

India-Nepal State, district, and local level bilateral onsite meeting for cross-border malaria elimination

11-12 April 2022, Lucknow, Uttar Pradesh, India

**Meeting Report** 

# TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
INAUGURAL SESSION	4
BUSINESS SESSION	
1. Appointment of Chair, Co-Chair and Rapporteurs	6
2. Adoption of Agenda	6
3. Country Presentations	6
India	7
Nepal	8
Uttar Pradesh, India	9
Uttarakhand, India	10
4. Deliberations	10
5. Recommendations	1
6. CLOSING	12
7. FIELD VISIT	12
Annex-1: Presentation by India	13
Annex-2: Presentation by Nepal	
Annex 3: Presentation by Uttar Pradesh, India	21
Annex 4 Presentation by Uttarakhand, India	
Annex 5: Field visit	29
Annex-6: Agenda of the meeting	30
Annex-7: List of participants	32

#### **EXECUTIVE SUMMARY**

India-Nepal National Malaria Program State, district and local level onsite meeting for Cross-border Malaria elimination organized by South East Asia Regional Coordination Mechanism Forum (SRCMF) was held on 11-12 April 2022 in Lucknow, UP India. The inaugural session started with a welcome address by Dr AK Singh, Director Communicable Diseases and VBD, Uttar Pradesh followed by opening remarks by Dr Rinku Sharma, Leader of the Indian delegation, Dr Chuman Lal Das, Director, leader of the Nepalese delegation, Dr Jigmi Singay Executive secretary cum Coordinator SRCMF and Shri Amit Mohan Prasad, Chief guest and Additional Chief Secretary Government of Uttar Pradesh. Shri Amit Mohan Prasad in his address reiterated that mutually agreeable cross-border collaborative activates directed at malaria elimination needs to focus on doable and implementable strategies that complement each other's efforts that are easy to understand and implement by field level officials. Unless a Regional approach is taken, no one country can claim to be safe. It was also highlighted that to achieve 2030 target both countries need to accelerate malaria elimination activities to interrupt chain of local transmission of all human malaria parasites nationwide for at least 3 consecutive years and have fully functional surveillance and response system is in place to get WHO certification.

The Inaugural session ended with delivery of vote of thanks by Dr Ramesh C Panday, Additional Director Malaria and VBD, Government of Uttar Pradesh.

The Business Session was chaired by Dr Chuman Lal Das, Director, Epidemiology & Disease Control Division (EDCD), Department of Health Services, Ministry of Health and Population, Govt of Nepal and leader of the Nepalese delegation and Co-chaired by Dr Rinku Sharma, Joint Director, National Centre for Vector Borne Disease Control (NCVBDC) & leader of the Indian delegation. Both the delegation leaders thanked SRCMF in bringing malaria program leads from India and Nepal together for continuing/extending bilateral collaboration & cooperation and contributing towards elimination of malaria from the region.

Both Nepal and India delegations presented and discussed Malaria elimination in both the countries, especially in the districts along the border and agreed on strengthening screening of fever cases at identified points of entry on both sides of a common border and develop Strategy and tool/standard template for capturing information and data sharing on any signs or indicators for probable outbreaks or epidemics to facilitate triggering alerts for prevention activities, as and when imported cases (following case investigation) and/or any local upsurge in cases are identified for harmonized responses and timely action. In addition to the issues around bordering states and districts, the delegations from both sides agreed upon being closely connected and work in collaboration with each other in future with regards to cases being reported with the history of travel to other states/districts. For the same, EDCD and NCVBDC to remain in close connection with each other.

# The Focus to be on:

- > case detection and management,
- strengthening entomological surveillance data for malaria vector control with active and passive case surveillance between two national programmes.
- At cross border area /district to have uniform diagnosis, treatment and case management system and both countries to follow WHO standard treatment and case management guidelines on both sides.
- All activities identified to be in line with WHO recommendation and meet the WHO criteria for Certification of malaria elimination by WHO for country.
- > Data sharing between the respective national programs about cases reported to have been imported from across the borders using an agreed format on a regular basis.

### The Chair formally closed the meeting at 4 PM IST.

The second day of the programme was the Field visits to districts of Bahraich in UP, India and Nepalgunj, Banke in Nepal. The Field visit ended after a debriefing meeting at 4PM (IST)

### INAUGURAL SESSION

Dr AK Singh, Director Communicable Diseases and VBD, Uttar Pradesh, welcomed delegates from Nepal and India, Respected Additional Chief secretary, agencies supporting the Malaria program and all participants to the meeting. He added that Hon'ble Prime Minister of India at the East Asia summit in 2015 committed for India to eliminate malaria by 2030. Since then, intensive malaria elimination activities are ongoing in the state under leadership of Additional Chief Secretary Government of Uttar Pradesh. Seven districts of India share border with Nepal and as India prepare towards malaria elimination, considerable challenges lie ahead as increasing numbers of movement of malaria across international borders poses a major obstacle to achieving malaria elimination.

This transfer of infection from high risk to low risk will continue unless we have common agenda for elimination.

- a) Malaria elimination can't be achieved until unless neighbour countries undertake mutually agreeable cross border collaborative, coordinated activities and synchronised complementary approaches to accelerate Malaria elimination.
- b) Need to execute jointly agreed program plans on both sides of adjoining international border areas /districts.
- c) ensure intensive epidemiological surveillance to identify imported cases, sources of transmission, notification and sharing of information in collaboration with frontline workers in Cross-border areas/districts.
- d) Enhance joint capacity building through training.
- e) No country can achieve and sustain malaria elimination in isolation we have to work together to eliminate malaria through joint efforts and Cross-border collaboration.

# Address by Dr Rinku Sharma, Joint Director, National Center for Vector Borne Diseases Control (NCVBDC), MoHFW, Government of India

Dr Rinku Sharma thanked SRCMF for organising the meeting and welcomed and thanked Member delegates from Nepal and India and the Additional Chief Secretary for taking out time to attending the meeting. She apprised the participants that SRCMF is a platform where respective participants from Governments come together to focus on 3 important diseases Malaria, TB and HIV/AIDS across 11 Member countries in SEA Region and it has been approved by MoHFW Government of India. Already three Director Level bilateral meetings have been convened between three countries India-Bhutan, India-Nepal and India—Bangladesh and this meeting is the first meeting at State, district and local level to plan coordination of joint activities for accelerating Malaria elimination in Cross border areas/districts.

- a) Malaria elimination can't be achieved alone and essential mutually agreeable cross border collaborative activities such as sharing information on imported cases, drug resistance and insecticide resistance need to be implemented.
- a) Focus is needed on synchronised/complementary approaches/strategies/activities/tools directed at accelerating malaria elimination on both sides of international adjoining Cross border areas/districts.
- b) cross-border malaria data sharing platform need to be developed for taking timely action in response to malaria transmission across borders areas and districts.

