes the latest available WHO and UNICEF recommendations and guidance and operational examples of how to implement them in humanitarian settings.

The target users include: humanitarian field coordinators and programme managers; those tasked with assessment, planning, costing, implementing, monitoring, or evaluating malaria control interventions in a humanitarian emergency; those who may have limited experience of malaria

prevention and control; and possible useful reference for students and senior decision-makers (e.g. in donor agencies).

Finally, the presenters reported from a meeting the day before with UNHCR, WASH and Shelter people on vector control where the focus was on the operational level. The communication challenge as mentioned in the previous session came up. The information is there – but people are not getting it; for the Shelter people every change comes with a cost; it is opportune time to provide input to the shelter catalogue and to some of the WASH materials.

Floor discussion

It was pointed out that the average life of a camp is 25 years and that it is not just about the structures, but also about the environment, extreme high temperatures and looking beyond VBD in isolation. There are needs for niche products. While academia can be very innovative – there is a resistance culture against new innovations coming in. This goes right up to the funders (IRS and nets). It was also mentioned that a lot of innovation is going on in the field – not all innovation come from academia.

From Uganda, it was reported that there is a lot of experience from malaria in refugees. But a question is how to introduce innovative solutions e.g.: insecticide treated tents, blankets and repellents. Refugees are not always in tents – they are moving. A further question is how to support host communities. There might be hostilities building up because the refugees are served and the host community often not.

Allen Maina agreed that a lot of good work is going on, and the example from Uganda has a global impact on refugees that we are not properly capturing, documenting and sharing. In Uganda, refugees are included in the National Malaria Programme. However, in the GF funding notes we haven't done a great job in including refugees and IDPs. Generally, there is not enough information on refugees and IDP in the GF applications.

Working together is not natural. Sectors come with funding – some of this comes with limitations. We must create an environment conducive for working together. In many places, there are limited human resources. When it comes down, it is actually the same people on the ground doing the work. Malaria is just one of the issues that the people working in emergency setting have to deal with. They cannot read a guide of 170 pages. We need to build multi-sectoral platforms and find ways to collaborate across sectors that are effective and not increasing the workload.

In rounding off, the two presenters expressed said: "*We are just a sounding board. It's the real people out there doing the work. Building local capacity is a multi-sectoral issue. A lot of innovation and opportunities – but is costs money. The solutions are going to come from you*". Graham continued: "*In emergencies the refugee agencies are playing the role of town councils*" and closed the session.

7. The malaria and housing (BOVA) work

Presenters: *Steve Lindsay and Fiona Shenton, Durham University / BOVA Network*

BOVA – or "Building Out Vector-borne diseases in sub-Saharan Africa" is an interdisciplinary network of researchers and practitioners working on insect-borne diseases and the built environment that aims to establish a new research discipline.

Among BOVA's achievements are: a membership of 461, eight pump-priming projects, seven grant writing workshops, continuing advocacy and contributions to high level reports and policy documents, publications, and simple messages "*what can we do now*".

The eight pump-priming projects

- Basic science
  - Computer fluid dynamics – Denmark
  - Filming mosquitos – Malawi
  - Up & down houses – The Gambia
- Multi-sectoral and scale-up
  - Housing development programme – Ethiopia
  - Trash to treasure – Kenya
- New tools
  - Floors for tungiasis control – Kenya
  - Mosquito repellent chairs – Tanzania
  - Screening entry points with spatial repellents – Mozambique

The seven grant writing workshops

- Basic science
  - Rapid malaria mapping tool
  - Modelling airflow
- Multi-sectoral and scale up
  - Healthy housing bridging the evidence gap
  - Health through housing coalition
  - Developing policies to build residence and adaptation
  - Chagas disease
- New tools
  - Eave ribbons in combination with LLIN

The BOVA Network brings together experts in vector-borne diseases with those in the built environment; vector-borne diseases are a major environmental threat to countries and their economies; and building out vectors will lead to more resilient cities in the future.

Floor discussion

A participant wanted to know if there would be a Cochrane review on the topic. The answer was that this is in planning.

Another participant noted that walls are lightweight tarpaulin material; the bedrooms in the 'Up & Down' houses are upstairs. He wanted to know why not more traditional building materials are used? If bedroom is upstairs – people are still downstairs when preparing the food - why not screen the house altogether? What is the cost compared to a standard house?

The answers were given as: light walls ensure that houses cool down more quickly after sunset thus making them more comfortable to sleep in. The houses are also screened downstairs. Finally, the cost of a prototype house is USD 8,000 compared to a standard (improved) house of USD 6,000. When going into normal production, the price can probably be lowered.

One participant remarked that we have been discussing this '*multi-sectoral*' for decades. If countries are not obliged to work like this, they will probably not do. Donors should oblige countries to work like this. Another supplemented by asking: who are going to be the flag-bearers, mayors or town clerks? We have them for HIV. People dealing with malaria – don't know much.

Josh Levens responded: As this Working Group thinks about how to outline its work stream – what about that including one on built environment and getting mayors and town clerks on board? RBM has already supported an advocacy-training for francophone mayors on malaria in the urban environment. The Mayor of Freetown Sierra Leone is interested in bringing commonwealth mayors together. RBM Secretariat is funding – it is about finding ways to have that conversation.

In closing, Steve Lindsay remarked that he had learnt from his collaboration with architects that they make buildings to be copied and modified. We need to build show-homes demonstrating that you don't have to build as you have always done. A lot of money is spent on building houses throughout Africa.

7*bis*. Malaria elimination achievement through intersectoral collaboration and partnership in Iran

Presenter: *Ahmad Raeisi (Ministry of Health and Medical Education, Islamic Republic of Iran)*

Iran has moved from pre- to elimination phase and malaria is now concentrated in the least developed provinces of Sistan and Baluchestan, Hormozgan, and the southern part of Kerman with a combined 3.5 million people at risk. The area is bordering the Persian Gulf to the south and Pakistan to the east. The Pakistani side is also of high-transmission.

