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Malaria Update

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Regional Consultation Meeting with the participants from Banke, Bardiya, Surkhet and Dang districts at Nepalgunj, Banke.

Regional Consultation & Focus Group Discussion

Consultation meetings were conducted to do a SWOT analysis of the existing malaria program in the community, VDCs and districts. Regional consultation meetings were conducted in Banke, Chitwan and Kailali with representation of participants from Banke, Bardiya, Surkhet, Dang, Parsa, Chitwan, Makwanpur, Kaski, Kailali, Kancharpur, Dadeldhura, and Baitadi. Similarly, Focus Group Discussion in different risk groups was conducted in Chitwan, Bardiya, Kancharpur and Dhanusha.

The main objective of the meetings was to understand perception, identify needs of the target beneficiaries and their acceptance towards the ongoing interventions. It also helped identify the challenges and the persistent risks and threats involved in conducting the activities.

The meeting also out listed the roles and responsibilities of stakeholders to help the country reach elimination by 2026. The information generated will prove to be vital evidence in modifying the existing malaria interventions and activities and increase its acceptance level among the population at risk. Furthermore the meeting also provided an opportunity to gain insight of the ongoing programs, their effectiveness, challenges and the areas for improvement in the future.

The participants in the Regional Consultation Meeting included District Health/Public Health Officers, District Malaria Focal Persons, DPHO Storekeepers, Medical Superintendents & Medical Officers from Private and Public Hospitals, Army, Police and Armed Police Force Personnel, representation from District Administration Office, District Coordination Committee, NGOs etc. Similarly, Focus Group participants involved risk population in the form of people who had suffered from malaria in the past or had a family member with a past malaria history, people who had received a LLIN, migrant workers and FCHVs working in high malaria endemic areas.



Focus Group Discussion at Dhanusha (left) & Bardiya district.

Observing World Malaria Day 2017



Participants on the Press Meet organized by EDCCD (top) and Rally organized by FWRHD, Doti (left) & DPHO, Morang.

On 25th April 2017, World Malaria Day was celebrated throughout the country (center, regions and districts) with various awareness raising programs and local community engagement activities.

Epidemiology & Disease Control Division (EDCCD), to celebrate the occasion, also organized a press meet at National Health Training Center, Teku on the same day to share the Strategic Plan, current malaria burden and disease trend, ongoing programs, activities and research to help the country reach elimination by 2026. Media personnel and other participants were not only informed about the various malaria initiatives taken by the program but feedback was sought to understand their perception of the existing program. Similarly, rallies were organized in high risk areas across the endemic districts with the support of various community based organizations, students, health workers to raise awareness about the disease and the communities' role in eliminating malaria.

Basic Training on Medical Entomology

Save the Children/Global Fund in coordination with EDCCD organized a month long training on medical entomology (Batch-II) from 26th March to 22nd April, 2017 at VBDRTC, Hetauda. A total of 18 participants from the regions, districts, Save the Children and BP Koirala Institute of Health Sciences participated in the training. The participants attending the course were entomologists/VCI/VCA/VCSO/VCSI/ MI who is actively involved in vector borne disease control program.

The training was conducted in the leadership of Mr. Shishir Pant, Entomologist at VBDRTC and Mr. Shambhu Natha Jha, Sr. Entomologist at EDCCD-GF unit.

The objective of this training was to build a critical pool of trained staff, at national, regional and district level for entomology surveillance and monitoring. The training covered all thematic areas originally planned in the course program which mainly concentrated in identification of anopheline adult mosquitoes. The practical based training helped participants to identify various species of anopheles mosquito and dissect their ovary and salivary gland in search of parasites. External trainers from BPKIHS were asked to orient the participants on sand-fly and other vectors besides Anopheles.

Entomological Survey

Malaria program under Save the Children/Global Fund in coordination with EDCCD, entomological survey has been conducting in selected localities in each district/province by focusing high & moderate risk areas and localities where potential outbreaks are expected.

The main objective of this study was to detect geographical distribution & distribution of various vectors, and to determine the role of the vector mosquito in the dynamics of transmission, their behavior and seasonal prevalence.

At this period, the survey has conducted on 3 different sites; Indreni/Raising/Luitel at Bahundangi VDC of Jhapa district, Dharkhola/Tulsichaura at Mithila Municipality of Dhanusha district and Kalapani at Bardibas Municipality of Mahottari district. During the study, *An. fluviatilis*, *An. annularis*, *An. pseudowillimori*, *An. vagus*, *An. culicifacies* and *An. tessellatus* were the common species found in all 3 sites where *An. psudowillimori*, *An. culicifacies* and *An. fluviatilis* are pre-dominant species respectively in study sites of Jhapa, Dhanusa and Mahottari.

