



Progress and Lessons Learned

Dengue Prevention and Control DREF

June to December 2023

1. Background

Dengue fever has recently seen an increased infection intensity. It has expanded rapidly in many parts of the world, including Asia, affecting the most vulnerable. The history of dengue fever in Nepal reflects the broader trends seen in the global spread of the disease and is characterised by the increased morbidity and mortality rate. Dengue was not historically endemic in Nepal. The country's unabated proneness to it was identified relatively recently compared to many other countries, with significant reports of exposure emerging in the early 21st century. These outbreaks might be result of climate change, urbanisation, fragile socio-economic conditions, and population movement. In recent years, Nepal has seen periodic outbreaks of dengue fever and a rapid surge in infection, often coinciding with the monsoon season. These outbreaks pose significant challenges to public health systems and constrain humanitarian actors and public institutions to launch immediate actions to reach the most vulnerable to curb the intensity of loss of lives and the severity of the infection.

Since the Dengue outbreak, Nepal has witnessed a concerning surge in dengue cases, with over 21,000 instances diagnosed between June and August 2023, according to the Early Warning, Alert and Response System (EWARS) report from Epidemiology and Disease Control Division (EDCD). This rise is particularly alarming given that it marks the first-time dengue has occurred in consecutive years, deviating from its typical cyclical pattern in Nepal. Notably, cases began to appear even during the winter season and have been increasing steadily, showing an exponential rise in July and August. A mathematical model projection by the World Health Organisation (WHO) in 2022 indicated that the dengue cases in Nepal have surpassed the alert threshold since early 2023, compared to the EWARS reports. This suggests an ongoing dengue outbreak in the country. Given the relative novelty of dengue in Nepal, there is a low public knowledge and awareness level. Although dengue prevention was not a high priority in the country until the previous year, the Nepalese government has been actively engaged in addressing this emerging trend through joint planning and implementation starting this year.

In 2022, the number of dengue cases in Nepal reached a record high. The Nepal Red Cross Society (NRCS) initiated preventive measures following the government's declaration of an outbreak. However, the response was not as timely as needed, leading to overwhelmed hospital capacities and a significant increase in the mortality rate. Community-level preventive campaigns, including search and destroy missions, were conducted, but controlling mosquito breeding proved challenging. In response, the NRCS implemented early action activities in 2023, although the situation continues to worsen, highlighting the need for additional response measures and preventive actions.

Dengue has been regarded as an endemic in Nepal, with all four serotypes present. The EDCD and the Ministry of Health and Population (MoHP) report that Dengue Virus Serotypes (DENV) 1 and 2 are responsible for most cases. In 2022, Nepal experienced one of its most significant dengue outbreaks, with a total of 55,000 cases and 88 fatalities. In 2023, there has been a significant increase in dengue cases across 77 districts, with over 51,000 people grappling with infection and 16 districts recording over 500 cases. Twenty people have lost their lives to Dengue infection. The urban design of major cities in Nepal, characterised by poor infrastructures, improper and inadequate waste management and drainage systems, and inadequate sanitation

facilities, creates optimal breeding environments for vector mosquitoes. Residents of slums and urban areas with poor sanitation are at higher risk. The current dengue outbreak strains the healthcare system and disproportionately impacts populations with lower socio-economic conditions and challenges by protection concerns.