# Address by Dr Chuman Lal Das, Director, Epidemiology and Disease Control Division, Department of Health Services, Kathmandu, Nepal

Dr Chuman Lal Das expressed his great pleasure to see the initiation of Cross-border Coordination through this onsite bilateral meeting. He highlighted the need to focus on Malaria elimination milestones and targets and expressed his gratitude to NCVBDC, MoHFW Government of India for showing interest to collaborate and work with Nepal in jointly addressing the common issue of Cross-border malaria major obstacle to malaria elimination. He further added that SRCMF is an excellent support in efforts to move the agenda of Cross Border Malaria and to move closer to malaria elimination

in SEA Region. He thanked all on behalf of Government of Nepal and looked forward to working with India towards cross-border malaria elimination.

# Address by Dr Jigmi Singay Executive Secretary Cum Coordinator SRCMF Secretariat

Dr Jigmi Singay welcomed Honourable chief guest, Shri Amit Mohan Prasad, Additional Chief Secretary Government of UP, honourable members on Dais, Senior officials from MoHFW, delegation members headed by Dr Chuman Lal Das from Nepal and delegation members from India headed by Dr Rinku Sharma, partner and all the participants. He expresses his special thanks to Shri Sudesh Kumar and team for excellent arrangement for Inaugural session. He further added that the presence of all the honourable members in the Inaugural session reflects the commitment of National program towards achieving the malaria elimination goal and gives encouragement and inspiration to all to achieve elimination goal and sustain.

On behalf SRCMF he thanked both the programmes for consenting and agreeing to this important meeting. He thanked Shri Amit Mohan Prasad for consenting to be the chief guest, all partners and participates who travelled to the meeting site in Lucknow and madding it a real success by their kind presence.

- a) Leaders from two programmes to take the lead and SRCMF will be there to facilitate.
- b) As members countries of SEA Region move closer to eliminating malaria experience have shown that last cases frequently emerge from the border areas thus creating hurdle in achieve malaria elimination. Therefore, neighbouring countries need effective cross border collaboration to take timely interventions to achieved elimination goal.
- c) To be eligible for WHO Certification of malaria elimination, countries need to interrupt chain of local transmission nationwide for at least the past 3 consecutive years, to achieve the target countries would need to get rid of disease by the end of 2022 (in case of Nepal) and by the end of 2027 (in case of India) to be timely eligible for the certification as per the national goal of malaria elimination by 2025 and 2030 respectively for Nepal and India.

# Address by Shri Amit Mohan Prasad, Additional Chief Secretary Government of Uttar Pradesh

Shri Amit Mohan Prasad welcomed the delegation from Nepal and India and added that he felt privileged to be the Chief guest and to talk about malaria elimination and its intrinsic link to Sustainable Development Goals (SDGs). He highlighted that to achieve malaria elimination target of 2030, we need to achieve zero indigenous malaria cases by 2027 and sustain it for 3 consecutive years to be eligible for WHO malaria-free certification. He expressed his happiness on entering into active collaboration with Nepal a close neighbour and friend.

- a) Cross border collaboration is extremely important for tackling malaria.
- b) To undertake agreeable cross border collaborative synchronised activities, we need a strategy and road map with simple with doable steps so it's easy to understand and implement by front line workers.
- c) Establish an agree on M&E framework for achieving malaria elimination milestones in collaboration with front line workers.
- d) Ensure constant communication, uninterrupted supplies/ commodities, trained staff and mechanism for information sharing.
- e) Lessons can be learnt from COVID-19 pandemic, in time of global emergent scientists made coronavirus vaccine at a very short period it shows that where there is will there is way. Malaria elimination gaols too can be achieved if we jointly work to accelerate malaria elimination activities without compromising on quality.
- f) In order to address problem and find solution, whole of government approach is required through joint activities involving diverse ministries like health care functionaries, education department, local municipal bodies etc.
- g) Need to ensure that outbreaks of locally transmitted cases of malaria don't take place.
- h) Both countries need to collaborate proactively to translate strategies into action and get the desired result.

# Vote of thanks by Dr Awadesh Kumar Yadav, Joint Director and SPO Malaria, Government of Uttar Pradesh

Dr Awadesh Kumar Yadav expressed his deep sense of gratitude to the Chief Guest Shri Amit Mohan Prasad, Additional Chief Secretary for giving his valuable time to this meeting. He reiterated the importance of addressing cross-border malaria in achieving elimination. He added that this meeting is a platform to share and exchange information on malaria situation, gaps, and challenges and finding solutions. It highlighted the need to focus on malaria case-based surveillance and response up to village and sub centre level and event based cross-border notification of outbreaks. He emphasized that intensified IEC and BCC strategies and activities should be integral component of malaria efforts aimed at achieving elimination.

## **BUSINESS SESSION**

Dr Jigmi Singay, Executive Secretary cum Coordinator, SRCMF Secretariat briefly highlighted the objectives and outcomes of the Indo-Nepal Program Director level bilateral meeting for cross-border malaria elimination.

# 1. Appointment of Chair, Co-chair and Rapporteurs

Dr Jigmi Singay as per schedule invited nomination for the Chairperson and Co-Chairperson for this meeting. Dr Rinku Sharma leader of India delegation proposed Dr Chuman Lal Das, Team leader of the Nepalese delegation and Director, EDCD to be the Chair and Dr Chuman Lal proposed name of Dr Rinku to be the Co-chair of the meeting. Dr Chuman Lal Das was appointed as Chair and Dr Rinku Sharma as co-chair. From SRCMF Secretariat Natasha Dawa and Dr SN Misra were appointed as the Rapporteurs of the meeting. Dr Jigmi Singay formally invited and handed over the Chairmanship to Dr. Chuman Lal and requested honourable chair to take forward the agenda items of the business session

# 2. Adoption of Agenda

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

# 3. COUNTRY PRESENTATIONS

Chair then invited India for presenting the Malaria situation in India.

### 3.1 Presentation by NCVBDC India

### Malaria situation in India

- During 2000-15, malaria cases declined by 44%, whereas during 2015-2021 case reduction of 86% was achieved.
- Similarly, during 2000-15, malaria deaths declined by 69% whereas during 2015-2021 reduction of 79.1% was achieved.
- In 2021 (P), 125 districts reported Zero Indigenous Malaria cases.

