



# **India Bhutan bilateral Meeting for Cross Border Malaria Elimination Meeting Report**

**24 June 2022**

**Guwahati, Assam, India**

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## EXECUTIVE SUMMARY

India -Bhutan onsite meeting for cross-border malaria elimination organised by South-East Regional Coordination Mechanism Forum (SRCMF) was held on 24 June 2022 in Guwahati, Assam. The meeting was chaired by Dr Rinku Sharma, Joint Director NCVBDC and head of India delegation.

Dr R Basumatary, Director of Health Services, Assam welcomed the delegates which was followed by address by Dr. Rinku, Joint Director NCVBDC, MOH&FW, Govt. of India, Chief Guest, Dr M.S Lakshmi Priya (IAS), Mission Director, National Health Mission, Government of Assam, Mr. Rixin Jamtsho, Officiating Director, MoH, Royal Govt. of Bhutan, Dr Jigmi Singay Executive Secretary Cum Coordinator, SRCMF Secretariat. Inaugural session concluded with vote of Thanks by Dr Ruplal Nunisa Joint Director, Health Services Malaria Cum SPO, Assam .

Both country delegates made a presentation on District malaria elimination plan and implementation in the adjoining international cross-border areas/districts identified during the last meeting to meet the malaria elimination target and agreed on joint cross-border vector surveillance, case information sharing and referrals, critical information sharing for driving local interventions and supervision and monitoring activities to be implemented for malaria elimination on both sides of international border. Both countries also agreed on need for focal point for coordination, information sharing, M&E and Review. Both the delegation expressed the need to strengthen the coordination and start implementation on immediate action points in the field level.

SRCMF agreed to organizing next face-to-face meeting once both the country programs agree on a date.

## 1. INAUGURAL SESSION

The India-Bhutan onsite bilateral meeting for cross-border malaria elimination started with inaugural session commencing with welcome address by **Dr R Basumatary, Director of Health Services, Assam**. He extended warm welcome to the distinguished delegates from India and Bhutan and all the participants to the meeting. He shared malaria problems faced by state and how advent of advanced diagnostic tools and medicines brought an impact to the malaria control. He was hopeful that India would be able to achieve malaria elimination target by 2030 and hoped that this cross-border meeting between India and Bhutan will help toward achieving this goal.

**Dr. Rinku Sharma, Joint Director, NCVBDC, MoHFW, Govt of India** thanked all the delegates and participants for attending the meeting especially the Chief guest of the meeting honourable Dr MS Lakshmi Priya, Mission Director, National Health Mission, Assam for taking out time from her busy schedule to attend the meeting. She spoke of how the porous border between India and Bhutan and large population movement across border for livelihood and education could pose a major obstacle to achieving malaria elimination. She pointed out that four states of India -West Bengal, Sikkim, Assam and Arunachal Pradesh shared border with Bhutan. She emphasized the need to track imported cases not only from adjoining districts of neighbouring countries but also from other countries. She quoted the example of Chhattisgarh and especially Orissa where cases of drug resistant strain of malaria have been reported from African countries. She underlined the importance of tracking imported cases through strong surveillance system especially in countries where malaria is prevalent and expressed the need for making appropriate treatment available as per the country guideline to such patients. She requested government of both the countries to strengthen case reporting on both sides of the international border and suggested that SRCMF website be strengthened for such case reporting and information sharing. She pointed out that all activities are being implemented as per API, one of the indicators for implementation of various malaria elimination activities however they need to be strengthened as per district categorisation. She requested Dr MS Lakshmi Priya, Mission Director, National Health Mission, Assam to facilitate filling up of the vacant posts of state level consultant and support staff for strengthening of malaria elimination activities in Assam. She thanked SRCMF for organising the meeting. She then thanked all delegates from India and Bhutan and all the participants for attending the meeting.

The Chief Guest **Dr MS Lakshmi Priya, Mission Director, National Health Mission, Assam** spoke about cross-border malaria being timely discussed during the monsoon season, when cases tend to rise and

thanked SRCMF for organising the meeting. She spoke on how all kind of fever surveillance had taken a big hit because of huge load that COVID-19 pandemic had caused. However, situation bit better now teams have done intensive surveillance in the field and Assam coming back to track. She further underlined that both NCVBDC and IDSP should break down silos and work together with other health outcome related sectors and stakeholders with one intension of better health for all. Assam has decided to run both the programmes together for surveillance and follow-up and recommended that National programme do the same and hoped next meeting can have head of IDSP also in the meeting. She looking forward to discussing the present malaria situation and how it can be better both in cross-border and within state. She further added that if not for floods she would have preferred meeting in one of the India and Bhutan border districts as it would have been more meaningful and could have helped understand the actual issue in the field. She suggested that next onsite meeting should be in border district. She ended her address with invitation to all the delegates to her office by 4 pm to discuss in informal setting much more about way forward.

**Mr. Rixin Jamtsho Officiating Director, MoH, Royal Govt. of Bhutan** thanked SRCMF for organising this important meeting and hoped for many more such meetings in future. He apologised for not being able to attend in person due to end of financial year and mandatory 5day covid quarantine rule. However, he thanked organisers for making it possible for him to attend it virtually. He thanked India for its support and cooperation in malaria program. He further added that effective and strong collaboration between Bhutan and India has helped in bringing down the malaria cases significantly and both countries should continue its joint effort towards malaria elimination. He underlined that Cross-border malaria poses a major obstacle to achieving malaria elimination. He hoped that this meeting comes up with realistic plan, strategy and established mechanism for sustainable information sharing and joint surveillance, case investigation and control measures at local level. He reiterated that Bhutan will take the recommendations of this meeting very seriously and make sure it is implemented. He hoped that this meeting will come up with potential solutions for filling the gaps where things have gone wrong in keeping in touch at ground level. He looked forward to a fruitful outcome of the meeting.

**Dr. Jigmi Singay, Executive Secretary Cum Coordinator SRCMF Secretariate** shared that it has been heartening to listen to previous speakers especially the honourable Chief guest for not only highlighting direction in which meeting should focus but also reminding us most importantly to be realistic, pragmatic and field oriented and reminding that venue in subsequent meeting should be at site. This is important take home lesson as a SRCMF In charge for ongoing bilateral meeting for malaria

elimination. He also pointed out that it is Important to remind ourselves that malaria elimination target of 2030 is not very far. We need to accelerate efforts towards elimination. He briefly apprised participants on historical aspect of SRCMF, Launch and its mandate to coordinate with focus on cross-border areas/district level in 3 diseases (Malaria, TB and HIV/AIDS) and to attract adequate funding. In conclusion he emphasised that SRCMF would be seen more frequently at state but much more frequently at local level and subdistrict level. He further added that today's deliberations would focus on malaria however SRCMF in future would also be looking at TB and HIV/AIDS. He reiterated the importance sustainable systems for accelerating progress towards ending HIV, TB and malaria as epidemics. He thanked all the speakers for enlightening address and expresses deep gratitude to Dr Keshab Barman and Dr Ruplal Nunisa for excellent organisation and arrangement and wished meeting a successful deliberation and looked forward to similar arrangement at local level.

**Dr Ruplal Nunisa, Joint Director, Health Services Malaria Cum SPO , Assam** delivered vote of thanks on behalf of NCVBDC Assam. He thanked the Chief guest and all the speakers of the Inaugural session for very encouraging and inspiring address. He then thanked the delegates from Bhutan and India, partners from WHO and APLMA and all participants for attending the meeting.