2. Response strategy, and Operation's Key Features and Progress.

2.1. Response Strategy

The Dengue Operation support through IFRC DREF and other bilateral support from the IFRC Members prioritised early and preventive actions, aligning with national and local authorities' expectations for the NRCS. Consultations and coordination meetings of the NRCS with the authorities at the various levels highlighted the lead role of the NRCS in engaging with communities in high-risk zones and preparing them to combat the consequences of Dengue infection in the early stage of Dengue transmission. The response approach was further shaped by the lessons and experiences from the 2022 response, particularly to address the significant increase in blood services during the epidemic's peak by maintaining bloodstock in advance. A second-tier strategy of the DREF operation was to expand the response with increased resources and capacities, with the support from the IFRC and the membership (including American Red Cross, British Red Cross, Canadian Red Cross, Danish Red Cross, Finnish Red Cross and Swiss Red Cross), potentially shifting the DREF into an Emergency Appeal. The response strategy was aligned with the IFRC's regional epidemic preparedness and control approach, focusing on supporting the Host National Society (HNS) through training, awareness campaigns, distribution of educational materials, community-based surveillance, and communication of key dengue prevention messages in collaboration with the health authorities and local governments. A strong emphasis was placed on promoting the NRCS's ability and role for collaborative and collective actions to the Dengue response, working closely with the MoHP, EDCC, National Health Education, Information and Communication Centre (NHEICC), hospital authorities, and municipalities, in complementarity to NRCS's auxiliary role.

2.2. Key Features of the Operation

With the financial support secured through the International Federation of Red Cross Red Crescent Societies (IFRC) Disaster Response Emergency Fund (DREF) operation, the NRCS focused its response on assisting the most vulnerable populations in three Kathmandu valley districts with the highest dengue prevalence in 2022 and 2023 and expanded interventions in additional 13 districts from the support of the other RCRC members. Its primary aim is to disseminate health and Water, Sanitation, and Hygiene (WASH) awareness messages about Dengue while incorporating Risk Communication and Community Engagement (RCCE) and Protection, Gender, and Inclusion (PGI) strategies. The DREF operation was concluded in December 2023, successfully attaining specific objectives.

- Preventing and controlling the spread of Dengue in targeted areas through health and WASH-related awareness campaigns and RCCE activities.
- Strengthening the emergency health and WASH preparedness and response capabilities of the NRCS

The DREF applied four-fold response strategies for anticipatory activities, particularly mobilising communities for community-led preventive measures for infection control and expanding the response initiatives with the significant increase in the caseloads and spread of the Dengue infection.

Water Sanitation and Hygiene

Promotion (WASH): Dengue had been sporadically diagnosed in various districts of Nepal before the monsoon season, highlighting the need to establish effective onsite preventive and sensitisation responses for Dengue hotspots. This involved enhancing the government's "Search and Destroy Campaigns" and increasing awareness about sanitation, hygiene, and behavioural change. As Dengue was relatively new for most of the districts in Nepal, community awareness about preventive actions and conducting



As part of the Dengue response, Nepal Red Cross volunteers support the government's Search and Destroy sanitation campaign, where they search, clean, and disinfect mosquito breeding areas. (Photo: NRCS)

sanitation campaigns was low. Therefore, addressing the community's WASH needs was crucial, focusing on enhancing knowledge and awareness for effective sanitation practices at home and in localities to reduce vector breeding and dengue transmission rates.

Health: Recognising that Nepal's healthcare system, still adapting from past outbreaks in 2019 and 2022, was equipped only for symptomatic dengue treatment, the interventions aimed to capacitate the health system to cope with overwhelmed situations with the surge in Dengue cases and expand service provisions in maternal and child health and non-communicable disease management. Some interventions are aimed at strengthening a community-led surveillance system. It involves collaboration with local authorities and stakeholders to monitor the trends and scale of Dengue cases in local communities. Enhanced community engagement will be a focus, particularly among high-risk groups. These groups include pregnant and lactating women, children, senior citizens, outdoor workers, and those living in areas with poor sanitation. A response model aligned with a scenario when the outbreak evolves to full intensity was envisioned, requiring the NRCS's blood transfusion services to operate at full scale with a heightened need for platelet-rich plasma transfusions.