Indian state and districts adjoining Nepal international border with Number of Cases and API in 2021 are given in Table A below:

Table A: State and districts adjoining Nepal international border with Number of Cases and API in 2021

State	Districts	Cases	API 2021
Uttar Pradesh	Pilibhit	38	0.02
Uttar Pradesh	Lakimpur Kheri	115	0.02
Uttar Pradesh	Bahraich	1	0
Uttar Pradesh	Sravasti	2	0
Uttar Pradesh	Balrampur	1	0
Uttar Pradesh	Sidhhathnagar	47	0.02
Uttar Pradesh	Maharajganj	6	0
Bihar	East champaran	2	0
Bihar	West Champaran	4	0
Bihar	Sitamarhi	2	0
Bihar	madhubani	7	0
Bihar	Supaul	7	0
Bihar	Araria	11	0
Bihar	Kishanganj	1	0
Uttarakhand	Champavat	2	0.01
Uttarakhand	Pithoragarh	0	0
Uttarakhand	Udham Singh Nagar	0	0
Sikkim	North Sikkim	0	0
Sikkim	South Sikkim	2	0.03
West Bengal	Darjeeling	6	0

- API of all Indian States adjoining Indo-Nepal Border fall under Category 1 with API less <1 case/1000 population in all the districts, with API ranging from 0.00 in Uttarakhand, 0.00 in Bihar, 0.02 in Sikkim, 0.05 in Uttar Pradesh to 0.29 in west Bengal in 2021
- All the 20 districts bordering Nepal fall under category 1 with API less <1 case/1000 population.

# Challenges for malaria elimination in India

- a) Decreased priority for Malaria in low burden states/UTs.
- b) Limited capacity of states/districts in documentation for Malaria certification and validation of zero indigenous malaria cases.
- c) Lack of regular cross border meetings.
- d) Lack of Peripheral treatment availability in remote areas.
- e) Low treatment availability in remote areas.
- f) Manpower and logistics issues in remote areas.
- g) Limited entomological surveillance capacity in state/districts.
- h) Limited involvement of private sectors.

# Way forward

- a) Appointing Nodal person for cross border collaboration border states for better coordination to look for malaria and other disease.
- b) Regular meeting for cross border
- c) Nearest Health facilities mapping within cross borders districts from both Nepal and India.
- d) Strengthening the entomological surveillance within cross borders districts nearest health facilities

The detailed presentation of India is attached in Annex 1

Chair thanked the Indian delegate from NCVBDC for his presentation and invited Nepal delegate for his presentation.

# 3.2 Presentation by Nepal

## Malaria situation in Nepal

- a) Malaria Trend in Nepal from 2012-2021 has shown reduction in total malaria cases and indigenous cases
- b) Malaria Cases by Species in 2021: there were a total of 391 (359 imported and 32 indigenous) cases of malaria in Nepal. Of the total 359 imported cases following is the number of cases by species.
  - o Imported Plasmodium vivax (PV) cases =270
  - o Imported Plasmodium falciparum (PF) cases=79
  - o Imported Plasmodium mixed (PM)=10
- c) In 2021 of the total 359 imported cases, 336 cases were imported from India and 23 from other countries. Imported Cases from India by State in year 2021 are given below in Table B below

Table B: Imported	Cases from	ı India, by	/ State 2021
-------------------	------------	-------------	--------------

State	No. of Cases
Maharashtra	224
Gujarat	54
UP	19
Delhi	10
WB	6
Rajasthan	4
Tamil Nādu	4
UK	4
Goa	3
Haryana	3
Bihar	2
Andhra Pradesh	1
Karnataka	1
MP	1
Total	336

- d) 13 designated health desk established at PoEs, malaria tests with IEC and BCC material and trained staff Initiatives
- e) Cross Border Collaboration is a priority in National Malaria Strategic Plan (2014 -2025).
- f) Targeted activity for the migrants at the point of entry (PoE):
  - o Screening for fever cases at point of entry (PoEs).
  - o Provision of the BCC/IEC materials at the PoEs.
  - Trained staffs are stationed at the health desks established at 13 PoEs for screening COVID-19 and malaria from ground crossings.
- a) Active Case Detection with community health workers initiated in areas with high receptivity & vulnerability patterns.

### **Kev** issues in cross border collaboration

- a) No clear guidance for implementing cross border collaboration.
- b) Infrequent collaborative meetings at the country levels to discuss cross border issues.
- c) Data sharing among health authority at the local level across border.

# Way forward

- a) Universal access to health and prevention services in border areas and in high burden states incl. for people from across the countries.
- b) Effective and coordinated cross-border surveillance and response, incl. planning & implementation at the border areas.
- c) Parallel implementation of preventive measures such as IRS, LLIN distribution
- d) Strengthen Cross-border collaboration mechanism (formal and informal) that provides the enabling environment for malaria elimination.
- e) Robust interventions in focused areas with high number of migrants.

The detailed presentation of Nepal is attached in Annex 2

Chair thanked the delegate from Nepal for his presentation and invited delegate from Lucknow, Uttar Pradesh India for his presentation.

# 3.3 Presentation by Uttar Pradesh, India

## **Malaria situation in Uttar Pradesh**

- a) Total 7 Districts Pilibhit, Lakhimpur Kheri, Bahraich, Sravasti, Balarampur, Sidharthnagar, Maharajganj in UP share international border with Nepal
- b) Active Case Surveillance (ACS) carried out:
  - o to interrupt transmission by early case detection & and prompt treatment and attain Annual Blood Examination Rate Target and reduce API
  - o identify every fever case at the earliest. in line with the malaria elimination strategy of early diagnosis and prompt treatment
- c) Strengthening Surveillance
  - Active Surveillance- Trainings given to ASHA & ANM for doing malaria testing of fever cases during their visits/camps. Cluster meetings conducted by team during monitoring visits
  - Passive Surveillance- Community awareness & Participation encouraged with help of IECs, social media, newspaper etc. to encourage people to visit nearby facility in case of fever
  - Further strengthening of coordination with other health partners & local NGOs to reemphasize on 3Ts (Test, Treat, and Track) and Strengthening Follow-up
- d) Monitoring
  - o State level teams Joint Director is deployed.
  - o District level teams ACMO VBD, DMO, VBD Consultant, Biologist
  - o Block Malaria Inspector, BCPM
  - o Partners: PATH-CHRI
- e) Plan to Further strengthen surveillance in Cross Border Districts
  - o All Districts already initiated ACS (Active Case Surveillance) during House-to-House activity, Dastak Campaigns.
  - o Cross-border Malaria workshop in Kheri as it shares the international border with Nepal.
  - Sensitization of ASHAs of Sub centers of Villages having international border for routine surveillance

### Way forward

- O Strengthening of surveillance to achieve 10% Annual Blood Examination Rate for elimination of malaria by 2030.
- o Identification of hot spots in all 7 neighbouring districts sharing border with Nepal.
- o Regular & Periodic sharing of data for neighbouring districts (malaria cases) among India and Nepal.
- Organization of annual malaria workshop in any of the 7 border districts with Nepal for knowledge sharing, cross learning, and dissemination of key information.
- Malaria testing of individuals with fever of people travelling from identified hot spot area from India to Nepal or vice-versa.