## **2. BUSINESS SESSION**

### **Appointment of Chair and Co-chair**

The Session started with Executive Secretary, SRCMF Secretariat Cum Coordinator proposing to the meeting Dr Rinku Sharma Joint Director NCVBDC for the Chairperson of the meeting. The proposal was seconded by Bhutan team leader Mr Tobgye Program Analyst VDCP, MoH Bhutan . Mr Tobgye was nominated as Co-chair and seconded by India. Dr Rinku Sharma was appointed as the Chair and Mr Tobgyel as Co-chair. Dr Jigmi Singay formally invited and handed over the Chairmanship to Dr Rinku Sharma and requested to conduct the bilateral onsite meeting

### **2.1 Adoption of agenda**

As per the agenda the Chairperson started the business session by inviting comments on the draft agenda. In absence of any comments the draft agenda was adopted

**2.2 District malaria elimination plan and implementation in the adjoining international cross-border areas/districts identified during the last meeting to meet the malaria elimination target**

Chair invited the delegate from Assam for his presentation

**Assam**

Dr. Keshab Barman Sr M&E Consultant, TCIF, NCVBDC Assam presented the Epidemiological situation of cross-border districts Baksa, Chirang, Kokrajhar, and Udalguri, from 2018 -2021.

He further shared following District Malaria Elimination Plan and implementation status in the identified cross-border districts.

Strategies	Implementation	Status
Malaria is a notifiable disease	Notified by Government on October 2018	All sectors
Surveillance/EDCT	ASHAs/CHO/MPWs	Improved
Line listing of malaria cases	Improved	Case base epidemiological/Entomological surveillance
Vector Control	LLIN distribution: 2020/21, ITBN IRS not carried out as a regular round	Saturated all the SCs(API>1 Selected area by camp approach in this year 2022
IEC/BCC	IPC/meeting/miking	Awareness increase, (LLIN uses/treatment seeking behaviour)
Capacity building	On progress	ASHAs/MPWS/ Lab technicians (on going)
Supervision& monitoring	All level	BPHC/District/State
Cross notification of malaria case	District/state	Cases of origin/inter district/interstate
Task Force meeting	State /District	Intersect oral coordination Improved
Special focus	Forest fringe villages	Engaged Health volunteer for diagnosis /treatment of malaria
Rewards to districts	Announces	ASHAs/volunteer /Health Workers

He shared the following Key activities undertaken in border areas:

- Surveillance by ASHAs/ Volunteer/MPWS: RDTs are available with them. Anti-malarial are also available for the treatment.
- Vector Control: LLIN were distributed in those areas, regular monitoring visits for uses of LLIN by the community.
- IPC. Miking, Group meeting also organized in those areas.
- School activity are carried out regularly.
- Organised village health& sanitation day.

Regarding Information on cross-referrals he underlined that Information is only available for interstate and no information of Cross border districts available since 2020.

He also shared the progress on mapping vector breeding sites in Kokrajhar of *An.annularis* and *An.minimus* species and breeding sites in spring and lake water and Chirang districts of *An.minimus* species and breeding site in lake water.

Further Information on Insecticide resistant studies found for insecticide DDT in Kokrajhar/ Chirang, Baksa and Udalguri districts found Susceptible Status for Vector Species *An.minimus*, *An.dirus*, *An.annularis* and *An.subpictus*

He further shared the next steps for cross-border collaboration

- Exchange/ share of information of malaria cases by WhatsApp/ mail/face to face meeting with the district/BPHC officers with the counterpart
- Sharing of entomological survey information with the cross-border districts
- Sharing of Vector control measures like DDT spray/LLIN in bordering area.  
Sharing of field level activities (monitoring & supervision) may also be included

The detailed presentation is annexed

Chair thanked delegate from Assam for wonderful presentation and invited Dr. Tushar Acharyya DDHS (Malaria) & SPO (NVBDCP Department of Health & Family Welfare NVBDCP, Govt. of West Bengal for presentation

### **West Bengal**

Dr.Tushar Acharya, shared the trend of malaria cases in West Bengal from year 2017 to 2022



- a) Declining trend of Malaria cases (Pv & Pf Malaria) is observed during last four years but slight increase of malaria incidence in last year (2021) as total BSE (blood slide examination) has been increased.
- b) Due to COVID pandemic in 2020 the health seeking behavior in the community hampered.
- c) Very low incidence of Malaria cases & no malaria death reported from the Indo Bhutan bordering areas during last 3 years.

He spoke on Status of Malaria Elimination in the cross-border districts:

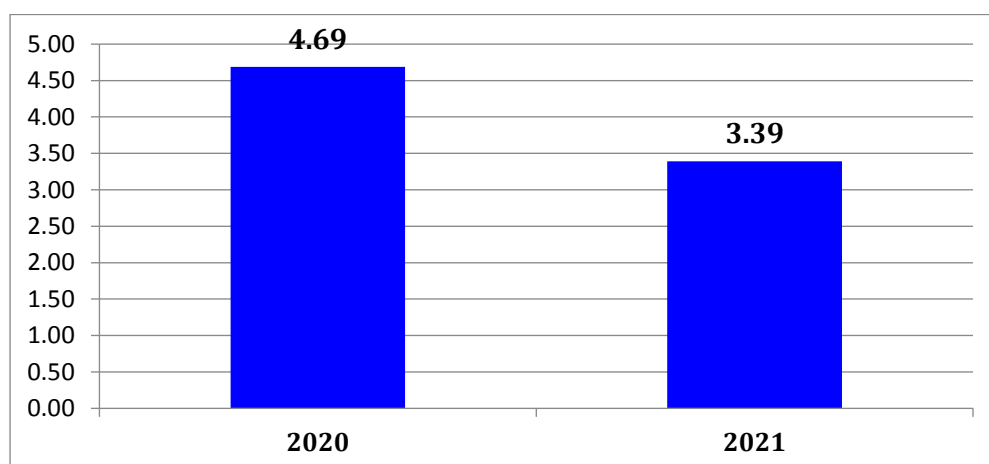
- a) Malaria endemic districts are Alipurduar, Jalpaiguri & Kalimpong.
- b) Information of imported cases – No case reported.
- c) Other relevant points: ABER decreased in COVID Context in 2021.

He added that no vector found in the Nepali Line of Indo-Bhutan border in Jalpaiguri during Pre and Post IRS Entomological survey.

He shared the names of districts and blocks of West Bengal - Bordering Bhutan:

<b>District</b>	<b>Block (Adjacent to International border)</b>	<b>International Border</b>
Alipurduar	Madarihat, Kumargram, Kalchini	Bhutan
Jalpaiguri	Nagrakata, Dhupguri	Bhutan
Kalimpong	Kalimpong-I, Kalimpong-II, Gorubathan	Bhutan

Percentage of malaria cases adjacent to international border had decreased from 4.69 % in 2020 to 3.39 % in 2021



He spoke of following Malaria Activities:

- a) Regular Training and Sensitization of all category of staffs (MOs, MT/LT, Staff Nurse, ANM & ASHA) TOT of faculties of MCHs. Panel discussion plan to involve private practitioners.
- b) Mobile Medical camp in Malaria endemic districts in remote inaccessible forest, hilly and tribal villages fortnightly including bordering blocks during Malaria Transmission period.
- c) Anti Malaria Month observed including in bordering blocks in the month of June 2021 through virtual meeting with districts to identify gaps and challenges and to take required action for achieving elimination target.
- d) Two rounds Malaria IRS (with 50% DDT) are conducted in Alipurduar (99% coverage) & Jalpaiguri (97% coverage) during pre & post monsoon every year.
- e) 4,700 Nos. of new LLINs distributed in the district Alipurduar in 2021 & 2100 Nos. of new LLINs distributed in the district Jalpaiguri in 2021.
- f) Anti Malaria Month (AMM) Observation in June, 2022
  - 27 VC at District level in presence of DM & BDOs
  - 342 Inter-sectoral meeting at Block level
  - Circulation of Treatment Protocol and IEC messages through WhatsApp
  - Printing of Bengali IEC Materials like Banner, Leaflet, RDK usage Guideline, reconstitution of injection Artesunate. Dos & DONTs Booklet for LLIN usage etc.
- g) District Malaria Task Force formed in all the districts in line with NVBDCP recommendation
- h) IMA being involved to reach private sectors to ensure proper and complete treatment.
- i) Entry of Malaria cases from private Institution and Labs mandatorily in real-time through CE portal (Clinical Establishments portal) in border districts
- j) Advocacy workshop/ Inter-sectoral sensitization programme & Capacity building programme for grass root level health workers at the blocks of the border areas.
- k) overall strengthening of surveillance at block, sub-centre & GP level of the border areas.
- l) EDPT & availability of RDK & Anti-malaria drugs in the health facility of the border areas.
- m) Distribution of LLIN among the villagers of the border areas.
- n) Pre & Post monsoon IRS with DDT in the villages of the border areas.
- o) Special focus is given to the migrant people by the ASHAs.
- p) Outdoor Publicity: Tableau movement in the villages of the border areas.
- q) Awareness generation among the school students of the border areas, as practicable.
- r) Entomological Survey to determine the *Anopheles* Vector Density at the cross-border areas.
- s) New focus, outbreak, of the Malaria along International Border