Community Engagement and Accountability (CEA): A series of targeted interventions were planned to address the low level of awareness among the population regarding Dengue prevention measures and safe practices to curtail mosquito breeding. It included raising awareness of the local population through social media, engaging at-risk groups, and using infotainment materials, with the insight gained for adapting information to preferences, languages, and information sources. These needs were captured through surveys, and available materials within the RCRC Movement and MoHP's Information, Education, and Communication (IEC) materials, including videos and animated messages about Dengue, were adapted, and used.

These resources were utilised for health sessions in community and school settings, as well as slums, areas with poor sanitation facilities, and at-risk communities, targeting the most vulnerable groups such as people with chronic diseases, pregnant, elderly, and children.

Protection, Gender, and Inclusion (PGI): Focus was given to engaging and addressing the needs of vulnerable population groups, such as pregnant and lactating women, children, and senior citizens. This initiative, on the one hand, addressed the information needed to change behaviour to minimise the risk of Dengue infection, and on the other hand, addressed their differentiated needs, reducing the potential protection concerns.

2.3. Key Achievements and Progress

In the targeted districts, more than 295 volunteers were mobilised to conduct 470 'Search and Destroy' campaigns in areas identified as high-risk, ensuring that interventions were directed toward the most vulnerable populations. The mobilisation of volunteers for these campaigns significantly exceeded its goal, reaching 777,625 individuals, including over 48 per cent female, and 20 per cent senior citizens. This achievement indicates exceptional community engagement and participation. To ensure the safety of the volunteers, playing a pivotal role in conducting regular activities and monitoring the situation in high-risk zones, personal protective equipment (PPE) was provided to minimise their risk of infection and to protect the health of those receiving services directly. Beneficiaries residing in high-risk areas, particularly those at an elevated risk of infection or with family members already affected and with challenging socioeconomic conditions, were provided with sanitation kits/tools. This assistance has reached a total of 1,397 individuals. The WASH initiatives have not only met but surpassed several key performance indicators, demonstrating extensive community reach and the organisation of campaigns, thereby contributing substantially to the overarching objectives of the sanitation efforts.



More than 13 targeted interventions aimed at enhancing access to improved healthcare for the most vulnerable populations, raising awareness of dengue prevention and care, and strengthening community surveillance by mobilizing the NRCS and external volunteers have reached 787,025 individuals with at least one health related activities. The success of these health initiatives can be attributed to their widespread reach, scale, and comprehensive scope. The

walkathons, help desks, and street theatre campaigns were particularly effective with an extensive outreach scope, which together accounted for over 70% of the progress in the health sector. It's important to highlight the crucial role of Teacher Sponsors, the convenor of the Junior Red Cross and Youth Red Cross Circles (JRC/YRC), in the dengue response. They have been instrumental in educating students and promoting community-led dengue prevention measures in affected areas. Additionally, the health interventions have supported local authorities by providing female community health volunteers (FCHV) with a training on infection prevention and control measures. The blood donation campaigns have been remarkably successful, with over 115 events resulting in 5,217 individuals donating blood, which was then provided to those needing various blood components. Although the support for ambulance services and blood for dengue-infected patients was relatively modest, and direct cash support reached only 33 patients, these efforts were crucial components of our response. Furthermore, the interventions included distribution of 2,000 LLN in communities and 3,157 mosquito repellents in communities and schools, which have benefited over 500 community members and 3,157 school children and community members, respectively. Remaining 1,500 LLN are stocked at the district chapters' warehouses and will be distributed to the government-run health facilities.

The progress on the CEA part indicates a proactive approach to disseminating crucial messages, with radio being the most far-reaching medium. The feedback received exceeded targets, suggesting good community engagement. Through far-reaching and wider radio spots and public service announcements (PSA) on Dengue prevention and control, over 2 million people were reached. The adoption, reprinting, dissemination, and distribution of IEC materials has met an impressive target, with over 1.2 million people, including 500 differently abled individuals. Feedback mechanisms through existing channels were effective, with 48 feedback received from communities, districts, and provinces, which were addressed promptly and effectively by the NRCS team.