The detailed presentation of India is attached in Annex 3

# 3.4 Presentation by district Champawat, Uttarakhand, India

Delegate from Uttarakhand shared Malaria action plan for malaria

- a) Case management,
- b) Vector Control measures like for fogging activity, Diagnostic capacity,
- c) Capacity building like Regular orientation of health care workers and other field workers, regular orientation on standard clinical management for doctors,
- d) Outbreak Response by Rapid Response Team NCVBDC (Dengue/Malaria, Inter
- e) sectoral coordination with PWD, Panchayat Raj, Swajal, ICDS, Education Department, Ayush etc. departments on chlorination of water, bleaching and sanitation, vector control.
- f) IEC Plan and activities distribution of Pamphlets and Posters, Flexes
- g) at village level involving Asha Worker, Aanganbadi Worker, Panchayat Pratinidhi to spread awareness about disease.

The detailed presentation of India is attached in Annex 4

# 4. AFTER DELIBERATIONS IT WAS AGREED BY BOTH THE SIDES THAT THE FOLLOWING ISSUES NEED TO BE ADDRESSED URGENTLY IN ORDER TO ACCELERATE MALARIA ELIMINATION IN THE CROSS-BORDER AREA:

# 4.1 Screening

- a) Both countries to strengthen screening of cases at identified point of entry on both sides of a common border
- b) SRCMF to identify funds for strengthening screening of fever cases (where maximum number of imported cases are reported) for cross border malaria elimination.
- c) National Malaria Programmes to share requirement and plan with SRCMF for strengthening screening so resources could be mobilised for acceleration of malaria elimination in cross border areas/district. Additional funds should be phased out in reasonable time frame with government phase-in and taken over by government budgetary provisions.

## 4.2 Sharing of information at local level for timely interventions and notifications.

- a) Both countries to develop Strategy and tool / standard template with 4-5 core indicators /parameters for capturing information, prompt data sharing on any signs or indicators for probable outbreaks or epidemics to facilitate triggering alerts for prevention activities, and when imported cases (following case investigation) and/or any local upsurge in cases are identified for harmonized responses and timely action.
- b) SRCMF Website to be considered for data sharing.
- c) Both programmes to explore utilisation of Integrated Disease Surveillance Programme (IDSP), disease surveillance system of India (for epidemic prone diseases) to monitor disease trends and to detect and respond to outbreaks through trained Rapid Response Team (RRTs) for sharing information and response.

# 4.3 Agreement on names of focal points between the two programmes, at National, State, district level and SRCMF

Following officials were identified as Focal points for coordination of activities in the cross-border areas/districts at various levels:

- a) National-Director
- b) State/Province- State Program Officers/Director, Provincial Health Directorate
- c) District Level-District Malaria Officer/District Malaria Focal Person
- d) Local/village level –Health coordinators
- e) SRCMF-Program Officer

# 4.4 Synchronised activities and harmonisation of treatment Regimens

- a) Seven adjoining international cross border areas/districts identified had API < 1, all being low endemic areas these districts don't fulfil the criteria for selection to be covered under dedicated IRS and LLIN activities.
- b) Both the countries to focus on case detection and management, strengthening entomological surveillance data for malaria vector control with active and passive case surveillance for timely identification of imported cases and sources of transmission, notification and exchange of information between two national programmes at district/local level on periodic and/or real time basis/ event-based cross-border notification and take timely outbreak response.
- c) Both countries at cross-border areas/districts to have uniform diagnosis, treatment and case management system and to follow WHO standard treatment and case management guidelines on both sides.
- d) All activities identified to be in line with WHO recommendation and meet the WHO criteria for malaria elimination Certification.

# 4.5 Frequency of onsite bilateral meeting

It was emphasised that for successful collaboration, onsite interactions with participation of district/local officials is essential. It was agreed to have bilateral onsite meetings on quarterly basis or earlier if required.

# 5. RECOMMENDATIONS OF INDIA-NEPAL BILATERAL MEETING:

# **National Program**

- 1. In line with the bilateral meeting agreement, the identified focal points at various level of both countries to submit the list of names, designation, email id and mobile number to SRCMF Secretariat with copy to the counterpart.
- 2. Local level coordination meeting will be held monthly and district level quarterly which will be reviewed periodically.
- 3. The meeting agreed and recommended for synchronisation and harmonisation of activities in the following areas:
  - a) Cross-border fever screening and logistics management
  - b) case detection and management, strengthening entomological surveillance data for malaria vector control with active and passive case surveillance to allow timely identification of imported cases and sources of transmission, cross border notification and exchange of information for timely outbreak response.
  - c) Both countries at cross-border areas/districts to have uniform diagnosis, treatment and case management system and to follow WHO standard treatment and case management guidelines on both sides.
  - d) undertake mutually agreeable cross-border collaboration through synchronized and harmonised activities in identified and prioritized cross-border areas /districts.
  - e) All activities identified to be in line with WHO recommendation and meet the WHO criteria for malaria elimination certification.
- 4. Share plan and requirement for fever screening and logistic plan (for districts reporting maximum imported cases) with SRCMF for additional resource mobilisation.
- 5. Develop Strategy and tool / standard template with 4-5 core indicators /parameters for capturing information, prompt data sharing on any signs or indicators for probable outbreaks or epidemics to facilitate triggering alerts for prevention activities, as and when imported cases (following case investigation) and/or any local upsurge in cases are identified for harmonized responses and timely action.
- 6. Explore utilisation Integrated Disease Surveillance Programme (IDSP) for sharing information and response.

# **SRCMF**

- 1. Facilitate information and data sharing between two National Malaria programmes on both side of the international border.
- 2. Facilitate organisation of regular meetings between the two programmes at the local level for implantation of joint planning, synchronised activities, joint surveillance, M&E and review of malaria elimination programme at local and district level.
- 3. Coordinate participation of technical agencies like WHO and other relevant agencies who are involved in acceleration of malaria elimination.
- 4. Mobilise external resources required for additional activities in districts with maximum imported cases for acceleration of cross border area/district malaria elimination.
- 5. Consider Involving IDSP and IH in Cross-border coordination activities.

Chair then invited the Focal Points from India and Nepal to brief participants on scheduled for field visit on next day. This was followed by a meeting summary presented by Program officer, SRCMF. Chair thanked the Program Officer for capturing the all the important aspects of the meeting.