- No outbreak reported in malaria for the last 1 year, prompt action taken for every Early Warning Signals, communicated to the state by districts.
- Overall Improvement in the surveillance in all districts compared to 2020 though very mild increase of malaria incidence in Jalpaiguri district in 2021.

He highlighted following challenges in Malaria Elimination in the cross-border districts:

- a) cross-border sharing of residential address & contact details of the infected persons.
- b) Blood testing facility of the suspected patient in cross-border entry & exit point.
- c) Self-medication and treatment from informal network/ medical shops/ quacks.
- d) Lack of follow-up data of cases

He pointed out the following next Steps for cross-border malaria elimination in the state:

- a) Information sharing mechanism
- b) Integrated case search and vector control activities simultaneously on both sides
- c) Creation of surveillance network of informal service providers on both sides

The detailed presentation is annexed

Chair thanked delegate from west Bengal for comprehensive presentation and invited Mr Tobgyel Program Analyst, VDCP, MoH from Bhutan for his presentation.

**Bhutan**

Mr. Tobgye highlighted the important for malaria elimination in Bhutan

- a) 95% National Malaria Cases confined to border areas
- b) Porous land border, large population movement across border (joint villages & towns)
- c) No-functional cross border collaboration at the ground level
- d) No proper information sharing platform to response

He shared the names of health Facilities on Bhutan side along Bhutan an India cross border villages:

S. no	Districts (Bhutan)	Health Facility Bhutan side	Bhutan Village	Indian Village
1	Samdrup Jongkhar	Jomotsangkha Hospital	Jomotsahngkha	Udalguri
			Rongchuthang	Khaorong
		Samrang PHC	Samrang	Samrang
		S/jongkhar hospital	S/jongkhar	Mala Bazaar /Daranga
		Samdrupcholing Hospital	Samdrupcholing	Udalguri
2	Sarpang	Umling PHC	Gaden	Bakmara
		Chuzergang PHC	Chuzergang	Bakmara
		Gelephu CRR Hospital	Gelephu	Dadgari
		Taraythang PHC	Taraythang	Bakmara
		Gelephu CRR Hospital	Samteling	Tulki Basti
		Sarpang Hospital	Sarpang Tar	Muri/ Sarpara
			Dargaythang	Muri/ Sarpara
Gakidling (Hilley)	Salarpara/Muri			

He also shared the Country level Cross Border initiatives in Bhutan:

- a) Mandatory malaria screening of all migrant workers entering the country for work and stay in Bhutan and periodic screening at sites
- b) Passive fever case surveillance of day workers at health facilities.
- c) Proactive case finding in project areas and construction sites
- d) Provision of free treatment and admission of cross border migrants in health facilities with DOTS for 3days
- e) LLIN coverage also for migrant workers in risk areas
- f) Continue follow up if patient stay in the country

He highlighted the following cross-border challenges:

- a) Unrestricted population movement across the border
- b) No coordinated malaria control and prevention coverage activities across the border
- c) No linkages among the health professional across the border
- d) No system of information sharing and cross referral of the patients

He Proposed following activities for Synchronization for malaria elimination interventions along the border:

<b>S. no</b>	<b>Proposed activity</b>	<b>Times</b>	<b>Scheduled timing</b>
<b>IDENTIFICATION OF 5KM CORRIDOR ALONG THE BORDER</b>			
1.	Indoor residual Spray (IRS)	every six-monthly	<b>1<sup>st</sup> round</b> – Mid February – End of March <b>2<sup>nd</sup> round:</b> Mid August – End of September
2.	LLIN Mass distribution	Once every 3 yrs.	<b>Due in Mar-April 2023</b>
3	Sharing of case Information and cross referral	As soon as the case is diagnosed	As and when malaria is reported
4	Joint vector surveillance	Frequencies to be discussed??	Schedule can be discussed??

He concluded his presentation with information on Vector breeding sites mapping & IR monitoring:

<b>Activities</b>	<b>Frequencies</b>	<b>Areas</b>	<b>Tools</b>
Breeding site mapping	Quarterly	Focus areas	QGIS & DHSI2
Mosquito species recording	During surveillance	Focus areas and beyond.	QGIS & DHIS2
B. Site Management	Quarterly	Mapped areas	Temephose granules/IGR
IR monitoring (Bioassays: LLIN & sprayed wall)	Quarterly	Sentinel sites in Sarpang	WHO Cones
Resistance status monitoring	Quarterly	Sentinel sites in Sarpang	WHO kits and impregnated papers.

The detailed presentation is annexed

The Chair thanked Mr Tobgyel for excellent presentation and invited Dr Roop Kumari NPO Malaria & VBD WHO India Office for her presentation

### 2.3 Priority actions to address malaria along international borders

Dr. Roop Kumari, shared actions to address the challenge of control of malaria across international borders:

- a) The national program to conduct mapping of border villages and health facilities located along the border (VDCP, Bhutan and NVBDCP, Assam, India) last recommendation—no action taken
- b) Capacity building especially at district & sub district levels through trainings would be crucial and need to be prioritized.
- c) Recognizing the importance of harmonization and synchronization of vector control interventions (IRS, LLIN distribution) between two bordering areas of Bhutan and India, the meeting agreed to share action plans for implementation of vector control interventions with the counterpart before the plan is executed in the field with mutual discussion (Responsible organization: VDCP, Bhutan and NVBDCP of Assam and West Bengal, India).

She shared the conclusions and recommendations of Evidence Review Group (ERG) on border malaria, WHO Global Malaria Programme, 2018:

- a) As each border is unique, there are no one-size-fits-all solutions that can be used for all borders. A situation analysis is needed to define the exact problems in each border area.

- b) The current recommended interventions for malaria elimination are suitable for malaria elimination in border areas.
- c) It is very common that the implementation of malaria interventions is suboptimal in periphery areas including border areas. But it holds the key to success. As such, the national programme should
  - Ensure access to health care for all populations in border areas
  - Improving the quality of the surveillance in border areas
  - Ensure the quality of implementation of malaria interventions (e.g. vector control) in border areas
- d) Cross-border collaboration
  - Information sharing and coordination at the local level is essential) and often more efficient)
  - Suggested cross-border collaboration activities- Depending on the border's situation, countries might consider conducting a joint situation analysis, synchronizing vector control, joint case/foci/outbreak investigation and response wherever appropriate

She highlighted the way forward:

- a) is nodal officer from NCVBDC National, state and districts should be officially nominated-
- b) A core group to be constituted with member of both countries
- c) Data sharing platform developed
- d) Synchronized implementation of interventions like LLIN distribution, IRS by districts on both sides of the border as much as possible.
- e) Initiation of case/focus investigation, classification & response especially in border districts/village
- f) Coordination at local level
- g) Focal point
- h) mechanism for information sharing
- i) Join surveillance - foci investigation and response
- j) Realistic plan and strategy – common plan for adjacent distt-DD CM/review
- k) Meeting with districts – for framing operational plan, implementation and review

She further added that WHO welcomes and supports the convening of India-Bhutan bilateral onsite cross-border meeting and reiterated WHO's support for malaria elimination

The detailed presentation is annexed

Chair thanked WHO for the comprehensive presentation and invited Dr Ferdinand Laihad for his presentation.