The response elements of the DREF response were carefully analysed to ensure its coherence with the IFRC policy on Child Protection and Prevention and Response to Sexual Exploitation and Abuse (PSEA). The approach to protection follows the principle of Dignity, Access, Protection and Safety (DAPS) throughout the response, and efforts were made to collect gender and disability-inclusive data to ensure the most vulnerable group and people with protection concerns have unhindered access to the services. The volunteers and staff engaged in response signed a Code of Conduct (CoC).

3. Key Results, Lessons learned, Gaps and Challenges

Rather than convening stakeholders in a workshop setting, which is the traditional method, the process embraced direct engagement with those on the ground – namely, field stakeholders such as rural and urban municipalities and local health authorities and service recipients. This engagement is structured around a carefully and objectively designed survey to gather insights. This new strategy aims to collect firsthand accounts of key achievements and identify any challenges and gaps that could hinder the smooth management of the DREF operation. The change is guided by a need to get a more nuanced understanding of the impact and efficacy of the operation by tapping directly into the experiences of those involved in implementing and those who benefitted from the field activities.

The data collection process comprised 53 key informant interviews (KII) and 29 focus group discussions (FGD). The IFRC and NRCS operational teams worked together to outline a survey structure by designing a questionnaire consistent with the DREF framework. The field teams, comprising three units per district, each with a pair of volunteers to function as an interviewer and a note-taker with previous experience in surveying a community setting, were inducted, and deployed to facilitate the surveys. The NRCS HQ and IFRC team actively and closely monitored this process for ongoing technical support and evaluation of the progress.

The sampling method for this learning initiative is purposive, targeting specific stakeholders from four provinces – Bagmati, Gandaki, Lumbini, and Koshi. This approach is deliberate to ensure a broad and diverse range of information is gathered, facilitating a more comprehensive and comparative analysis.

3.1. Key Achievement from Field Perspective

Overall, the consolidated feedback indicates that the dengue prevention and control programs have been very effective due to comprehensive strategies, early awareness campaigns, community and school-level involvement, effective dissemination of information, and active volunteer engagement. The FGD shows it was the synergy between all response components, extensively backed by ownership of the local health authorities and municipalities, the DREF operation has achieved the intended results. This well-balanced and complementing synergetic approaches empowered communities and individuals to adopt improved behaviours and sustain practices to reduce the risk to Dengue infection.

The Dengue prevention program's success is attributed to the interconnected and community-driven efforts. The 'search and destroy' campaigns stood out for actively engaging the community in a hands-on manner. Communities came together to locate and remove stagnant water sources and locations, effectively demolishing mosquito breeding sites and reducing the risk of Dengue transmission.



I wouldn't describe the program as merely effective; rather, it has catalysed people to act. Educating people on how the Dengue vector breeds and the ways to mitigate Dengue infections risk was helpful. *One of the FGD participants, Sunsari District. Source: NRCS.*

In educational settings, school orientations played a crucial role. The activities were designed in way to inspire to become proactive agents of change by communicating and disseminating awareness messages on Dengue prevention and control at their homes and communities. These

students regularly joined hands with community representatives and inhabitants to clean their environments. Direct engagement tactics, such as personal visits by the NRCS volunteers to risk areas, broad-reaching measures like radio broadcasts, were instrumental in spreading critical information. The distribution of IEC materials by the NRCS provided a tangible resource for the community to understand and engage with Dengue prevention practices. Through rallies, home visits, and 'Search and Destroy' campaigns in highly affected areas, the NRCS ensured that the awareness campaign's presence was felt in every corner of the affected areas.

Volunteers emerged as role models, demonstrating how individuals could contribute to the public good through their actions. Their efforts in cleaning public spaces and organizing awareness rallies offered visible and influential examples of public responsibility. The program's effectiveness was further bolstered by the Red Cross's strategic coordination with local governments, ensuring that initiatives like the orientation of FCHVs were well-supported and well-executed.