# 6. CLOSING SESSION:

In the closing session, the Executive Secretary thanked all the participants for their active participation and valuable contributions. He also thanked Chair and co-chair for conducting the meeting efficiently and bringing it to a successful conclusion. He thanked all for their participation, valuable guidance, and suggestions. Dr Awadesh Kumar Yadav, Joint Director, SPO Malaria Uttar Pradesh thanked delegation members from Nepal and India for fruitful discussion and expressed his gratitude to SRCMF for organising this meeting. He conveyed special thanks to PATH for partnership and support. The Chair then thanked the delegates for their active participation, very productive deliberations and thanked SRCMF team for their efforts to improve Coordination between two national programs to work together for malaria elimination.

The Chair formally closed the meeting at 3 PM IST.

### 7. DAY 2 - FIELD VISIT

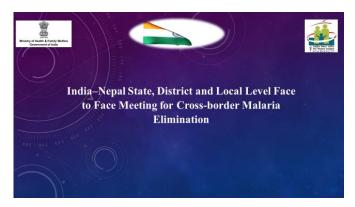
Day two started with field visits to Bacharach district in UP, India followed by Narainapur Municipality of Banke district in Nepal. Field visit schedule is in Annex 5

# AFTER THE FOLLOWING DELIBERATIONS IT WAS AGREED BY BOTH SIDES THAT FOLLOWING ISSUES NEED TO BE ADDRESSED

- 1. Large number of imported Malaria cases are reported by Narainapur ward no. 3 in Nepal from Maharashtra and Gujarat Sates of India
- 2. It was reported that most migrant workers from Nepal on their visit to Maharashtra and Gujrat returned either without treatment, malaria relapse or incomplete treatment.
- 3. special concern was raised regarding this migrant worker population group and need for implementation with adequate system for proper screening and case management of this population group.
- 4. List of Local health services available at destination points of migrants could be shared with the migrant seasonal workers to ensure access to malaria services.
- 5. SPO Lucknow to raise the issue of migrant seasonal workers with SPO of Maharashtra and Gujrat.
- 6. Narainapur district to share names and contact details of these migrant workers for identification and proposed solutions.

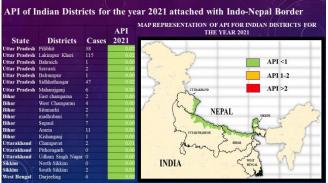
Dr Chuman Lal Das formally closed the Field visit at 4 PM IST.

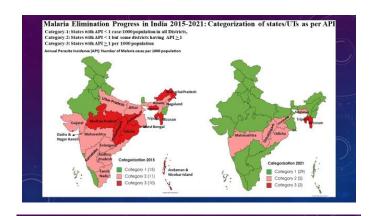
Annex 1











# Stakeholders Involved 1. Director NVBDCP India 2. NVBDCP Officers 3. National Consultants 4. State Programme officers 5. State consultants 6. Malaria technical Supervisors 7. District consultants 8. ITBP 9. SSB

# STATUS OF MALARIA ELIMINATION IN INDIA IN 2020 15% decline in cases in the year 2021 as compared to 2020. 13.9% decline in deaths in the year 2021 as compared to 2020. The Malaria success of India has been applauded in World Malaria Report (WMR) 2018, 2019 & 2020. Among 11 high burden countries across world, India is the only high endemic country which has reported a decline in malaria.

# CHALLENGES FOR MALARIA ELIMINATION IN INDIA Decreased priority for Malaria in low burden states/UTs. Limited capacity of states/districts in documentation for Malaria certification and validation of zero indigenous malaria cases. Lack of regular cross border meetings. Lack of Peripheral treatment availability in remote areas. Low treatment availability in remote areas. Manpower and logistics issues in remote areas. Limited entomological surveillance capacity in state/districts. Limited involvement of private sectors.

## WAY FORWARDS

- · Appointing Nodal person for cross border collaboration border states for better coordination to look for malaria and other disease
- · Regular meeting for cross border
- Nearest Health facilities mapping within cross borders districts from both Nepal and India.
- · Strengthening the entomological surveillance withing cross borders districts nearest health facilities

## Action Plan for Malaria Elimination In India

High Endemic Areas

Moderate Endemic Areas

Low Endemic Areas

- Early Diagnosis and
- Complete Treatment. Case based surveillance & follow up Anti-larval measures
- including source reduction.
- Early Diagnosis and Complete Treatment.
- IRS (SC with API >2) LLIN (SC with API >1)
- Intensified Malaria reporting & surveillance early detect,
- contain & prevent outbreak. Anti-larval measures including source reduction.
- Early Diagnosis and Complete
- Treatment.

  Mass screening and treatment (SC with API >5)
  IRS (SC with API >2)
  LLIN (SC with API >1)
  Intensified Malaria reporting &

- surveillance early detect, contain & prevent outbreak.
- Anti-larval measures including source reduction.

# THANK YOU

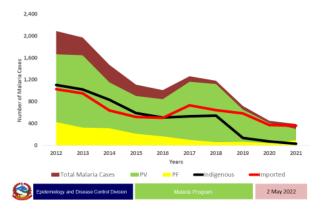
# Indo-Nepal Meeting on Cross-border Collaboration for Elimination of Malaria

11-12 April 2022 Lucknow, India

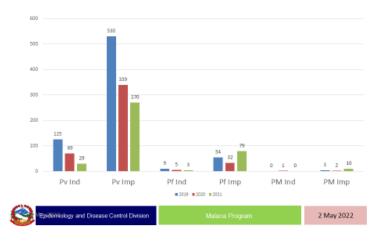
Dr. Chuman Lal Das Director Epidemiology and Disease Control Division Ministry of Health and Population



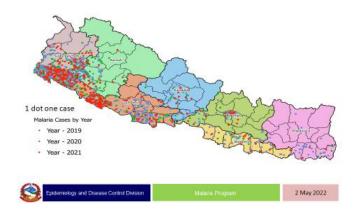
# Malaria Trend in Nepal, 2012-2021



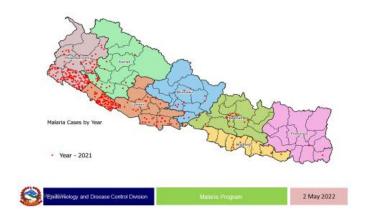
# Malaria Cases by Species, 2019-2021



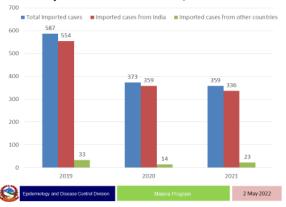
# Imported Malaria, 2019-2021



# Imported Malaria, 2021



# Imported Malaria Cases, 2019-2021



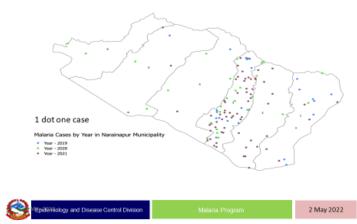
Imported Cases by States of India, 2021

State	No. of Cases			
Maharashtra	224			
Gujarat	54			
UP	19			
Delhi	10			
WB	6			
Rajasthan	4			
Tamilnadu	4			
UK	4			
Goa	3			
Haryana	3			
Bihar	2			
Andrapradesh	1			
Karnataka	1			
MP	1			
Total	336			
Epidemiology and Disease Control Division	Malaria Program 2 May 2022			