**Dr Ferdinand Laihad**

Dr Laihad highlighted Joint Planning at the District level for harmonization activities:

- a) Screening/Case detection & classification, focus classification & response on the cross-border districts as well at exit/entry points for travellers/high-risk groups/mobile migrant Population (MMP) from Malaria endemic areas.
- b) Case information sharing, notification, active transmission foci, and referrals such as treatment guidelines, anti-malarial drug's efficacy, health post check positive malaria cases for treatment, and referral
- c) Joint cross border Vector surveillance on mapping vector breeding potential and Insecticide resistance study
- d) Establish and expand Border Malaria Check posts including infrastructure, personnel, supplies, and training
- e) Ensuring quality assurance of diagnostics used for screening of populations at international border crossings and training/certification of security personnel at international border crossings on malaria diagnosis
- f) intensify routine surveillance to detect and eliminate the sale of oral artemisinin-based monotherapies, spurious, falsified, falsely labelled, and counterfeit antimalarials, especially in border areas
- g) Synchronized surveillance activities to be implemented for malaria elimination in both cross-border districts

He suggested following regular periodic meetings at following levels:

- Health Center level: weekly - monthly
- District and state/Division level Monthly – 3 monthly
- National level 3 monthly – 6 monthly

He also pointed out the need of :

- Clear role and function of Focal contact point at Local, District, and state level
- Activities by district:
  - Critical information sharing for local intervention
  - Control activities in District
  - Cross-border activities
  - Supervision, Monitoring, and Evaluation

Chair thanked Dr Laihad for his presentation and added that state and district level officials would need to be aware of the all M&E and surveillance indicator in order to note the information for data sharing.

Chair then opened the floor for discussion, comments and questions

**THE FOLLOWING AGREEMENTS HAVE BEEN REACHED AFTER THE DELIBERATIONS:**

Both the National Malaria Programme at the local level agreed on the following key areas for cross border coordination and collaborations:

- a) Both countries based on local malaria situation analysis in each bordering district and mutually agreed synchronised cross-border activities develop monthly action plans for intensified elimination through synchronized LLIN distribution, IRS, IEC/BCC, and sharing of information with adjoin border districts on real time basis, case & focus investigations, vector surveillance, seasonal screening of symptomatic population with appropriate follow-up of individual malaria cases crossing international borders. Involvement of civil society and community networks and private sector to be considered for Early Diagnosis and Complete Treatment.
- b) revive and reactivate the WhatsApp group for initiating communication for data sharing between Sarpang district in Bhutan and adjoining districts in Assam by both the programme for sharing cross-border initiatives and cases
- c) SRCMF Website to be considered for regular information sharing
- d) Both programmes to explore utilisation of various tools and mechanisms such as emails, existing platforms /portals like IHR and Integrated Disease Surveillance Programme (IDSP), to monitor disease trends and to detect and respond to outbreaks for sharing information and response
- e) SRCMF to facilitate discussions on type of data for information sharing and harmonisation of efforts between the countries in joint national committee
- f) Districts along international border to share imported case information and cross referrals as soon as diagnosed for response and interrupt local transmission
- g) Both programmes to map service providers and establish network for cross-border referrals and follow-up of malaria cases among migrants
- h) Both countries agreed to identify focal points for coordination, sharing information, M&E and Review between the two programme and with SRCMF
- i) Local level meeting to undertake the responsibility for implementation of all agreed activities
- j) Regular supervision/periodic programme reviews by appropriate authorities



- k) Considers sensitisation and Involvement of border security forces in screening mobile migrant population with malaria symptoms/fever screening at international border crossing points to catch malaria at entry points, report/notify across border and follow-up for treatment /management and to prevent transmission.

#### **2.4 Date, time and frequency of next onsite bilateral meeting**

1. SRCMF to circulate proposal for next meeting at district level in consultation with both the countries with enough lead time for programmes to seek necessary approvals.

#### **RECOMMENDATIONS OF INDIA-BHUTAN BILATERAL ONSITE MEETING:**

##### National Programs:

1. In line with the bilateral meeting agreement between National Malaria Elimination Programmes from India and Bhutan it is recommended to identify the Focal Points for the cross-border Coordination, information sharing and M&E and Review at local and district level and state level where required/applicable and submit the list to SRCMF Secretariat with copy to the counterpart.
2. The meeting agreed and recommended synchronized activities in the following areas:
  - a) Indoor Residual Spray (IRS) on identified districts on both sides of the international border.
  - b) LLIN Mass Distribution, once in every 3 years
  - c) Harmonised treatment policy and case referrals on both sides of border
  - d) Sharing of Case information and Cross referral – As soon as the case is diagnosed, as and when malaria case is reported;
  - e) Explore various tools and Mechanisms for information sharing like -WhatsApp, Emails, SRCMF Website, existing platforms/portals like IDSP, IHR etc.
  - f) Both the national programmes to identify type of data for information sharing and harmonisation of efforts between the countries
  - g) Each district along the international border undertakes to share or cross international border notification of the positive imported cases for direct response intervention to interrupt local transmission.

- h) Both programmes to map service providers and establish network for cross-border referrals, case management and follow-up of malaria cases among migrants
  - i) Joint vector surveillance
3. Joint surveillance and M&E for elimination such as case/focus investigation, Reactive Case Detection (RACD), classification & response, follow-up, screening at exit/entry points for mobile migrant Population (MMP) from Malaria endemic areas population, coupled with IEC/BCC, will be planned jointly and implemented simultaneously on both sides of international border
  4. Local/district level meeting will undertake the responsibility for implementation of all the agreed malaria elimination activities
  5. Regular supervision and periodic programme reviews as per the National Malaria Elimination work plan will be implemented by appropriate authorities of National Programme at various levels.
  6. Sensitisation and Involvement of border security forces in screening mobile migrant population with malaria symptoms/fever screening at international border crossing points to catch malaria at entry points, report/notify across border and follow-up for treatment /management and to prevent transmission.

SRCMF Secretariat:

1. coordination and collaboration for the National Malaria Elimination Programmes at local and district level. The SRCMF to coordinate joint district level coordination and development of joint costed operational plan for cross border malaria elimination with implementation and responsibilities at the earliest possible time
2. Facilitate information and data sharing between two National Malaria Elimination Programmes on both side of the international border.
3. SRCMF to facilitate discussions on type of data for information sharing and harmonisation of efforts between the countries in joint national committees
4. Facilitate organisation of regular meetings between the two programmes at the local level for implementation of Joint planning, synchronised activities, joint surveillance, M&E and for review of malaria elimination programme activities at the local and district level.
5. Coordinate participation of technical agencies like WHO and other relevant agencies, partners and donors who are involved in acceleration of malaria elimination activities.
6. Mobilise external resources required for additional activities for acceleration of cross border area/district malaria elimination.

7. Put up a proposal for next face to face India-Bhutan bilateral meeting at district level with provision for field visit, with a convenient date after consulting with both the programmes

**CLOSING SESSION:**

In the closing session the Executive Secretary thanked all the participants for their active participation and valuable and enriching contributions. He also thanked Chair and Co-chair for conducting the meeting efficiently and bringing it to a successful conclusion. He delegates from Bhutan and India , Resource Persons, Partners and all the participants for valuable guidance and suggestions. Dr Rinku Sharma thanked the delegates for their active participation and very productive deliberations and thanked SRCMF for organising this bilateral meeting.