- High-level political commitment translated to the provincial level
- The government is the owner of the malaria elimination programme
- The long-term strategic plan "Malaria elimination 2010 -2025 is an integral part of the "Iran's 2025 Horizon" bringing health and development together

National and provincial poverty alleviation programmes aim to increase social and economic capacities of the malarial areas, and collaboration of all stakeholders towards malaria elimination is a pivotal element of the national strategic plan. In each province and district, there are multi-

sectoral malaria elimination committees chaired by the respective governors. Members are departments of education, energy, water supply, broadcasting, agriculture, and municipal and community-based Islamic councils. Since 2012, the number of indigenous malaria cases has been reduced by nearly 90%.

Key interventions include:

- Prioritizing and targeting rural electrification to areas with local malaria transmission
- The community involvement and engagement in the agricultural areas with huge immigrant workers
- Community education and involvement for larviciding distribution in the bordering villages
- Early detection among immigrants using RDTs test through village volunteer
- Border posts establishment with support of GFATM and Local Government cross the eastern border offering testing and treatment for border crossers irrespective of their legal status.

Floor discussion

One participant wanted to know how electrification contributed to malaria reduction**.** Ahmad explained that in addition to contributing to the general social and economic development and through that indirectly to malaria reduction, electrification also made it possible for people to sleep indoors. This allowed people to sleep inside during the extremely hot nights and thus reduce the biting rates.

Josh Levens, fascinated by the experience, asked if any African countries or others have come to get insight into the experience. Ahmed responded that once in a meeting, an African minister had asked to have a group to visit. Any visitor would be welcome.

8. Criteria, procedures and marketing opportunities for bankable projects focused on intersectoral action for malaria

Presenters: Anne Wilson (*Liverpool School of Tropical Medicine*) and Jo Lines (*London School of Hygiene and Tropical Medicine*)

Anne started off describing the difficulties getting funding for multi-sectoral approaches. She specifically mentioned a three to four year project with Kisumo City Board in Kenya on malaria, dengue and chikungunya around the city. So far, they had not been successful but will recycle the proposal, when another call opportunity arises.

Jo continued focused on rice growing and posed a development dilemma

- Ministries of Agriculture in Africa are planning for a major expansion in irrigated rice
- Ministries of Health in Africa are planning for the elimination of malaria

Evidence 1: From wetlands to paddies

Q: What happens when we introduce irrigated rice? What happens to the mosquito fauna when natural wetlands are replaced by irrigated rice?
A: Non-vector culicines are replaced by malaria vector anophelines in roughly equal numbers.

Paddies Paradox - Update

- The additional mosquitoes created by rice were never "harmless".
- Rice did bring higher vectorial capacity, but did not bring higher malaria prevalence because humans had better defences.
- Now, with less malaria and better intervention coverage, there are signs that rice-communities do have more malaria.

- Whose problem is it really? The agricultural or public health sector?
- Some people who work in agriculture might say that more bed-nets need to be given to rice communities but is that really a solution?
- How can both sectors integrate to work on this problem?

A transdisciplinary win-win-win-win solution independently developed by scientists from the rice sector and the public health sector, suggests alternate wetting and drying (AWD) vs. intermittent irrigation

- Water use: 30% reduction
- Methane emissions: 48% reduction
- Vector production: 95% reduction
- Rice yield: No reduction

Rice experts should know – sooner and better than anyone else – what effect their recommended production methods have on mosquitoes. They already take into account of parameters such as yield, labour intensity and water consumption. So when testing for new or improved technologies such as AWD, which has gained popularity recently as a strategy for climate change mitigation and adaptation, vector abundance should also be included as another parameter. What effect would this irrigation method have on malaria vectors? If it does work, we could potentially have a transdisciplinary win-win-win-win scenario.

Floor discussion

Participants raised some issues from a farmer's perspective. Small and large-scale farmers may not have the same interest. AWD might well not lead to reduction in yield – but it will surely require more man-time and thus potentially reduce profitability.

Jo responded that they will count for that. Two weeks is too long to wait for the water to go down naturally. In Peru, AWD is now a requirement by directive from the President. Without such measures, we are not going to achieve malaria elimination in Africa

The issue of increased rice growing is already real. In Uganda, it was reported, that the Permanent Secretary asked the MOH to give guidelines on what to do and what not to do. In Jo's view this is a really long-term project and it is the rice growers job to grow rice without growing mosquitoes.

Reflections at the end of the day

Maisoon asked Frederic Baur (Bayer) to reflect on the meeting so far before closing Day One.

There is an amazing diversity of experience, expertise and culture present in the room. Such breadth of topics has been presented and discussed all with a focus is on malaria.

We need more engineers, planners, economists, etc. to bring different perspectives and we must need to reach out wider when talking multi-sectoral action.

The meeting with mayors, involvement of town clerks and heads of district councils sounds promising – it's their bread and butter.

Only one country (DR Congo) has come with representatives from a range of different sectors. Can we ask them for our next meeting: what have you done? How can we leverage that type of information?

Universities – do we know what is being taught now? Could be a Masters. What works for malaria will work for Dengue and other public health challenges.

The objective is to make it happen locally. How do you do it locally? It would be interesting next year to hear the experiences.

9. Recapitulation of day one

Rapporteur: *Erik Blas*

Erik presented his take homes from day one viewed through a multi-sectoral lens and arranged under two themes

Is the multi-sectoral message getting through? *Are we framing it right?*

- Most national malaria plans are health sector plans.
  - Challenges getting the big players, e.g., WB and GF on-board
  - If not multi-sectoral in national strategies, it will not take off
  - Cannot release GF funding if not included in the national strategy – get the NMCP to own.
- We have discussed this 'multi-sectoral' for decades. If countries are not obliged to work like this, they will probably not do. Donors should oblige countries to work like this.
  - The information is there but the WASH and Shelter people are not getting it.
  - A lot of wording is about what malaria gets out of this. If not saying what malaria programmes offer, we are going to fail.
- In many environments, mosquitoes are man-made. "*I have a right to live without*".
  - Messages are not right. Human created environment – invasive species – should not be there.

  - It's their work to grow rice without growing mosquitoes
  - Win-win-win-win!