# Malaria Cases by Province, 2021



# Imported case reported at Narainapur Banke



# 13 designated health desk at PoEs, malaria tests 15(0) Malaria tests (positive) All PoEs 33,553(10) ONLINE TO THE TO

# **Initiatives**

- Cross Border Collaboration is a priority in National Malaria Strategic Plan (2014 -2025).
- Targeted activity for the migrants at the point of entry (PoE):
  - Screening for fever cases at point of entry (PoEs).
  - Provision of the BCC/IEC materials at the PoEs.
  - Trained staffs are stationed at the health desks established at 13 PoEs for screening COVID-19 and malaria from ground crossings.
- Active Case Detection with community health workers initiated in areas with high receptivity & vulnerability patterns.



# Key issues in cross border collaboration

- No clear guidance for implementing cross border collaboration.
- Infrequent collaborative meetings at the country levels to discuss cross border issues.
- Data sharing among health authority at the local level across border.



# **Potential way forward**

- Universal access to health and prevention services in border areas and in high burden states incl. for people from across the countries.
- Effective and coordinated cross-border surveillance and response, incl. planning & implementation at the border areas.
- Parallel implementation of preventive measures such as IRS, LLIN distribution
- Strengthen Cross-border collaboration mechanism (formal and informal) that provides the enabling environment for malaria elimination.
- Robust interventions in focused areas with high number of migrants.



# **THANK YOU...**



# International Cross Border Malaria (UP)

# Demography

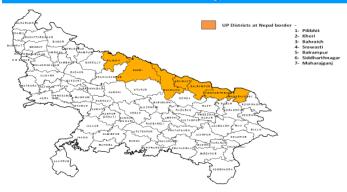


Status of Malaria in UP in different yrs (2010 - 2021)						
SN	Year	Malaria				
SIN	tear	Blood Slide Examined	Cases	Pv	Pf	SPR
1	2010	4040902	67468	66079	1389	1.67
2	2011	4142930	56829	54972	1857	1.37
3	2012	3945295	47400	46660	740	1.20
4	2013	4211429	48112	47431	581	1.14
5	2014	4613130	41875	41564	311	0.91
6	2015	4952483	42767	42396	371	0.86
7	2016	5062942	40787	40631	156	0.81
8	2017	4669321	32342	32183	159	0.69
9	2018	5312368	86486	64352	22134	1.63
10	2019	5854414	92732	78275	14457	1.58
11	2020	2776349	28668	22182	6486	1.03
12	2021	4245089	10792	9328	1464	0.25

# Highly Endemic Malaria Districts

District	Year - 2020				Yea	r - 2021		
District	BSE	Positive	P.f.	SPR	BSE	Positive	P.f.	SPR
Bareilly	306268	11686	4286	3.80	209847	2362	472	1.12
Badaun	268624	11979	2003	4.40	157097	1657	159	1.05
Hardoi	52732	249	1	0.40	48316	716	123	1.48
Sonbhadra	72164	1407	188	1.94	81428	1978	694	2.4

# Districts at UP-Nepal border



# Pilibhit

Indicators	2019	2020	2021
Test done	34400	20466	32538
Total Cases	659	37	38
Pf cases	12	0	0
Deaths	0	0	0

# Kheri

Indicators	2019	2020	2021
Test done	60653	23650	26663
Total Cases	209	78	115
Pf cases	0	01	0
Deaths	0	0	0

# Bahraich

Indicators	2019	2020	2021
Test done	52094	20642	32538
Total Cases	17	0	38
Pf cases	04	0	0
Deaths	0	0	0

## Shrawasti

Indicators	2019	2020	2021
Test done	31374	12606	17338
Total Cases	10	0	2
Pf cases	0	0	0
Deaths	0	0	0

# Balrampur

Indicators	2019	2020	2021
Test done	35175	21681	23546
Total Cases	04	02	1
Pf cases	0	0	0
Deaths	0	0	0

## Sidharthnagar

Indicators	2019	2020	2021
Test done	34823	13224	22851
Total Cases	179	52	48
Pf cases	0	0	0
Deaths	0	0	0

# Maharajganj

Particulars	2019	2020	2021
Test done	40642	11069	16388
Total Cases	13	0	6
Pf cases	0	0	0
Deaths	0	0	0

#### Active Case Surveillance (ACS)

- $\bullet\,\mbox{It}$  is a focused approach to identify every fever case at the earliest.
- These would be in line with the malaria elimination strategy of "early diagnosis and prompt treatment."
- lue Primary objectives of active case search are;
- $\ensuremath{\mathbf{1}}.$  To interrupt transmission by early case detection & and prompt treatment.
- 2. To attain Annual Blood Examination Rate Target and reduce API.

## Strengthening of Surveillance



# Active Case Detection Methodology



# Monitoring

State level teams – Joint Director is deployed District level teams – ACMO VBD, DMO, VBD Consultant, Biologist. Block - Malaria Inspector, BCPM. Partners: PATH-CHRI



## Strengthening of Surveillance-

All Districts already initiated ACS (Active Case Surveillance) during House-to-House activity, Dastak Campaigns.

Cross-border Malaria workshop in Kheri as it shares the international border with Nepal.

Sensitization of ASHAs of Subcenters of Villages having international border for routine surveillance.

- Strengthening of surveillance to achieve 10% Annual Blood Examination Rate for elimination of malaria by 2030.
- identification of hot spots in all 7 neighbouring districts sharing border with Nepal.

  Regular & Periodic sharing of data for neighbouring districts(malaria cases) among India and Nepal.
- Organization of annual malaria workshop in any of the 7 border districts with Nepal for knowledge sharing, cross learning, and dissemination of key information.
- Malaria testing of individuals with fever of people travelling from identified hot spot area from India to Nepal or vice-versa.