The Chair formally closed the meeting at 3:30 pm IST

## Annexures 1

## AGENDA

Time		Responsible person(s)
9:30-10:00	Registration	SRCMF Secretariat
	<b>Inaugural Session</b>	
10:00-10:05	Welcome Address by Director of Health Services, Assam	Dr R Basumatary
10:05-10:10	Address by Joint Director NCVBDC, MOH&FW, Govt. of India	Dr. Rinku Sharma
10:10-10:15	Address by Officiating Director, MoH, Royal Govt. of Bhutan	Mr. Rixin Jamtsho
10:15-10:20	Address by Executive Secretary Cum Coordinator, SRCMF Secretariat	Dr Jigmi Singay
10:20-10:25	Address by Chief Guest, Mission Director, National Health Mission, Government of Assam	Dr M.S Lakshmi Priya (IAS)
10:25-10:30	Vote of Thanks by Joint Director, Health Services Malaria Cum SPO, Assam	Dr Ruplal Nunisa
10:30-10:50	Tea Break	
	<b>Business Session</b>	
10:50-10:55	Nomination of Chair and Co-chair	Dr Jigmi Singay
10:55-2:00	<ol style="list-style-type: none"> <li>1. Adoption of Agenda</li> <li>2. District malaria elimination plan and implementation in the adjoining international cross-border areas/districts identified during the last meeting to meet the malaria elimination target <ul style="list-style-type: none"> <li>• India</li> <li>• Bhutan</li> </ul> -Discussions</li> <li>3. Priority actions to address malaria along international border</li> <li>4. Sharing of experience on case information and cross referrals of malaria cases <ul style="list-style-type: none"> <li>• Bhutan</li> <li>• India</li> </ul> -Discussions</li> <li>5. Progress on Mapping vector breeding sites and insecticide resistant studies. <ul style="list-style-type: none"> <li>• India</li> <li>• Bhutan</li> </ul> -Discussions</li> <li>6. Joint planning at the local/districts level through: <ul style="list-style-type: none"> <li>-Regular periodic meetings</li> <li>-M&amp;E and review under coordination by SRCMF in the initial stage <ul style="list-style-type: none"> <li>• Bhutan</li> <li>• India</li> </ul> Discussions</li> </ul> </li> <li>7. Date, Time and Frequency of the next onsite bilateral meeting <ul style="list-style-type: none"> <li>• India</li> <li>• Bhutan</li> </ul> -Discussions</li> </ol>	Chair: -Dr Rinku Sharma -Mr Tobgye  -WHO       -Dr Ferdinand Laihad
2:00-2:05	AOB	Dr. Jigmi Singay
2:05-2:15	Closing	-Delegation Heads -Any other delegates -Dr. Jigmi Singay Chair:

## List of Participants

SN	Name	Designation	Organization	Country	Email Address
<b>Delegation from India</b>					
1	Dr. Rinku Sharma	Joint Director	NCVBDC	India	rinkusharma2005@gmail.com
2	Ms. Jyoti Nagarkoti	Assistant Director	NCVBDC	India	<a href="mailto:jyoti.nagarkoti.nvbdc@gmail.com">jyoti.nagarkoti.nvbdc@gmail.com</a>
3	Dr. Tushar Acharyya	DDHS(Malaria) & SPO (NVBDCP), Govt. of West Bengal	NVBDCP West Bengal	India	<a href="mailto:nvbdc.wb@gmail.com">nvbdc.wb@gmail.com</a>
4	Dr. Tumge Loyi	State Epidemiologist	NVBDCP Arunachal Pradesh	India	<a href="mailto:apsvbdc@gmail.com">apsvbdc@gmail.com</a>
5	Dr. Ruplal Nunisa	Joint Director of Health Services (Malaria)-cum-State Programme Officer	NVBDCP Assam	India	<a href="mailto:papli3006@gmail.com">papli3006@gmail.com</a> ncvbdcassam@gmail.com
6	Dr. Keshab Barman	Sr. M&E Consultant, TCIF	NVBDCP Assam	India	keshab51barman@gmail.com
7	Dr. L. Somorendra Singh	Sr. Regional Director,	ROH&FW Guwahati	India	rd.gwh-mohfw@gov.in rd.rohnfw@gmail.com
8	Shri Sudarshan Chhetri	Entomologist	NCVBDC Sikkim	India	entomologist007@gmail.com
9	Dr Lakshmi Priya, IAS,	Mission Director National Health Mission, Assam	Government of Assam	India	<a href="mailto:mdnrhmasm@gmail.com">mdnrhmasm@gmail.com</a>
10	Dr R Basumatary	Director of Health Services, Assam	Government of Assam	India	directorhealthassam@yahoo.co.in
<b>Delegation from Bhutan</b>					
1	Mr. Rixin Jamtsho	Officiating Director, DoPH	MoH, Royal Govt. of Bhutan	Bhutan	rjamtsho@health.gov.bt
2	Mr Tobgyel,	Program Analyst	VDCP, MoH Bhutan	Bhutan	tobgye@health.gov.bt
3	Mr Rinzin Namgay	Chief Entomologist	VDCP, MoH, Bhutan	Bhutan	rinzin69@yahoo.com
4	Mr. Dawa Pelzang,	Sr. District Health Officer	Sarpang	Bhutan	dpelzang@sarpang.gov.bt
5	Mr. Pema Tshewang,	Dy. Chief District Health Officer	S/Jongkhar	Bhutan	ptshewang@samdrupjongkhar.gov.bt
6	Ms. Thinley Choden,	Dy. Chief District Health Officer	Samtse	Bhutan	tchoden@samtse.gov.bt
<b>Partners</b>					
1	Dr Po-lin Chan,	Team Leader (communicable diseases)	WHO India Office		chanpo@who.int
2	Dr Roop Kumari,	NPO- Malaria & VBD	WHO India Office		kumarir@who.int
3	Dr Harsh Rajvanshi	Associate Director - Country Programs	APLMA		hrajvanshi@aplma.org
<b>SRCMF Secretariat</b>					
	Dr. Jigmi Singay	Executive Secretary	SRCMF Secretariat	Bhutan	<a href="mailto:jigmi2118@gmail.com">jigmi2118@gmail.com</a>
	Ms Nattasha	Program Officer	SRCMF Secretariat	India	<a href="mailto:dawanatasha@gmail.com">dawanatasha@gmail.com</a>
	Dr SN Misra	Resource Person	SRCMF	India	samarendra.habf@gmail.com
	Dr Ferdinand Laihad	Resource Person	SRCMF	Indonesia	fjlaihad1@gmail.com
	Dr Shampa Nag	Resource Person	SRCMF	India	<a href="mailto:drshampa@gmail.com">drshampa@gmail.com</a>

India-Bhutan State, District and Local level  
Bilateral meeting for Cross-border Malaria  
Elimination, 24<sup>th</sup> June 2022 in Guwahati, Assam,  
India

Presentation By: Assam, INDIA

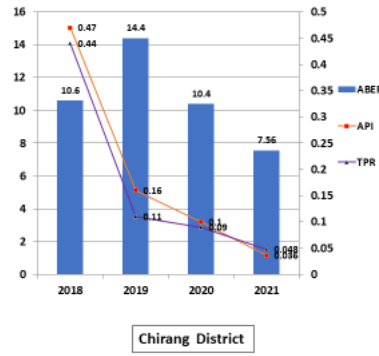
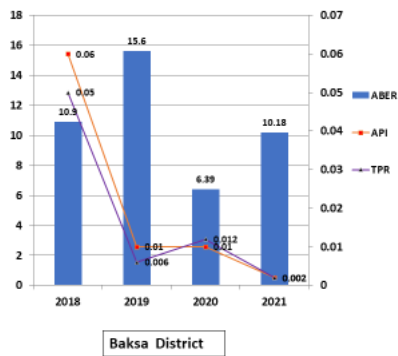