3.2. Key Results

The success of Dengue response initiatives for early detection and prevention hinge on the timeliness and the reach of the awareness initiatives. The reflection of key stakeholders engaged and participating in operation has the reflection proving the effectiveness of the DREF operation in supporting the local authorities in descaling the potential effect of Dengue infection in the target communities.

Early awareness campaigns: the emphasis on early awareness campaigns stemmed from the GoN's and stakeholders' strategic decision to intervene before the onset of the Dengue season. Multiple stakeholders stressed the importance of organising early awareness campaigns to educate communities in understanding the life cycle of the Dengue vector, methods to eliminate conditions supporting the vector to breed, and recognise primary symptoms of Dengue fever. Such knowledge dissemination before the peak transmission period has equipped communities



"The awareness sessions for students of classes 9 and 10 were a good start, but they were insufficient. It should target wider student groups", says a student from a school in Kathmandu District who participated in the FGD organised by the NRCS Kathmandu branch. *Source: NRCS.*

with the tools and information necessary to protect themselves, thereby limiting the spread of the disease.

Meaningful involvement of target schools and communities: the engagement of educational institutions has extended the reach of awareness activities beyond the individual to families and the community network. Schools

have served as hubs for disseminating information, with students acting as agents for transmitting knowledge back to their homes, thus magnifying the impact. Furthermore, community-centred operations, facilitated by the volunteers, have enabled the local populations to participate

During Dengue infection peak, we, the District Health Office (DHO), conducted awareness campaigns in the community. Nepal Red Cross Society also partnered with us during that critical time to raise awareness, and this collaboration proved very effective. For future awareness campaigns, involving all stakeholders and the community in a 'search and destroy' campaign would be beneficial to combat the spread of dengue. Section Officer of DHO, Biratnagar.

actively in surveillance and control efforts. Volunteers trained and mobilised to work at the household level have facilitated case-based surveillance, providing increased opportunities to understand local circumstances, and passing the information on to the local authorities.

Effective and synergetic use of coordination and collaboration approaches: Effective dengue prevention has resulted from the synergistic efforts among the municipal offices, health offices, and community-based organisations that have formed a platform for regular dialogue and interactions and plan and implement together to maximise the impact of the overarching Dengue response and the effective use of the available resources. Such partnerships have been proven effective in executing a 'search and destroy' campaign.

The target municipalities have played a favourable role in extending the efforts to control dengue. Their support, manifested through rallies, community cleaning programs, and policy-level backing, has been critical for the success of the DREF supported Dengue response operation. This local government engagement has reinforced public health messaging and provided the necessary resources and facilitation to organise events in the target areas.

Information Dissemination: A concentrated effort has been made to utilise appropriate communication channels to reach diverse audiences. Information such as flyers, posters, and pamphlets have been distributed widely. Innovative methods like using public address systems (miking) in densely populated slum areas, engaging users on social media platforms, and broadcasting messages via radio have ensured that preventive messages penetrate deeply into the communities exposed to Dengue infection.

The influence of these activities has been significant as it stimulated a shift in behaviour, leading to a community-wide increase in preventative practices, such as covering water containers and ensuring regular clean-up of potential breeding sites. This underscores the necessity for infection control and prevention initiatives to be founded on the community needs to adopt improved behaviour to minimise the risk of infection and should be drawn on previous experiences.

Volunteer Engagement: Volunteers, especially FCHVs attached to the local health facilities and the NRCS volunteers trained in vector control and psychosocial first aid (PFA), have been instrumental in enhancing community engagement and participation. Their proximity to the local population and their understanding of local needs and dynamics have fostered a trusted channel for communicating health messages and interventions. The involvement of local stakeholders has further amplified the effectiveness of awareness campaigns.