Thanks



		Action Plan		
S.N.	Subject	Sub headings	Remarks	
01	Case management	Identification of big isolation facilities for catering Dengue / Malaria patients     No. of beds with mosquito nets     No. of Mosquito nets     Availability of fluids     Availability of dedicated Doctors and paramedical staff	DH Chamapawat SDH Tanakpur  12 each 12 each Adequate Available physician and S/N Pharmacis Ward boys.	

S.N.	Subject	Sub headings	Remarks
02	Source reduction activity (Prevention of mosquitogenic conditions)	Sanitation drives     No. of teams for source reduction activity surveys     Involvement of ward Members/Parshad in the drive     Involvement of NGOs	Jila Panchayat.     By Nagar Palika / Nagar Panchayat.     Project Manager Swajal.     Gram Panchayat

S.N	Subject	Sub headings	Remarks
03	Vector Control	No. of fogging Machine.     Monitoring plans of NPP/NP for fogging activity.	4 Machines (1 in each NPP/NP)     In Nagar Panchayat Banbasa and Nagar Palika Tanakpur fogging activity starts from June to September.     In Nagar Palika Champawat and Nagar Panchayat Lohaghat fogging activity starts from July to September.     Cleaning of Drains in NPP/NP area.     Mitigation of Jal Bharay areas

S.N.	Subject	Sub headings	Remarks
04	Diagnostic capacity	No. of functional diagnostic centres     Update on any additional diagnostic centres     Availability of NS1 Elisa kits	DH     Chamapawat     SDH Tanakpur     SDH Lohaghat     PHC Pati     Yes 02 Kits     (96 X 02 Test)

S.N.	Subject	Sub headings	Remarks
05	Capacity building	Regular orientation of health care workers and other field workers by following social distancing Regular orientation on standard clinical management for doctors	DTF and BTF Training and building capacity - Yes

S.N.	Subject	Sub headings	Remarks
06	Outbreak Response	No. of RRT     Capacity building of RRT	4 RRT     RRT Team Members are trained by DMO frequently.

Name of Team Member	Place Of Posting	Contact Number	R.R.T.	
Dr. Vivek Singh (Paediatrician)	DH Champawat	9411346293		
Dr. Ajay Kumar(Physician)	DH Champawat	8740998039	Distirct Level	
Dr. Rashi Bhatnagar( Pathologist)	DH Champawat	7454914890	team team	
Dr. Kuldeep Singh Yadav (Public Health )	CMO Office Champawat	9410555365	team	
Mr. Vishnu Giri ( Pharmacist)	DH Champawat	9917055398		
Dr. Mohd. Umar ( Medical Officer)	PHC Banbasa	9756193304	48 M 25 W	
Mr. Ganesh Chand (Health Supervisor)	PHC Banbasa	7534852957	Facility Level	
Mr. Prakash Bhatt (Pharmacist)	PHC Banbasa	9927362743		
Dr. Hemant Sharma( Anesthecist)	SDH Tanakpur	9690028445		
Mrs. Sangeeta Bohra(Staff Nurse)	SDH Tanakpur	9627243493	Facility Level	
Mr. Jagdish Singh Kunwar(Pharmacist)	SDH Tanakpur	9897962658	The second of the second	
Mr. Prabhat Rajput( Lab Technician)	SDH Tanakpur	7500666466		
Dr.Ravi Kumar( Medical Officer)	DH Champawat	7830639025		
Mr. Himanshu Kohli(Staff Nurse)	DH Champawat	9760830577	Facility Level	
Mr. Tan Singh( Pharmacist)	DH Champawat	9411308862	team	
Mr. Manoi Mehta(Lab Technician)	DH Champawat	9897465667	team	

S.N.	Subject	Sub headings	Remarks
07	Outbreak Response	No. of RRT     Capacity building of RRT	1-District Level RRT 2-DH Chamapwat B.RRT 3-SDH Tanakpur B.RRT 4-APHC Banbasa B.RRT • All SDMs • All BDOs • AMA • DPRO • DDMA

S.N.	Subject	Sub headings	Remarks
08	Inter- sectoral coordination	Coordination with other departments.     Activity action plan	On 03rd April 2022 under the chairmanship of DM Sir ar awareness program was conducted in which Jal Sansthan, PWD Panchayat Raj, Swajal, ICDS Education Department, Ayush etc departments participated and explained about chlorination of water, bleaching and sanitation vector control

S.N.	Subject	Sub headings	Remarks
09	IEC	IEC Plan     IEC Activities	Pamphlets and Posters, Flexes. At village level Asha Worker, Aanganbadi Worker, Panchayat Pratinidhi are spreading awareness about disease by distributing Pamphlets and Posters.

# Dengue Test (January to July 2021)

	ВLОСК	January to August 2021  Dengue/DHF/DSS		
s.NO				
		SAMPLE TESTED/FOUND +VE (Card Test)		
1	LOHAGHAT	00/00		
2	CHAMPAWAT	131/00		
3	PATI	05/00		
4	POORNAGIRI	167/00		
TOTAL		303/00		

# Field visit schedule

# India–Nepal State, District and Local Level onsite Meeting for Cross-border Malaria Elimination, 11-12 April 2022, Lucknow, UP, India

Time	Day 2: 12 April 2022	Responsible person(s)	
6:30 – 10:30	Travel from Lucknow to Bahraich District	RCMF Secretariat	
	Field Visit, Bahraich, UP, India		
10:30-11:30	Visit to PHCC in Bahraich District and interact with the team	Shri Sudesh Kumar	
	Field Visit, Banke, Nepal		
11:30-12:15	Visit the health desk at PoE and interact with the health desk team	Dr Gokarna Dahal,	
		Chief, NTD/VBD Section EDCD	
12:30 – 13:30	Lunch, Hotel Soaltee, Nepalgunj	Dr Krishna Aryal	
13:30 – 14:00	Travel to Narianapur		
14:00 – 14:30	Visit to HP and PHCC of Narainapur Rural Municipality, Banke	Durga Gautam, Malaria Focal	
		Person, Banke District	
14:30 - 15:00	Visit to point of entry direct to Narainapur Rural Municipality	Durga Gautam,	
		Malaria Focal Person,	
		Banke District	
15:00 – 15:30	Travel back from Narianapur to Hotel Soaltee		
15:30 – 16:00	Meeting conclusion and debrief among team	Dr Chuman Lal Das	
		Dr Rinku Sharma	

# **AGENDA**

# India–Nepal State, District and Local Level onsite Meeting for Cross-border Malaria Elimination, 11-12 April 2022, Fairfield by Marriott Lucknow, UP, India