Epidemiological situation of cross -border districts 2018 -2021

Name of Districts	Year	Population	Persons Examined		Positive	Pf	Death	ABER	API	Pf%	SPR	SFR	TPR
			BSC & BSE	RDT									
Baksa	2018	996260	108625	31898	59	19	0	10.9	0.06	32.2	0.008	0.003	0.05
	2019	1015030	158022	71321	10	3	0	15.6	0.01	30.0	0.001	0	0.006
	2020	1025593	65513	40559	8	2	0	6.39	0.01	25	0.006	0.002	0.012
	2021	1028064	104651	64232	2	0	0	10.18	0.002	0	0	0	0.002
Chirang	2018	538127	57154	29119	252	181	0	10.6	0.47	72	0.25	0.2	0.44
	2019	542286	78311	49443	88	46	0	14.4	0.16	52.3	0.04	0.02	0.11
	2020	520487	54269	46479	52	36	0	10.4	0.10	69.2	0.009	0.004	0.09
	2021	550994	41628	37417	20	15	0	7.56	0.036	75	0.009	0.006	0.048



• Graph Showing ABER, API, TPR :



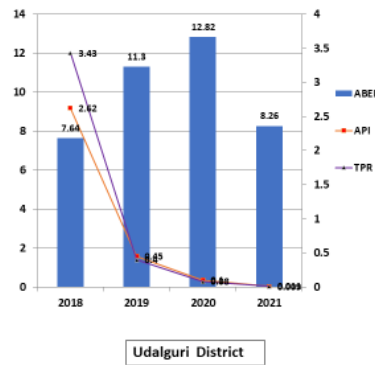
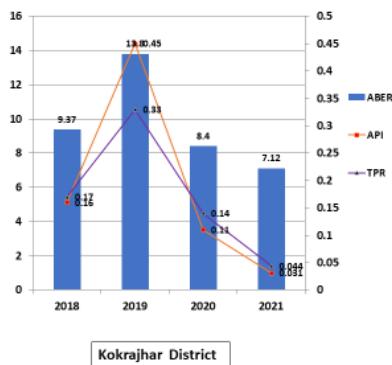
Continued




Epidemiological situation of cross -border districts 2018 -2021


Name of Districts	Year	Population	Persons Examined		Positive	Pf	Death	ABER	API	PF%	SPR	SFR	TPR
			BSC & BSE	RDT									
Kokrajhar	2018	1027806	96307	40216	161	114	0	9.37	0.16	70.8	0.02	0.01	0.17
	2019	991959	136953	90010	447	219	1	13.8	0.45	49	0.07	0.04	0.33
	2020	957658	80418	60502	109	37	0	8.40	0.11	33.9	0.039	0.014	0.14
	2021	1019987	72611	58400	32	8	0	7.12	0.031	25	0.015	0.001	0.044
Udalguri	2018	908181	69389	26242	2378	1844	0	7.64	2.62	77.5	0.20	0.141	3.43
	2019	913862	103096	59865	415	287	0	11.3	0.45	69.2	0.141	0.08	0.40
	2020	897776	115118	107498	90	51	0	12.82	0.1	56.7	0.005	0.003	0.08
	2021	918644	75888	74536	8	3	0	8.26	0.009	37.5	0	0	0.011

• Graph Showing ABER, API, TPR :



District Malaria Elimination Plan and implementation status in the identified cross-border districts 

Strategies	Implementation	Status
Malaria is a notifiable disease	Notified by Government on October 2018	All sectors
Surveillance/EDCT	ASHAs/CHO/MPWs	Improved
Line listing of malaria cases	Improved	Case base epidemiological/Entomological surveillance
Vector Control	LLIN distribution: 2020/21, ITBN IRS not carried out as a regular round	Saturated all the SCs(API>1 Selected area by camp approach in this year 2022
IEC/BCC	IPC/meeting/miking	Awareness increase, (LLIN uses/treatment seeking behaviour)
Capacity building	On progress	ASHAs/MPWS/ Lab technicians(on going)

Continued   
District Malaria Elimination Plan and implementation status in the identified cross-border districts

Strategies	Implementation	Status
Supervision& monitoring	All level	BPHC/District/State
Cross notification of malaria case	District/state	Cases of origin/inter district/interstate
Task Force meeting	State /District	Intersect oral coordination Improved
Special focus	Forest fringe villages	Engaged Health volunteer for diagnosis /treatment of malaria
Rewards to districts	Announces	ASHAs/volunteer /Health Workers

Key activities undertaken in border areas 

- Surveillance by ASHAs/ Volunteer/MPWS: RDTs are available with them. Anti malarial are also available for the treatment.
- Vector Control: LLIN were distributed in those areas, regular monitoring visits for uses of LLIN by the community.
- IPC. Miking, Group meeting also organized in those areas.
- School activity are carried out regularly.
- Organised village health& sanitation day.



Case information in the identified cross-border districts  
2020 – 2022 (up to 24<sup>th</sup> June)

Year	Name of the district	Indigenous Cases	Imported Cases
2020	Baksa	8	0
	Chirang	51	0
	Kokrajhar	109	0
	Udalguri	90	0
2021	Baksa	2	0
	Chirang	20	0
	Kokrajhar	32	0
	Udalguri	8	0
2022 (up to 24 <sup>th</sup> June)	Baksa	4	0
	Chirang	4	0
	Kokrajhar	11	0
	Udalguri	6	0

Information on cross-referrals

- Information available for interstate only
- No information of Cross border districts from 2020

Progress on mapping vector breeding sites

Name of Places	Block PHC	District	Breeding Site	Species
1. Jahar Bill (Forest Village)	Kachugaon	Kokrajhar	Spring (Slow moving water)	An.annularis An.minimus
2. Haldhibari	Dotma	Kokrajhar	Lake water	An.annularis
3. Uguri	Sidli PHC	Chirang	Lake water	An.minimus

Information on Insecticide resistant studies



Insecticide used	Vector Species	Susceptible Status	Study District
DDT	An.minimus	Susceptible	Kokrajhar/Chirang
DDT	An.dirus	Susceptible	Kokrajhar/Chirang
DDT	An.annularis	Susceptible	Kokrajhar/Chirang
DDT	An.subpictus	Susceptible	Baksa
DDT	An.minimus	Susceptible	Udalguri



Next steps for cross-border collaboration

- Exchange/ share of information of malaria cases by WhatsApp/ mail/face to face meeting with the district/BPHC officers with the counterpart
- Sharing of entomological survey information with the cross border districts
- Sharing of Vector control measures like DDT spray/LLIN in bordering area.
- Sharing of field level activities (monitoring & supervision) may also be included.