The objective is to make it happen locally. *How do you do it locally?*

- Multi-sectoral council did not really work – despite everything we have done.
  - Can we have a meeting in our country to mobilize other sectors?
  - Have to be mindful that we are working with existing structures
- There need to be examples of *how* and *why* things work and fail.
  - Difficult to pull together good multi-sectoral projects and get funding
- Most of the Working Groups are actually well established and have a lot of tools and experiences that should be included for the MSWG
  - A lot of good work – not captured, documented, shared and applied.
  - In academia we are very innovative – but there is a resistance-culture
  - Not just another 170 pages theoretical book.
  - We have been limited in scope and scale – need to look outside the box.
- Working together is not natural.
  - Sectors come with resources – some of this comes with limitations.
  - Create an environment that is conducive for working together.
  - In many places, there are limited human resources. When it comes down, it's often the same people doing the work.
- 2020 is the third year of the three year RBM strategy – will have a series of consultations on the future strategy this year

Floor discussion

A question was asked if there had ever been some thought of selecting a few countries to map what they are doing with regards to multi-sectoral action for malaria and mentioned specifically military involvement in Zambia. Florence (TDR) responded saying that they had supported six commissioned reviews on multi-sectoral collaboration for VBD. The reviews covered mechanisms, stakeholders, environment, mobile people, hard to reach, extraction sector, etc. will be published soon.

One participant suggested formalizing the use of geo-clustering within countries to identify areas where multiple factors act together to shape the malaria situation and then go to these areas to facilitate multi-sectoral action. Another participant added – 'and involve the community early-on'.

It was remarked that if there has not been much uptake it might be due to lack of motivation or drivers. Each sector has different drivers. They are interested in different things. We have to think individual sectors and their specific interests and drivers and acknowledge: "*this is why you are doing it – this is why we are doing it*".

Maisoon, in rounding off the floor discussion brought up the issue of ownership and leadership and whether we wanted to reach generic or individual actors within sectors, e.g., private or public. One

participant suggested that at least for Africa, we should reach out to and work with the African Leaders Malaria Alliance (ALMA).

10. Sector focus and partnerships for malaria control

10.1 Mass Action Against Malaria (MAAM) for malaria free sectors

Presenter: *Peter Kwehanganan Mbabazi (NMCP, Uganda)*

Uganda has the third highest number of annual deaths from malaria in Africa and one of the highest reported malaria transmission rates in the world. Malaria has a direct impact on the economy and development in general.

The Uganda Malaria Reduction Strategic Plan (2014 -2020) has six strategic objectives:

1. Integrated vector management
2. Diagnosis and case management
3. Health promotion, IEC/SBCC
4. Programme management and multi-sectoral collaboration
5. Surveillance, M&E, operational research
6. Emergencies, epidemic preparedness / response

Peter, who himself is in charge of finance and multi-sectoral collaboration, stressed that it is important for multi-sectoral collaboration to have an organisational home.

The strategy implementation emerges out of a strong political commitment. The President has made a personal commitment to Mass Action Against Malaria (MAAM) as the first publicly signing "*a malaria-free Uganda is my responsibility*" followed by the Speaker of the Parliament, the Prime minister and other high-level officials. Each Member of Parliament has committed to free their respective constituencies of malaria.

Peter stressed the point of identifying an entry point for each sector – show them what is in it for them, i.e., why they should be involved with malaria when it is not their core business. For each sector, guidelines have been developed and the Permanent Secretary of Health has sent these to his peers in other ministries, showing what each of them need to do.

The political will and support is being exchanged into tangible money and results. The Permanent Secretary of Treasury requires all sectors to mainstream malaria, i.e., to have a budget slot under cross-cutting activities and to report on deliverables and results. This was a landmark breakthrough for multi-sectoral action in Uganda.

Through local government and religious leader engagement at district and local levels the aim is to facilitate malaria smart homes and malaria smart villages and to reach the upcoming generation "I am malaria-free today".

10.2 A Multi-sectoral approach to the fight against malaria epidemics in Burundi

Presenter: *Ignace Bimenyimana (Chemonics International, Burundi)*

After an initial fall, Burundi has since 2010 seen a slow steady increase in the malaria incidence rate from less than 200 per 1000 inhabitants in 2011 to more than 800 in in 2016 and 2017. This increase is believed at least in part to be related to increases in rice growing. Since the beginning of 2019 epidemics have broken out along the eastern and western borders of the country with under-five children most affected.

Analyses show a number of possible factors in addition to the increase in rice growing contributing to this abnormal situation. These include, effects of climate change making malaria entering into areas where it has not been earlier and where immunity is low; socio-economic factors; low and ineffective use of preventive measures; and high rates of malnutrition.

To address this complex situation, a multi-sectoral national task force was established under the second Vice-President in charge of social issues. The task force regroups the technical partners, financial resources and the different ministries required to complement the indispensable actions within the health sector in the fight against the malaria epidemics.

Key sectors involved include:

- Environment – clearing around settlements; covering breeding spaces; metrological forecasting; identifying and promoting plants and flowers with repellent effects; etc.
- Agriculture and livestock – management of insecticide resistance; eliminate larvae in agricultural ponds; introduction of bacteria and larvae eating fish; put in place strategies to combat food insecurity; etc.
- Local government and public security – protection of own staff, including in particular night guards; reduce misuse and subsidise procurement of malaria fighting means; contribute to mass campaigns by providing transport and man-power; organize regular community work for malaria; put malaria on the agenda of each local council meeting; plan and budget for malaria control in each commune; etc.
- Communication – plays a crucial role in informing the public about the drivers of malaria, the health and economic consequences, and effective action; through a diversity of channels to reach the whole population, including the hard-to-reach in order to support behaviour change; etc.

Working across a large number of sectors with a long-term vision and consensus around strategies, decisions, resources and implementation approaches will be necessary for the effective elimination of malaria.

10.3 Rotarians Against Malaria (RAM) – Global Action Group

Presenter: *Michael Hayward (Rotarians Against Malaria)*

The goal of RAM is to collaborate with Rotary clubs, Rotary districts and the Rotary Foundation to support group members in creating and delivering service projects in malaria elimination, to contribute to global malaria eradication.