Time	Day 1: 11 April 2022	Responsible person(s)			
9:30-10:00	Registration	RCMF Secretariat			
	Inaugural Session				
10:00-10:05	Welcome Address by Director Communicable Diseases and VBD, UP	Dr A.K Singh			
10:05-10:10	Address by Joint Director NCVBDC MoHFW, Govt. of India	Dr Rinku Sharma			
10:10-10:15	Address by Director, Epidemiology and Disease Control Division	Dr Chuman Lal Das			
	Department of Health Services, Teku, Kathmandu				
10:15:10:20	Address by Executive Secretary Cum Coordinator, SRCMF Secretariat	Dr Jigmi Singay			
10:20-10:25	Address by Chief Guest, Additional Chief Secretary Government of Uttar Pradesh	Shri.Amit Mohan Prasad			
10:25-10:30	Vote of Thanks by State Entomologist, Uttar Pradesh	Shri. Sudesh Kumar			
10:30-10:50	Tea Break				
	Business Session				
10:50-10:55	Nomination of Chair and Rapporteur	Dr Jigmi Singay			
10:55-12:50	1. Adoption of Agenda	Chair:			
	2. Agreement and confirmation of corresponding Cross-border areas/district				
	adjoining the international border for Malaria elimination for 2022	-Dr. Rinku Sharma			
	• India	-Dr Chuman Lal Das			
	Nepal				
	-Discussions				
	3. Synchronization of activities				
	a) IRS b) LLINs				
	<ul><li>c) Joint Cross-border Vector Surveillance</li><li>d) Sharing of case Information and cross referral and follow-up as soon as</li></ul>				
	the case is diagnosed and as and when malaria is reported				
	Nepal				
	India				
	-Discussions				
	Discussions				
	4. Harmonization of Treatment Regimen				
	• India				
	Nepal				
	-Discussions				
	5. Sharing of information at the local level for timely interventions, notifications				
	through following means:				
	a) WhatsApp, SMS, Telephone, Email etc.				
	b) Website and Dashboard				
	Nepal				
	• India				
	-Discussions				
	C. American the charing manage of the Property of the Constitution				
	6. Agreement for sharing names of the Focal point between the two Programmes, Districts and SRCMF:				
	1) Focal points- National, State, District and local level				
	• India				
	Nepal Discussions				
	Discussions				
	7. Joint planning through regular/periodic meetings for harmonization of				
	activities, M&E and review under Coordination by SRCMF in the initial stage				
	,	I			

	Nepal     India     Discussions	
	<ul> <li>8. Date, Time and Frequency of the next onsite bilateral meeting</li> <li>India</li> <li>Nepal</li> <li>Discussions</li> </ul>	
12:50-12:55	AOB	Dr. Jigmi Singay
12:55-1:00	Closing	-Delegation Heads -Any other delegates -Dr. Jigmi Singay Chair:

# List of participants India-Nepal State, District, Local Level onsite Meeting for Cross-border Malaria Elimination, 11-12 April 2022, Fairfield by Marriott Lucknow, U.P, India

SN	Name	Designation	Organization	Country	Email Address			
Delegation from India								
1	Dr. Rinku Sharma	Joint Director	NCVBDC	India	rinkusharma2005@gmail.com			
2	Dr Vinod Choudhary	Medical Officer	NCVBDC	India	drvinodnvbdcp@gmail.com			
3	Dr Shikhar choudhary	National Consultant (M&E)	NCVBDC	India	nacltmne1.gf@gmail.com			
4	Dr Vijay Kumar Choudhary	Sr Regional Director	Lucknow	India	srrdlko@yahoo.com			
5	Dr RC Pandey	Additional Director & SPO, Malaria / V.B.D	Uttar Pradesh	India	admalup2014@gmail.com admalariaup@gmail.com			
6	Dr Awadesh Kumar Yadav	JD Malaria, SPO Malaria	Uttar Pradesh	India	jdmalaria@gmail.com			
7	Dr Jayant	ACMO VBD	Bahraich	India	acmobrh.64@gmail.com			
8	Dr Sudesh Kumar	State Entomologist	Uttar Pradesh	India	skentoup@gmail.com			
9	Dr SK Srivastav	DMO	Kheri	India	dmokheri@gmail.com			
10	Dr Avinash Gupta	State Consultant	Uttarakhand	India	uknvbdcp@gmail.com			
11	Dr. Kuldeep Singh	DTO Champawat	Uttarakhand	India	yadav.kuldeep764@gmail.com,			
	Yadav				idspchampawat@gmail.com			
12	Shri. Amit Mohan Prasad	Chief Guest Additional Chief Secretary	Uttar Pradesh	India	Psecup.health@gmail.com			
		D	elegation from Nepal					
1	Dr. Chuman Lal Das	Head of delegation Director, EDCD	Epidemiology and Disease Control Division Teku (EDCD)	Nepal	drchuman@gmail.com			
2	Dr.Gokarna Dahal	Section Chief, NTDs/VBDs,	Epidemiology and Disease Control Division, Teku (EDCD)	Nepal	dahalgokarna7@gmail.com			
3	Mr. Uttam Raj Pyakurel	Vector Control Inspector, NTDs/VBDs Section	Epidemiology and Disease Control Division, Teku (EDCD)	Nepal	uttamrajpyakurel@gmail.com			
4	Mrs. Durga Devi Upadhya Gautam	Malaria Inspector	Health Office, Banke (HO)	Nepal	durgagautam77@yahoo.com			
5	Mr. Dinesh Tiwari	Health Assistant	Kulau Health Post, Baitadi (HP)	Nepal	dt255290@gmail.com			
6	Dr. Suman Thapa,	Sr. Technical Advisor Malaria	Save the Children	Nepal	Suman.thapa@savethechildren.			
7	Dr. Krishna Aryal,	Sr. Program Manager Malaria	Save the Children	Nepal	krishna.aryal@savethechildren.			
		SR	CMF Secretariat	•				
1	Dr. Jigmi Singay	Executive Secretary	SRCMF Secretariat	Bhutan	jigmi2118@gmail.com			
2	Ferdinand Laihad	Resource Person	SRCMF Secretariat	Indonesia	lihard fjlaihad1@gmail.com			
3	Dr Shampa Nag	Resource Person	SRCMF Secretariat	India	drshampa@gmail.com			
4	Dr S.N Misra	Resource Person	SRCMF Secretariat	India	samarendra.habf@gmail.com			
5	Ms Natasha Dawa	Program Officer	SRCMF Secretariat	India	dawanatasha@gmail.com			
6	Mr Anil Chitkara	Finance Officer	SRCMF Secretariat	India	chitkara_a@hotmail.com			
7	Dr Nishikant Bele	Information Technologist	SRCMF Secretariat	India	nr_bele@yahoo.com			