Tailormade Initiatives: Tailored initiatives addressing the unique aspects of dengue control have been cited as effective. The distribution of mosquito nets and repellents has provided direct protection against mosquito bites. Sanitisation programs have aimed at maintaining clean environments to reduce mosquito breeding sites, thereby significantly reducing the risk of Dengue infection. Additionally, blood donation motivation campaigns have helped to ensure an adequate blood supply for treating severe cases, thereby supporting the healthcare system's capacity to react in overwhelming situations.

3.3. Challenges

The feedback gathered from various stakeholders regarding the DREF operation revealed a consensus on the need for earlier and more extensive engagement in the community, improving approaches for volunteer management and mobilisation, increased level of coordination with stakeholders, and timeliness of initiatives for multiplied impacts.

A primary challenge was the restricted geographic coverage and activities often implemented post-peak dengue season, reducing its preventative potential and impact. An expanded reach and earlier start, ideally in the earlier months of the year (e.g. between January and February), could better prepare communities.

The short duration of the operation and the frequency of ongoing follow-up and monitoring, primarily community-led monitoring mechanisms, might have produced reduced impact of the awareness campaigns. There was a clear need for prolonged and monitored intervention to assess and ensure evidence-based impact of the interventions. The scheduling of the awareness events did not account for local cultural activities and festivals, which are critical times for community gatherings and valuable opportunities for impactful awareness campaigns. This oversight might have led to reduced effectiveness during these key periods.

The efforts to effectively reach target communities with the ambition to raise awareness on Dengue prevention and control were impeded by delayed distribution and the complexity of IEC materials, which were not always tailored to local languages or contexts, especially in the complex community setting in Kathmandu Valley, where people of different cultural and language orientations reside. This resulted in a disconnect with non-native speakers and communities not fully benefiting from the information.

The program faced difficulties in fully engaging diverse community groups. Despite efforts, the outreach did not effectively include all demographics or sectors, and local committees and groups were not sufficiently involved in the planning and execution phases. Increasing the involvement of local groups like *Tole Sudhar Samitte (Community Development Committee)* groups,

mothers' groups, community-based organisations, and local youth in the awareness campaigns for focused orientation might have produced a greater impact on people's way of dealing with the situations.

The program's educational outreach was limited, often excluding private schools and younger students. There was a notable gap in inclusive education, which should encompass broader student demographics and extend beyond academic institutions to include other vulnerable worker groups. The strategy to use media did not sufficiently capitalise on its greater potential to reach broader and younger demographics. The delayed introduction of and the limited use of engaging and culturally feasible mediums like street dramas and folk songs also posed a challenge to a good start of the response initiatives.

The distribution of preventive resources such as repellents and mosquito nets were insufficient, particularly in schools and vulnerable community segments, which could have provided additional protection against dengue.

In some cases, the collaboration with local government and stakeholders was somewhat loose, risking potential duplication of efforts. Additionally, coordination with health workers and adequate waste management and cleanliness training was insufficient.

Sufficient training, coordination, and supervision could have enhanced the effectiveness of the volunteers' mobilisation and their work.

3.4. Recommendations

The feedback from the internal and external stakeholders highlights the need for an integrated and proactive response strategy solely based on early initiation, inclusivity, and sustained community engagement. The call is for improved community awareness strategy that ensures resources and information are accessible and tailored to community needs. On the other hand, the survey has emphasised collaborative efforts, leveraging media channels for broader awareness and solidifying partnerships across sectors to strengthen the effectiveness of infection control and prevention initiatives.

- a) Stakeholder feedback has identified several key areas for improving dengue awareness and prevention initiatives. There's a consensus on the importance of year-round engagement in high-risk communities, specifically focusing on initiating programs well before the peak dengue season to ensure communities are adequately prepared. Such programs should include various community members, from school students to mothers' groups and local organisations, fostering a sense of collective responsibility and action.
- b) The effectiveness of educational materials and training sessions is another crucial area, with a call for appealing, comprehensively distributed, and localised materials to enhance understanding and retention. This also extends to the need for early and accessible orientation sessions that are culturally and linguistically tailored. It is also emphasized that the most vulnerable areas bearing the high risk of infection such as unorganised and

improvised slums and settlements, and communities settled along the drainage discharge locations should be prioritised.