There are 1.2 million Rotarians worldwide in most countries focused on '*Service Above Self*". The RAM builds on the relationships, reputation and infrastructure created for the PolioPlus campaigns being used to eliminate vaccine preventable diseases. For many years, Rotary malaria projects have been carried out by Rotary groups, such as: Rotarian Malaria Partners (RMP) from Seattle, RAM-PNG, a club in Port Moresby, Papua New Guinea, and Rotary Clubs of Nigeria with projects in 22 communities in the country. Other individual clubs deliver 400 small and big projects in Africa, South America and Asia.

Action examples include:

- *Zambia* – Zambia-1 recruiting and training 300 community health workers which resulted in a 90% reduction in malaria in the deployed areas. Followed by Zambia-1a for an additional 200 and Zambia-2 a further 1,025 community health workers each with a responsibility for 500 people. Effectively providing 762,500 people with services to reduce malaria. Funds raised locally were multiple and matched by the Rotary Foundation and the Bill and Melinda Gates Foundation making it an over USD 1 million project. The type of activities included:
  - Training community health workers focused on malaria reduction and elimination
  - Providing equipment and running IRS projects
  - Providing and distributing RDTs
  - Providing and distributing LLINs
  - Providing fogging
- *Papua New Guinea* – RAM Australia with Rotary Australia World Community Service (RAWCS) agreed to raise the USD 12 million needed over a five-year period for Papua New Guinea, Vanuatu, Solomon Islands and Timor Leste. At the Global Fund Replenishment last October, because of this Rotarian action by RAWCS-RAM, DfiD committed to an additional USD 24 million for malaria projects … and because of this … the Asian Development Bank committed to USD 25 million in these four locations. That is, from an unfunded requirement to an additional USD 61 million for malaria.

10.4 UNICEF's Malaria Strategy and Activities – leaving no one behind

Presenter: *Valentina Buj, UNICEF*

Why are children under five dying of malaria? At least one third is related to undernutrition. Bednets are not just about procurement, quantification and distribution, e.g., against census data. We are swinging back and forth between campaigns and routine systems. We have to think a complete vision. It is about use. How do we change people's behaviour? If not, we cannot eliminate malaria.

We must strengthen national systems, including for MiP drugs and bednets. What are the real problems? Anaemia undercuts development and leads to life-long deprivation. ANC IPT is free almost everywhere and represents a missed opportunity.

UNICEF is a large-scale multi-sectoral agency looking at this from a cross-sectoral perspective. UNICEF's comparative advantage is support for malaria control across sectors: immunization, communication and communication for development (C4D), nutrition, WASH, health systems strengthening, early childhood development and adolescents, and education.

UNICEF's Malaria Strategy: Alignment with GTS and AIM (2016 -2030)

- Increasing investment and resource mobilization
  - Domestic resources, alignment with GFF and GFATM
- Integrating malaria into health systems
  - Alignment with UNICEF HSS and PSM efforts, including community-based systems
  - Support and use of MNCH platforms (ANC, EPI, CHWs)
- Advocacy – aligning with EWEC/APR
- Targeting vulnerable / marginalized populations as part of UNICEF's equity agenda
- Improving quality and use of data, and monitoring results
  - EQUSIT, DHSS, MICS, APR scorecards, m-health / RapidPro, etc.
- Strengthening and facilitating cross-sectoral engagement in the malaria response (e.g. nutrition, WASH, education)
- Strengthening social / BCC and community engagement: C4D

UNICEF's priority areas are: increasing children's and mothers' access to life-saving commodities and equity.

Floor discussion

Children die not just because of malaria but on the background of a host of other factors. That is why, e.g., improved housing is one way to go. We have to look at malaria in context. More than half of fevers are vector-borne. TB is trying to disentangle what about being poor gives TB. We have not tried to do this in malaria.

Valentina responded that severe malaria is a major failure of the system. Six out of ten we follow die before they get to the hospital because they cannot afford the referral. 60% of those we put back in the community are still malaria positive. Michael added that when Rotary organizes family days in communities they look at each patient holistically.

A representative from Chad mentioned that with respect to pregnant women, Chad uses a wide range of different interventions holistically addressing the needs, and would like to present this during the next meeting.

Peter responded that nobody questions '*multi-sectoral*' - but how to get it implemented? What structures do we have for implementation – some are imposed. It is easy to bring people around for a campaign – but the challenge is in the long-term. It is not a matter of a meeting – but to get to

action. What guidance are we providing for real-life work? We need to focus on programme guidance. Here, we are talking vectors – this is confusing. People are told different, sometimes contradicting things, at different times. How to get it done?

Maisoon closed the discussion by saying this is an excellent introduction to the next session.

11. 2019 update of the malaria multi-sectoral framework and synergies with the TDR Multi-sectoral Approach for the Prevention and Control of Vector-borne Diseases

11.1 Multi-sectoral Action Framework for Malaria

Presenter: *Erik Blas, Independent consultant, Denmark*

Updating the 2013 Multi-sectoral Action Framework for Malaria (MSAFM) was one of the top-ten priorities on the MSWG activity list for 2019. In preparation for the update, all participants of MSWG-1 and MSWG-2 plus a few others were invited to comment on the 2013 framework and express their ideas and wishes for the update. Those who responded to the first round were then asked to review and comment on the draft update. A total of 36 out of 60 possible responded in the two rounds and their comments were included in the final draft.

Erik briefly described the background and rationale for multi-sectoral action in malaria. In the past 20 years, remarkable achievements have been made in reducing the number of global malaria deaths. It is now only about 55% of what it was in year 2000. This is likely the effect of improved malaria health services – better diagnosis, access and use of malaria drugs, etc. However, the annual number of malaria cases has remained constant over the same period. There will come a time when the reductions in malaria deaths will level off if the number of cases is not reduced.

Reducing the number of cases is a complex, requiring addressing a host of factors that needs effective multi-sectoral action. Malaria today is concentrated in a belt around the Equator with those countries having achieved or approaching elimination are all at the fringes of this belt, with one exception: Sri Lanka that is right at the centre.

Erik then showed graphs with the burden of malaria (rate) for 24 of the countries in the malaria belt mapped against Gross National Income (GNI) per capita and the Human Development Index (HDI). There is a clear relationship, the higher the GNI per capita and the HDI the closer the countries are to elimination. However, the graphs also show that below about $5000 per capita and a HDI of less than 0.6 there are hardly any countries approaching elimination.