DEPARTMENT OF PUBLIC HEALTH  
MINISTRY OF HEALTH  
ROYAL GOVERNMENT OF BHUTAN



**India-Bhutan  
Cross border Malaria Elimination Meeting**

**Guwahati, Assam 24<sup>th</sup> June, 2022**



## Why cross border collaboration is important for malaria elimination in Bhutan

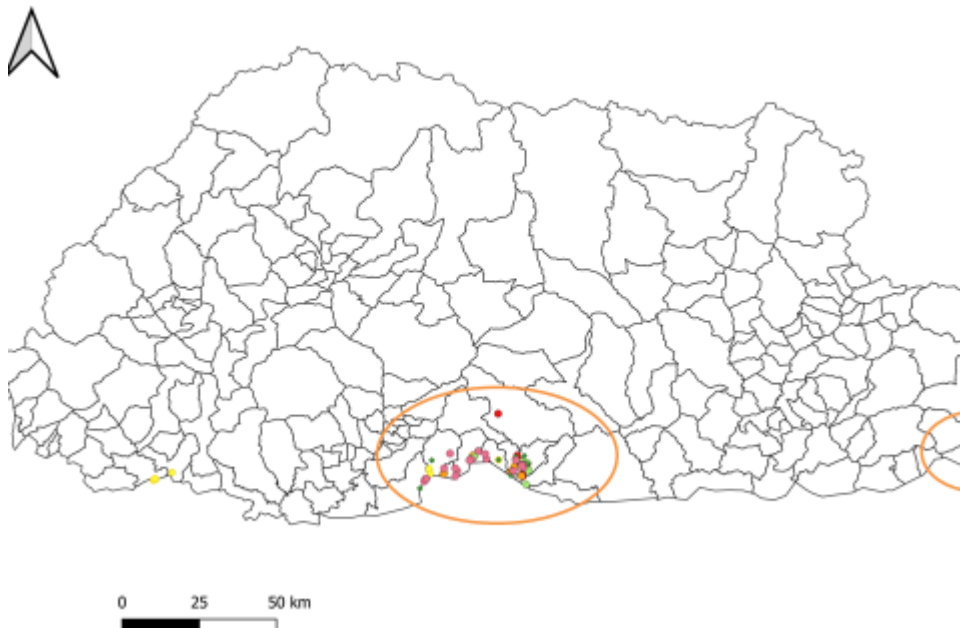
### Indian states bordering with Bhutan



### Problem statement

- 95% National Malaria Cases confined to border areas
- Porous land border, large population movement across border (joint villages & towns)
- No-functional cross border collaboration at the ground level
- No proper information sharing platform to response

### Indigenous Malaria Cases: 2015 - 2021





### Health Facilities and cross border villages

S. no	Districts (Bhutan)	Health Facility Bhutan side	Bhutan Village	Indian Village
1	Samdrup Jongkhar	Jomotsangkha Hospital	Jomotsahngkha	Udalguri
		Samrang PHC	Rongchuthang	Khaorong
		S/jongkhar hospital	Samrang	Samrang
		Samdrupcholing Hospital	S/jongkhar	Mala Bazaar /Daranga
2	Sarpang	Umling PHC	Samdrupcholing	Udalguri
		Chuzergang PHC	Gaden	Bakmara
		Gelephu CRR Hospital	Chuzergang	Bakmara
		Taraythang PHC	Gelephu	Dadgari
		Gelephu CRR Hospital	Taraythang	Bakmara
		Sarpang Hospital	Samteling	Tulki Basti
			Sarpang Tar	Muri/ Sarpara
Dargaythang	Muri/ Sarpara			
	Gakidling (Hilley)	Salarpara/Muri		

### **Country level Cross Border initiatives in Bhutan**

- ❖ Mandatory malaria screening of all migrant workers entering the country for work and stay in Bhutan and periodic screening at sites
- ❖ Passive fever case surveillance of day workers at health facilities.
- ❖ Proactive case finding in project areas and construction sites
- ❖ Provision of free treatment and admission of cross border migrants in health facilities with DOTS for 3days
- ❖ LLIN coverage also for migrant workers in risk areas
- ❖ Continue follow up if patient stay in the country

### **Cross border Challenges**

- ❖ Unrestricted population movement across the border
- ❖ No coordinated malaria control and prevention coverage activities across the border
- ❖ No linkages among the health professional across the border
- ❖ No system of information sharing and cross referral of the patients

**Proposed activities for Synchronization for malaria elimination interventions along the border**

S. no	Proposed activity	Times	Scheduled timing
<b>IDENTIFICATION OF 5KM CORRIDOR ALONG THE BORDER</b>			
1.	Indoor residual Spray (IRS)	every six-monthly	<b>1<sup>st</sup> round</b> – Mid February – End of March  <b>2<sup>nd</sup> round:</b> Mid August – End of September
2.	LLIN Mass distribution	Once every 3 yrs.	<b>Due in Mar-April 2023</b>
3	Sharing of case Information and cross referral	As soon as the case is diagnosed	As and when malaria is reported
4	Joint vector surveillance	Frequencies to be discussed??	Schedule can be discussed??

## Cross border experiences

**Recent inter-country cross border initiative (India and Bhutan)**

- Two rounds of meeting at the state/district level coordinated by GoI/Bhutan and supported by WHO/GFATM – 2019 -2020
- Informal social network group established for information sharing



**Recent inter-country cross border initiative (India and Bhutan)**

- Cross border visit and exchange of malaria surveillance and interventions



## Vector mapping & Insecticide Monitoring

### Vector breeding sites mapping & IR monitoring

Activities	Frequencies	Areas	Tools
Breeding site mapping	Quarterly	Focus areas	QGIS & DHIS2
Mosquito species recording	During surveillance	Focus areas and beyond.	QGIS & DHIS2
B. Site Management	Quarterly	Mapped areas	Temephose granules/IGR
IR monitoring (Bioassays: LLIN & sprayed wall)	Quarterly	Sentinel sites in Sarpang	WHO Cones
Resistance status monitoring	Quarterly	Sentinel sites in Sarpang	WHO kits and impregnated papers.



## Priority actions to address malaria along international border

Tackle the challenges of border malaria



Dr Roop Kumari  
Focal point for malaria & VBD  
WHO Country Office India

### Current WHO definitions related to border malaria

#### **Cross border malaria**

Malaria transmission associated with the movement of individuals or mosquitoes across borders

#### **Imported cases**

Malaria case or infection in which the infection was acquired outside the area in which it is diagnosed

## Border malaria as a challenge for malaria elimination



- Border malaria is a frequently cited challenge for malaria elimination.
- Many malaria-eliminating countries found the last few cases along with the international land border sharing with a malaria-endemic country.
- However, border malaria is a multifaced issue. The challenges of border malaria vary significantly in different borders
- The common challenges in different border areas include:
  - Malaria in border areas pose challenges on account of difficult-to-reach areas (geographic inaccessibility due to forest, hills) and key and vulnerable groups (tribal/ethnic groups, migrant and mobile populations, etc.) These populations are often poor, marginalized, and illiterate.
  - Relatively weaker health system, low surveillance
  - Lack of access to health care (including malaria service)
  - Large population movement across borders poses challenges for surveillance and implementing malaria interventions
  - Inadequate international coordination/border collaboration

Global Malaria Programme



## WHO – Meeting on Border malaria



1. The national program to conduct mapping of border villages and health facilities located along the border (VDCP, Bhutan and NVBDCP, Assam, India) last recommendation—no action taken
2. Capacity building especially at district & sub district levels through trainings would be crucial and need to be prioritized.
3. Recognizing the importance of **harmonization and synchronization of vector control interventions** (IRS, LLIN distribution) between two bordering areas of Bhutan and India, the meeting agreed to share action plans for implementation of vector control interventions with the counterpart before the plan is executed in the field with mutual discussion (Responsible organization: VDCP, Bhutan and NVBDCP of Assam and West Bengal, India).

## Conclusion and recommendations of ERG on border malaria



### *Evidence Review Group (ERG) on border malaria, WHO Global Malaria Programme, 2018*

- As each border is unique, there are no one-size-fits-all solutions that can be used for all borders. A situation analysis is needed to define the exact problems in each border area.
- The current recommended interventions for malaria elimination are suitable for malaria elimination in border areas.