- c) In terms of resources, there is an expressed need for strategic distribution of preventative tools like mosquito nets and repellents, alongside proactive measures such as pesticide spraying and search and destroy campaigns. These strategies should be implemented with penalties to ensure compliance and promote cleanliness.
- d) The role of media and communication in dengue prevention is highlighted, emphasising harnessing social media and PSAs to spread awareness more broadly and effectively. This is complemented by the suggestion to involve media outlets actively in prevention and mitigation efforts.
- e) Collaboration and coordination with local government and health authorities are considered vital for unified action against dengue, suggesting that collaborative programs should draw in all relevant stakeholders. Additionally, integrating cultural and interactive activities, such as street dramas and competitions, can enhance engagement among younger demographics.
- f) The sustainability of short-term initiatives is a concern, with a push for extended durations and ongoing follow-up to ensure long-term impact. There is a need for the projects supported by the RCRC partners to have a small component of infection prevention and control (IPC) tied with ongoing development projects. This also ties into providing financial and psychological support for those affected by dengue, emphasising the need for ongoing community support even after the program phase-out.
- g) Training and empowerment efforts are also recognised as fundamental, with training for a broad spectrum of community members and incentives to encourage adherence to prevention measures. Lastly, continuous feedback and adjustments based on community input are necessary to ensure that programs remain relevant and effective, considering local cultural practices and events.

Adopt a community-centred approach when raising awareness in the community. A simple rally may not be sufficient to inform the community effectively. Develop a new approach for an awareness generation campaign, ensuring the community understands the purpose of these activities. Communicate why such programs are being conducted and who will benefit, and actively involve and inform the community about the activities. Ward representative Kathmandu Metropolitan City
- h) The local government units including health offices should leverage their unique position to coordinate efforts across various departments and sectors, ensuring that consistent messages reach every part of the community. District Health Offices play a pivotal role in collecting and providing up-to-date information on dengue cases, risk factors, and prevention strategies. They can work closely with medical professionals and community

health workers to track the spread of the disease, identify hotspots, and tailor public health messaging to address specific local needs.

- i) The cash and voucher assistance (CVA) modality to financially support economically vulnerable people forms a critical part of any response operation and applies to the Dengue response. This assistance can mitigate the impact of the disease on households that might otherwise be unable to afford preventive measures or medical treatment. By allocating funds to these groups, local authorities, with the support of the humanitarian actors, can ensure that financial constraints do not prevent individuals from accessing necessary resources such as mosquito repellents and proper healthcare or even allow them (most vulnerable groups) the economic flexibility to remain at home, reducing the risk of further transmission.
- j) Offering psychological support to individuals who have experienced the loss of family members is an essential aspect of the comprehensive response. The trauma associated with such loss can cause mental health implications, potentially leading to prolonged grief or depression. Mental health services, including counselling and support groups, should be readily available as part of the public health response. NRCS and health authorities should prepare their networks to respond to these needs by integrating PFA approaches by training volunteers and community health workers.
- k) This DREF operation builds upon the lessons learned from previous operations. It focuses on analysing the trends of Dengue infection, utilizing data accessible from the national EWRAS and WHO. Given that Dengue continues to impact districts already categorized as high-risk areas and climate change has the huge potential to alter disease patterns, there is a growing opportunity for the RCRC partners to define an anticipatory response model for Dengue response. This model relies on data-driven early action protocols that activate alert and response mechanisms when needed. Pre-condition for this initiative is to establish functional and technical collaboration with health partners including but not limited to WHO, MoH and health-related research institutions and universities in Nepal.