A mapping of the same countries and ranking their malaria burden against achievement in the Sustainable Development Goals (SDG) arranged in four groups (Political / institutional – 16 and 17; Economic – 8, 9, 10, and 12; Social – 1, 2, 4, 5, 7, and 11; Environment – 6, 13, 14, and 15; and Health – 3) shows that those countries furthest away from achieving elimination of malaria also tend to be

furthest away from achieving the SDGs. This is particularly noticeable for SDG 8 (decent work and economic growth), SDG 1 (no poverty), SDG 4 (quality education), SDG 5 (gender equality), SDG 7 (affordable and clean energy), SDG 11 (sustainable cities and communities) and SDG 6 (clean water and sanitation).

Thus, there appears to be a vicious cycle: "*less development creates more malaria creates less development*". Further amplifying this vicious effect is that despite progress in malaria intervention coverage, despite systematically prioritizing the poorest, malaria is consistently concentrated in the poorest and most disadvantaged population groups.

To inverse the vicious cycle, multi-sectoral action is required to address the root causes of malaria. Sectors to be engaged will rightfully ask: *Where can I contribute*? *What can I do*? *How can I show that I am making a difference*? *Why should I engage*?

Should we frame malaria as primarily a medical problem for health programmes? No! It is a development challenge. Do no harm! Do good! Malaria is in all SDGs!

Erik then showed a brief analysis of the "*Double Africa's rice production by 2030*" project against the above four groups of SDGs. The analysis revealed that beyond potentially creating more mosquito-breeding site (as discussed in session 8) such project potentially has other harmful effects for malaria. However, there are also potential "do good" effects. Through multi-sectoral action, the harmful effects can be curbed and the good effects enhanced.

The overall driving theme of the multi-sectoral action framework is: "*Leave no one behind and sustainability*" with action theme "*a malaria-free world*" and the collaborative theme "*co-benefits*". The following principles and processes are underpinning the action framework: joint appraisal and consensus building; joint evaluation and learning; monitoring and mutual and public accountability; capacity building and cross-training; champions; and cross-sectoral assessment.

The framework proposes five steps to becoming a malaria-smart work place, school, office, institution, organization, company, donor, sector, district and nation:

1. Own staff and their families
2. Clients and their families
3. Malaria producing activities (*do no harm*)
4. Malaria reducing potentials (*do good*)
5. Socio-economic development for malaria and synergies with other sectors

11.2 Multi-sectoral Approaches for the Prevention and Control of Vector-borne Diseases

Presenter: *Qingxia Zhong and Florence Fouque, WHO TDR*

Work on the *Multi-sectoral Approaches for the Prevention and Control of Vector-borne Diseases* (MSA-VBD) started in 2016 on the background of the 2013 version of the MSAFM with a concept note: "*Leveraging the Sustainable Development Goals to intensify transdisciplinary and multi-*

sectoral collaboration in the global malaria response". Preliminary discussions lead to collaboration between SDC, IDRC, Swiss TPH and TDR; and in 2017, a call for commissioned reviews was published.

- Impact of population displacement
- Multi-sectoral approaches for displaced people
- Eco-bio-social approaches
- Impact of industrial activities
- Multi-sectoral approaches, mechanisms, effectiveness
- Existing models of multi-sectoral collaborations

On the basis of these reviews, it was concluded that a guidance document was needed.

The objectives of the MSA-VBD document are to help the Member States and any other stakeholders, researchers and interested people in the fight against VBDs through concerted multi-sectoral approaches that emphasize facilitating inclusive, participatory, and sustainable collaborations. It has seven chapters: (1) vector-borne diseases basics; (2) introduction to the multi-sectoral approach for the prevention and control of VBDs; (3) conceptual framework; (4) components of the framework; (5) coordination processes; (6) sectoral guidance; and (7) conclusion.

The document presents a 13 step sectoral pathway to assist each sector to plan and initiate their work as part of a multi-sectoral approach. The implementation of each step requires close coordination with the coordinating committee of the multi-sectoral approach.

1. Identify the relevant sectors, define vision
2. Conduct sectoral review of impact
3. Convene joint meetings with all sectors
4. Convene vertical consultation in each sector
5. Identify partners outside national government, including government at lower levels and non-government entities
6. Coordinate sectoral assessments of staff expertise and resources
7. Determine how each sector's existing activities can be aligned / used for the MSA programme
8. Develop sectoral plans delineating objectives, desired outputs and outcomes, and prioritized VBDs if applicable
9. Identify and appoint VBD sectoral focal points and other staff to contribute as well as be the rallying points for the multi-sectoral collaboration with the right skills and experience.
10. Mobilize the necessary resources
11. Implement sectoral and joint actions
12. Liaise with legislature for policy analysis and the development of evidence-based norms, standards, guidelines, regulations, policies, and laws to enforce actions
13. Conduct joint / sectoral monitoring and evaluation with a set of realistic, measurable and achievable indicators to measure sectoral gains and outcomes as well as jointly developed indicators

As an example of where the Water-Sanitation-Hygiene (WASH) sector might start, Qingxia suggested to use epidemiological information on VBDs to target / strengthen WASH services to areas with high VBD burden; in areas with high VBD burden, identify and implement adequate WASH control measures and monitor compliance; and contribute to coordination processes on VBD prevention and control including working with other stakeholders on joint situation analysis, joint planning and monitoring.

Complementarities and synergies between the two framework documents

Multi-sectoral Approach for the Prevention and Control of Vector-borne Diseases (MSA-VBD)	**Multi-sectoral Action Framework for Malaria** (MSAFM)
– All VBDs – Conceptual framework, detailed coordination pathway and sector-specific guidance – Planned outcome: testing the theoretical framework	– Malaria – SDG-based action framework – Planned outcome: countries' path-finding – Planned impact: sustainable elimination
Synergy – Engagement of non-health sectors – Integrate health outcomes into other sectors' core mandates – Emphasize testing and learning as a recurrent process	

Floor discussion

Addressing both presentations and as not everyone had a chance to see the draft documents presented, some concerns were raised about length of documents in general and the view was put forward that nobody reads guidelines and documents. The presenters clarified that aside from the case studies the MSA-VBD was actually only 50 pages long. As for the MSAFM, the first chapter of 8 pages is written as 'self-contained'. The rest of the document is meant as a reference for those interested in diving deeper and for the Path-finder Endeavour (see 11.3).