**Malaria Policy Advisory Committee Meeting**  
17–19 October 2018, Geneva, Switzerland  
Background document for Session 6



### **Evidence review group on border malaria**

Meeting report, 10–11 May 2018  
World Health Organization, Geneva, Switzerland

#### **Executive summary**

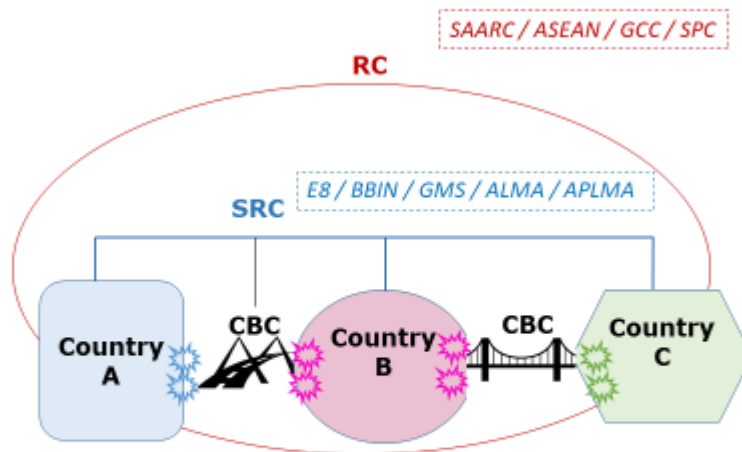
Border malaria is defined as malaria transmission or potential for transmission that takes place across or along borders between countries sharing a land border. Border malaria can extend up through the adjacent administrative areas along the international border, or up to a

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n

## Conclusion and recommendations of ERG on border malaria



- It is very common that the implementation of malaria interventions is suboptimal in periphery areas including border areas. But it holds the key to success. As such, the national programme should
  - Ensure access to health care for all populations in border areas
  - Improving the quality of the surveillance in border areas
  - Ensure the quality of implementation of malaria interventions (e.g. vector control) in border areas

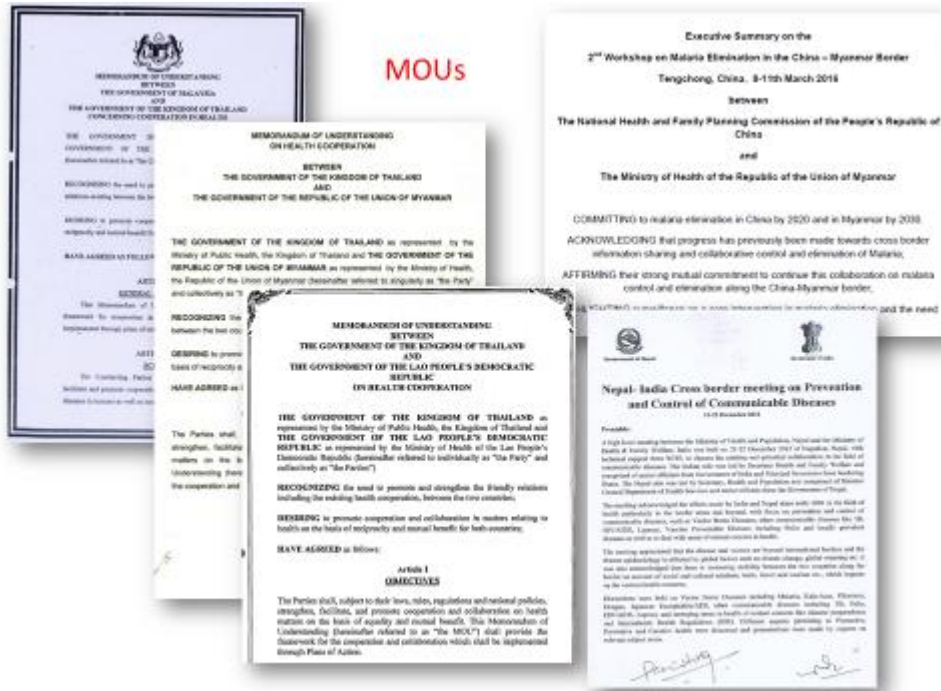


- CBC Cross border collaboration
- SRC Sub-regional (trans-national) collaboration
- RC Regional Collaboration

Refer handout

## Conclusion and recommendations of ERG on border malaria

- Cross-border collaboration
  - Information sharing and coordination at the local level is essential (and often more efficient).
  - Suggested cross-border collaboration activities  
Depending on the border's situation, countries might consider conducting a joint situation analysis, synchronizing vector control, joint case/foci/outbreak investigation and response wherever appropriate



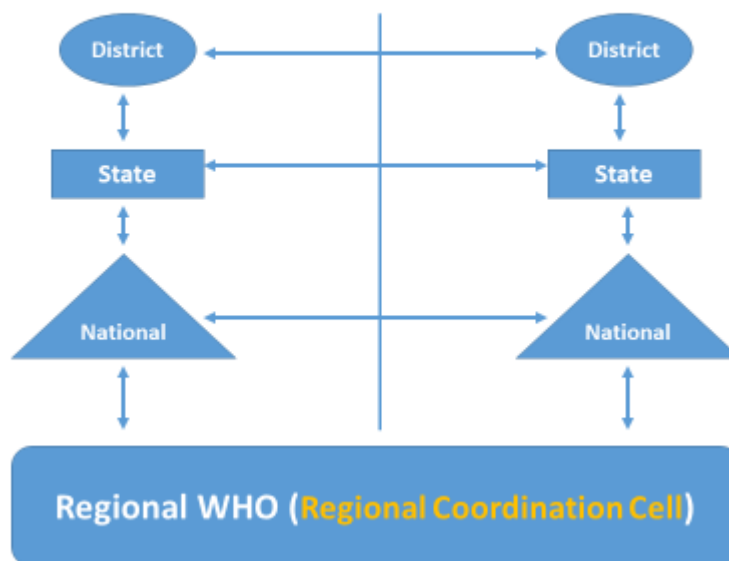
**Types of Cooperation**

- Subject to domestic laws/regulations
- Overseen by Joint National Committees – Coordination/Steering/Elimination
- National meetings
- Local collaboration at border areas
- +/- district level notification, data sharing
- WHO required to facilitate multi-sector involvement at national level

## Next Steps

- When a **CLEAR OBJECTIVE** of cross border (adjacent or non-adjacent) initiative is warranted then agree on:
- Get national agreements on:
  - minimum mutually agreeable cross-border action: synchronized and/or complementary approaches (coordinated by the core group)
- Nodal focal point at each levels
- Develop prioritized coordinated 6months/1-year action plans
- Initiate (or use existing) high level action -including and not restricted to MOUs [bilateral **email groups/ working groups/district level coordination committees**] with the aim to create an enabling environment for local action
- Initiate (or use existing) regional coordination mechanism if needed
- National and local situation analyses, identifying resources and gaps

## Coordination Mechanism for Cross-border Collaboration



Many meetings are being organized by program, WHO and Global fund , minutes prepared- action points circulated --- Implementation –follow up ??

- Who is nodal person to coordinate and follow up action taken --- my suggestion is nodal officer from NCVBDC HQ, state and districts should be officially nominated-
- A core group to be constituted - member of both countries
- Data sharing platform to be developed -
- **Synchronized implementation of interventions like LLIN distribution, IRS by districts on both sides of the border as much as possible.**
- Initiation of case/focus investigation, classification & response especially in border districts/village of India reporting relatively few cases.

- Although border malaria is challenging, it is possible to achieve malaria elimination in border areas, as many malaria-eliminating countries have done so.
  - *China: certified malaria-free in 2021. Bordering a malaria-endemic country, Myanmar (4000km)*
  - *Tajikistan: submitted a request for certification. Bordering Afghanistan*
  - *Iran: submitted a request for certification. Bordering Pakistan*
- **WHO welcomes and supports the convening of this cross-border meeting in India and Bhutan border and support for malaria elimination.**

- Coordination should be more effective at local level
- Focal point
- mechanism for information sharing–partners
- Join surveillance - foci investigation n response
- Realistic plan and strategy – common plan for adjacent distt-DD CM/review
- Meeting with districts – for framing operational plan – implementation- review