Till this period, the study has been done on 11 sites of Jhapa, Morang, Bara, Mahottari, Dhanusa, Makwanpur, Chitwan, Nawalparasi, Kapilvastu, Bardiya, and Kailali district.



Night landing catches (left) and laboratory work on ento survey at Bahundangi, Morang.

Distribution of LLINs in the Community



Mass distribution of LLIN at Tulsichauda VDC, Dhanusa.

This period Long Lasting Insecticidal Net (LLIN) distributed for mass population in 21 high risk VDCs of 6 districts; Banke, Dadeldhura, Dhanusa, Kailali, Kanchanpur and Sindhuli. Total 244,347 LLINs were distributed to 68,254 households with 478,541 household members as per the Operational Guideline for Distribution of LLIN, 2016 endorsed by Malaria Technical Working Group.

Similarly, total of 46,300 LLINs were handed-over to D/PHOs of the 22 high & moderate risk districts for ANC distribution and 18,123 to Regional Medical Stores for the storage of epidemic outbreak.

Malaria Microscopic Refresher Training at MWRHD, Surkhet



Malaria Microscopy Refresher Training at MWRHD, Surkhet.

Malaria Microscopic Refresher Training conducted in training center at Mid-West Regional Health Directorate (MWRHD), Surkhet which is step to promote decentralized training centers in the periphery. The 13 days training conducted from 12th to 24th February 2017 where total 15 lab staffs participated from Rolpa, Rukum, Salyan, Pyuthan, Dailekh, Surkhet and Jajarkot districts.

The general objective of the training was to develop and reenergize skills and capacity of laboratory staffs in malaria microscopy with an aim to strengthen the quality lab services in local health facilities. The training supported the participants to confidently identify species and stages of malaria parasites and quantify malaria parasites in a given sample.

Preliminary Result Dissemination of Micro-stratification 2016



Dissemination program at DPHO, Jhapa.

The preliminary result of Microstratification 2016 was disseminated in all 28 districts that have high and moderate risk wards/VDCs as per new and old microstratification to obtain feedback and suggestion from the respective district Govt. staffs/stakeholders.

The MS 2016 was conducted to define the risk of malaria at the ward level of a VDC/Municipality, which is the basic unit of the community. The purpose of the study was to provide ward level malaria information which will be instrumental in planning, monitoring and evaluating effective interventions especially in malaria elimination program.

All the wards of 383 VDCs of 44 districts which have positive cases from last 3 years were visited by the study team to validate the data in peripheral level during the study period. The result is produced as per the standard scoring methodology in which the criteria were set as per the CDC guideline that was also used in MS 2012. The new stratification has identified 53 high risk wards and 357 moderate risk wards from 125 municipalities/VDCs of 27 districts which is a preliminary result and can be revised as per the feedback & suggestion from the periphery level and reviewed by national & international experts.

Strengthening Health Facilities

EDCD through the Global Fund grant has supported various equipment and supplies to health facilities with lab facilities at high risk areas. To ensure a 24 hour supply of electricity at these microscopy centers, 27 solar panels with battery backup are being installed across 12 districts. Furthermore to ensure regular functioning of the PCR facility, microscopy lab and entomology section at Vector Borne Disease Research Training Center (VBDRTC), Hetauda a large solar backup has been installed. In addition to this, 56 new microscopes have been supplied in this fiscal year to lab facilities (PHCs and Hospitals) where malaria cases are being diagnosed. With the concept of developing decentralized regional microscopic training centers, 10 sets of microscopes have been handed over to the Mid-Western Regional Health Directorate while a further 16 microscopes have been distributed at Kanchanpur DPHO. Moreover, 15 sets of tables and revolving chairs for establishing a training hall have also been delivered to these facilities. This long term vision will help train more microscopists as well as decrease the overburden of such trainings at VBDRTC, which can then focus more on research activities. Similarly, 39 sets of LCD projectors are under the process of distribution in all five regional health directorates, vector control section of 25 DPHOs, training centers of Surkhet and Kanchanpur.

Glimpse of Program Activities



Monitoring of LLIN storage at Parasan, Kanchanpur.



Salivary gland dissection of mosquito during entomological training.



Case based investigation at Bijaura-05, Surkhet district.



Focus Group Discussion at Chitwan district.