Four broad themes emerged from the discussions: target audience / private sectors, localize, transform to practical approaches, and combine epidemiological and economic information.

Target audience and private sector engagement

A question was raised about the target audience of the two document – whether public or private sector or both. The focus appears to be on public sector. It was felt that the private sector is just not interested. Commercial organizations are not interested. How do we motivate the non-public for-profit-sectors to engage?

Florence responded that maybe the MSA-VBD would need a chapter for private sector.

Erik responded that the MSAFM has been modified from the version circulated for review by incorporating the feedback received, including specifying the target audience, which, indeed

includes the private sector. He further explained with reference to the five steps to becoming malaria-smart. Step 1 (Own staff and their families) is highly relevant to the private sector. If your staff is down with malaria – that affects your productivity and have a direct bearing on your bottom-line. Step 2 (Clients and their families), if, e.g., your business is selling farming implements and the farmers are sick from malaria, they produce less and buy less from you. It is in your business interest that they are free from malaria, produce more, buy more and give you more profit. Step 3 (malaria producing activities – *do no harm*) people have the right to be free from you, as a private business producing malaria - doing harm at the expense of the people and you should be held accountable just as you are if you are polluting streams with, e.g., mercury, pesticides, etc. It is also about Corporate Social Responsibility (CSR). However, applying the five steps will differ from one setting and business to another – but it is there in the MSAFM.

Tailor to local context

It was stressed that malaria and VBD in general exist and are determined by local circumstances. What is important in one location may not be important in another – strategies, approaches and interventions must be tailored locally. Too often, a lot of efforts are going into something that is not important.

The presenters responded that they were in agreement and that is why the adaptive approach to the Path-finder Endeavour has been chosen and that the focus is at district level (see session 11.3).

Combine epidemiological and economic analysis

A multi-sectoral approach customized to countries will require analyses combining epidemiology with economy with development to identify the most bang for the bucks across multiple bottom-lines.

Erik responded that this is exactly what is intended with the proposed Rapid Appraisal Tool to be used in the pre-assignment phase for the Path-finder Endeavour. This tool actually goes beyond to looking at all the SDGs (see session 11.3).

Translate for practical application

It was mentioned that the 2013 version of the MSAFM had gone to the shelves despite the high-level launch in New York. What are we doing different now? What are the structures that must be in place? Who is the person to take this forward? We need breaking it down into practical steps for each sector – both public and private: agriculture, transport, education, etc. and into operational plans for countries.

It was noted that UNDP involvement is key to promoting and supporting multi-sectoral action at country-level.

Erik thanked saying: “that’s exactly what the next session is about”.

11.3 The road to sustainable elimination – the "Path-finder Endeavour"

Presenters: *Qingxia Zhong and Erik Blas*

The Path-finder Endeavour is a response to an expressed need to move into the largely uncharted land of comprehensive multi-sectoral action for malaria. There is a need to go beyond publishing documents and guidelines to provide structured support to practical implementation and documentation of experiences in real-life of multi-sectoral action for malaria. This need has been expressed both in relation to the 2013 version of the MSAFM, part of the feedback and review process preparing the update of the MSAFM, as well as from this meeting of the MSWG.

The path-finding objectives are:

- to "***try, learn, and share***" in real-life situations in 10 to 15 selected malaria endemic countries with three districts each.
- to adapt and implement the ideas and principles of the MSAFM and the MSA-VBD at district level
- to narrow knowledge gaps, validate and document
- to eventually scale-up, replicate or adapt to other contexts and settings.

The roll-out of the Path-finder Endeavour is envisaged to happen in batches of three to four countries for cross-learning and with a staggered implementation over two to three years. Countries will be selected to represent high-burden, high incidence, and skewed distribution. Each country selected must have thee dedicated and strongly committed national champions: one coordinating, e.g., from Local Government; one malaria expert from NMCP; and one from a development organization.

Within each country, districts will be invited on a competitive basis with the following selection criteria: hardest hit by malaria and lack of development; best people, i.e., three champions representing backgrounds similar to those of the national champions; strongest commitment from the local leadership; and widest diversity in the ecology of malaria and additional VBDs as relevant.

The roll-out will involve four intercountry workshops – spaced six month apart: peer review and sharing; tools training, selection and adaptation; planning and budgeting; and commitment. Following each intercountry workshop there will be periods of implementation to: support and guide district stakeholders; build capacity and resolve bottlenecks; research and analyse (reporting); and communicate.

The overall implementation for each country will be guided by the five steps to becoming malaria-smart (see session 11.1) and phased: *Pre-assignment phase* – using the Rapid Appraisal Tool to identify five candidate districts; *Phase I* – select three districts and Steps 1 and 2; *Phase II* – steps 3 and 4; *Phase III* – Step 5; and *Phase IV* – sustain and institutionalize. A key feature of the Path-finder Endeavour is to use existing structural, human and financial resources in a more malaria-smart way.

However, a limited amount of catalytic money, e.g., US$200,000 per country is envisaged over the country's two-year roll-out period.

The knowledge gaps in multi-sectoral action for malaria and other VBDs relevant to the Path-finder Endeavour have been identified as:

- Causality, determinants and thresholds;
- Role and contribution of multi-sectoral action in malaria and other VBD prevention and control programmes;
- Cost-benefit when both costs and benefits are spread over many actors in a complex pattern
- Capacity of countries' institutional and social systems to implement multi-sectoral collaboration;
- How multi-sectoral approaches should be designed and adapted to different contexts;
- How to make it all happen; and
- How to apply new technologies to better share, analyse and use information across sectors, including for accountability to each other and to the public.

These knowledge gaps will be sought narrowed through integrating into the Path-finder Endeavour: research for policy, research for implementation and access, research for innovation, and research for integrated approaches.

The roll-out for the first batch of path-finder countries is planned to commence early during the second half of 2020. The preparations for country roll-out include:

- Complete the publication process for the MSA-VBD and MSAFM documents (*February*)
- Identify and meet with core-partners to review and finalize the Path-finder Endeavour concept and the Rapid Appraisal Tool (*Geneva, March*)
- Launch the MSA-VBD and the MSAFM documents and the Path-finder Endeavour with Geneva-based missions of donors and endemic countries as well as a wider group of potential partners (*Geneva, April*)
- Tools workshop with partners to review their existing tools and to assemble a tool-box cum menu from which countries can select, adapt and apply during roll-out (*Kenya, May*);
- Resource mobilization (*February to October*)
- Initial social media campaign primarily building on the existing platforms of partners (*April to September*)
- Rallying for Path-finder countries (*February to October*).

Floor discussion

The first comment / viewpoint: although often requested, one cannot write a generalized guide on this. According to the commenter, multi-sectoral action consists of two parts: (1) an ask for other sectors to help distributing drugs and bed nets, and (2) environmental. The latter differs from place to place. Due to the time constraints, this comment was not further discussed.

The second commenter complimented for the two brilliant documents and asked how many in the room had been involved in reviewing the documents while they were produced. It was clarified that

with respect to the MSA-VBD, four people in the room had reviewed; and with respect to the MSAFM, a total of 35 participants from meetings one and two of the MSWG had reviewed. From a quick count, at least 15 of these were in the room.

The second part of the second comment raised the question of how to go about road-testing of the frameworks given the great experience in this group (MSWG). The short answer to this question is to include the Path-finder Endeavour as one of the future work-streams of the MSWG. This is in next session.

12. Plenary followed by group discussions

Presenters: *Maisoon Elbukhari Ibrahim and Graham Alabaster (co-chairs)*

The four areas of responsibility of the MSWG were presented as:

1) Convene
   - The MSWG convenes members with a shared interest in the multi-sectoral action
2) Coordinate
   - The MSWG coordinates the work of the individual members to ensure that each member's efforts are aligned with those of the others, duplication and inefficiencies are avoided, collaboration between members is facilitated, and common challenges are addressed co-operatively.
3) Mobilize resources
   - Identify resources needed to achieve its objectives.
   - Create a compelling humanitarian and business case to support the mobilization of these resources.
   - Support members in the mobilization process to be able to deliver the MSWG work plan.
4) Facilitate communication
   - Develop systems and tools to conduct national appraisal of malaria determinants and inequalities.
   - Promote the development of national multi-sectoral malaria action plans
   - Promote 'malaria-smart' innovative approaches to apply multi-sectoral interventions at large scale for sustainable impact on malaria.
   - Develop the framework for monitoring the implementation of multi-sectoral malaria action plans at different levels.

Top-ten Priority List of MSWG activities for 2019 was

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

Unfortunately, several of these priorities remain for various reasons not-done. One noticeable exception though is item 8 '*Update the Multi-sectoral Action Framework*' (see session 11).

The plenary was then divided into four groups, including one francophone to make proposals for the following:

A. Consensus statement structure: audience; call to action; components
B. Documentation and sharing experience: how? On what?
C. Work streams-taskforces-projects
D. Coordination and collaboration with other Working Groups (prioritization)-technical assistance
E. Work plan for the next 12 months

Group feedback

A. Consensus statement structure: audience; call to action; components

The groups came up with a number of inputs to what could go into a consensus statement without proposing a fully prêt á porter statement. However, group 3 suggested a structure as follows:

- We are a group of ….
- That aims to ….
- In order to …
- Because ….

The target audience should be people we want to convince – international and national policy makers, academics, NGOs, manufacturing and mining industry / private commercial companies, etc. UN Resident Coordinators were specifically mentioned as a key target audience due to their access to Heads of State and that they represent all the UN Agencies across all sectors.

A special target group is the multi- / bilateral donors and lenders, including the Global Fund. They need to be reached with the message of including malaria into development funding and development into malaria funding.

Because malaria is both the cause and the result of lack of development and poverty – it cannot be addressed in isolation or in silos. The statement should therefore emphasize the co-benefits across different sections of eliminating malaria.

B. Documentation and sharing experience: how? On what?

A number of suggestions were made on documentation and sharing. These can broadly be grouped into four major themes.

- *Document available expertise for multi-sectoral action* and differentiate between
  - Academic institutions, students, and researchers
  - Consultants available for deployment at country level

  This breadth is not catalogued anywhere and the country participants would very much welcome having access to country-level consultants. RBM would be in a good position to host such catalogue – as it also has the ability to contract individual consultants.

- *Advocacy briefs by sector* – short and convincing models to be adapted to help securing involvement of specific sectors in individual countries.

  This will have close links with Work-stream V below.

- *Rigorously evaluated case studies* to be documented and, e.g., presented at the next meeting of the MSWG. Specific cases mentioned, included:
  - *Chad* – holistic interventions on malaria in pregnancy – see also section 10.4 of the report
  - *Climate change* – tools and interventions
  - *Cocoa business* with particular focus on co-benefits, including savings on lost work-days

  RBM might consider providing technical support to countries to formulate and critically review such case studies.

- *Six-monthly face-to-face meeting of countries of similar contexts and challenges* with regard to multi-sectoral action for sharing experience and tools

  This will have close links with Work-stream III below.

C. Work-streams – taskforces – projects

It was suggested to establish five work streams (*not prioritized*) – each with a steering group of three to about five members drawn from the MSWG membership. Each steering group was suggested to meet virtually every two to three months or more often if required.

Work-stream I: *Malaria in the urban context*. There are already individual Mayors in both francophone and Anglophone countries ready to pick up and go.

Work-stream II: *Agriculture and malaria*, building on the work already being done with respect to, e.g., rice farming, but going beyond to look at farming systems in a broader sense and to include issues of nutrition and food security.

Work-stream III: *The Path-finder Endeavour* as described in session 11. Identify partners, tools, path-finder countries and start rolling out in 10 to 15 countries covering different geographic, epidemiologic and ecologic situations.

Work-stream IV: *The role of private commercial sectors in malaria*, including, e.g., mining, tourism, manufacturing, trade, agribusiness, etc. The work stream would map, review and document current experiences, enablers and constraints and propose ways forward for effective engagement.

Work-stream V: *Multi-sectoral messaging*, including mapping of understanding malaria, its causes and consequences, review effectiveness of existing messages, develop and test new messaging content and approaches targeted to political leadership and critical non-health sector actors.

There are clear potential synergies between the different work-streams as well as with the other RBM Working Groups. This should be fully exploited through close interactions during the year. The work-stream steering groups would report back to the MSWG on approach, progress and results at next year's meeting. Josh (RBM) committed to support the work-streams, including with resource mobilization.

D. Coordination and collaboration with other Working Groups (prioritization)-technical assistance

The presentations on the first day of the MSWG meeting showed that there are many potential synergies with all the other Working Groups and Partner Committees. Maybe formats can be found to action these synergies – also between the annual meetings and for a more condensed presentation at the annual meetings of the MSWG. The latter will be important as the agenda in the future will fill up with '*own*' items, including from the above work streams.

E. Work plan for next 12 months

Not addressed beyond the above.

13. Finalization of the work plan and MSWG business issues

Presenter: *Konstantina Boutsika*

The co-chairs will distil the item 12 and transform it into a work plan for 2020. They will also draft the consensus statement.

The MSWG currently has about 200 members with most from within the health sector. Efforts should have to be made to attract membership from other sectors.

Maisoon and Graham will continue as co-chairs for one more year. From next year, the Working group will get into a regular mode of electing one co-chair each year for two-year terms.

14. Conclusion and further action

Presenters: *Konstantina Boutsika, Maisoon Elbukhari Ibrahim and Graham Alabaster*

Peter Mbabazi (Uganda) pointed to the fact that most African countries this year are reviewing their strategies. The next strategies must include multi-sectoral action. If we miss out on this opportunity we will lose the next five years. He asked about who is spearheading this – since he did not see any action?

Maisoon responded that the co-chairs will reach out to the Global Fund and to GMP as the latter is organizing the support. There was some uncertainty as to whether the current guidance already included multi-sectoral action. The co-chairs will check and report back.

Konstantina together with Maisoon and Graham thanked the participants for their active contributions to the meeting and continuous support.

Annex A: Concept Note and Proposed Agenda

Hotel Mövenpick, Geneva, Switzerland

6 - 7 February 2020
Co-chairs: Graham Alabaster & Maisoon Elbukhari
Coordinator: Konstantina Boutsika
Rapporteur: Erik Blas

Objectives

6. Engagement with other Working Groups and RBM Partnership
7. Provide an update on the implementation of 2019 MSWG work plan and identify priority activities in 2020
8. Share experiences on implemented multi-sectoral responses to malaria and discuss the technical assistance needs in countries
9. Identification of criteria, procedures and marketing opportunities for bankable projects focused on intersectoral action for malaria
10. Address MSWG business issues e.g. election of the co-chair; available resources etc.

Expected outcomes

6. Guidance note on opportunities for coordination and collaboration with other Working Groups
7. A work plan for the next 12 months
8. MSWG technical assistance plan and business case
9. Agreement on the business issues
10. Report of the meeting

Proposed agenda

1. Opening of the meeting, objectives, expected outputs, round of introductions
2. Keynote address- World Health Organization
3. Plenary discussion with the other Working Groups co-chairs and RBM
4. Non-health sectors' role and contribution in certified malaria-free countries reflection on 2019 Global Malaria Report
5. A presentation on the progress on the malaria multi-sectoral framework
6. Identification of criteria, procedures and marketing opportunities for bankable projects focused on intersectoral action for malaria
7. Approval of 2020 work plan
8. Closure of the meeting

Thursday 6 February 2020		
8:30 – 8:45	**Arrival and registration**	
8:45 – 9:00	1- Opening of the meeting Objectives and expected outcomes of the meeting Approval proposed agenda and programme of work **Documents:** proposed agenda/programme of work	Graham Alabaster Maisoon Elbukhari
9:00 – 9:20	2- Opening address: The role of non-health sector in vector control	Raman Velayudhan
9:20 – 10:00	3- Round of introductions	All
10:00 – 10:30	**Break for refreshments**	
10:30 – 11:00	4- Introduction to RBM Partnership to End Malaria	Joshua Levens
11:00 – 12:00	5- Engagement with other Working Groups and RBM Partnership to End Malaria Updates from the Co-Chairs/Representatives of the other RBM Working Groups and RBM strategic direction Discussion	Valentina Buj, Case Management Molly Robertson, Monitoring and Evaluation Valentina Buj, Malaria in Pregnancy Konstantina Boutsika, Social and Behavioural Change Justin McBeath, Vector Control
12:00 – 13:00	6- Malaria control in humanitarian emergence-an example of multi-sectoral response	Allen Maina Valentina Buj
13:00 – 14:00	**Group photo** **Buffet lunch**	
14:00 – 14:45	7- The malaria and housing (BOVA) work	Steve Lindsay
14:45 – 16:00	8- Criteria, procedures and marketing opportunities for bankable projects focused on intersectoral action for malaria	Jo Lines Anne Wilson Ahmad Raeisi

Friday 7 February 2020		
9:00 – 9:15	9- Recapitulation of day one	Erik Blas
9:15 – 10:30	10- Sector focus and partnerships for malaria control Plenary discussion: options, opportunities, priorities	Ignace Bimenyimana Peter Mbabazi Michael Hayward Valentina Buj
10:30 – 11:00	**Break for refreshments**	
11:00 – 12:30	11- Presentation: 2019 update of the Malaria Multi-Sectoral Framework and synergies with the TDR Multi-sectoral Approach for the Prevention and Control of Vector-borne Diseases	Moderator: Florence Fouque Presenters: Erik Blas Qingxia Zhong
12:30 – 13:30	12- Plenary followed by group discussions: **Documents:** MSWG 2019 work plan; consensus statement; mechanism for feedback; 2020 priorities	Graham Alabaster Maisoon Elbukhari All
13:30 – 14:30	**Buffet lunch**	
14:30 – 15:30	13- Finalization of the workplan MSWG business issues	Graham Alabaster Maisoon Elbukhari All
15:30 – 16:00	14- Conclusions and further action	Graham Alabaster Maisoon Elbukhari Konstantina Boutsika

The meeting is kindly sponsored by the Swiss Agency for Development and Cooperation (SDC) and Swiss Tropical and Public Health Institute (Swiss TPH).

Annex B: List of Participants

(*Last update: 5.2.2020*)

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