



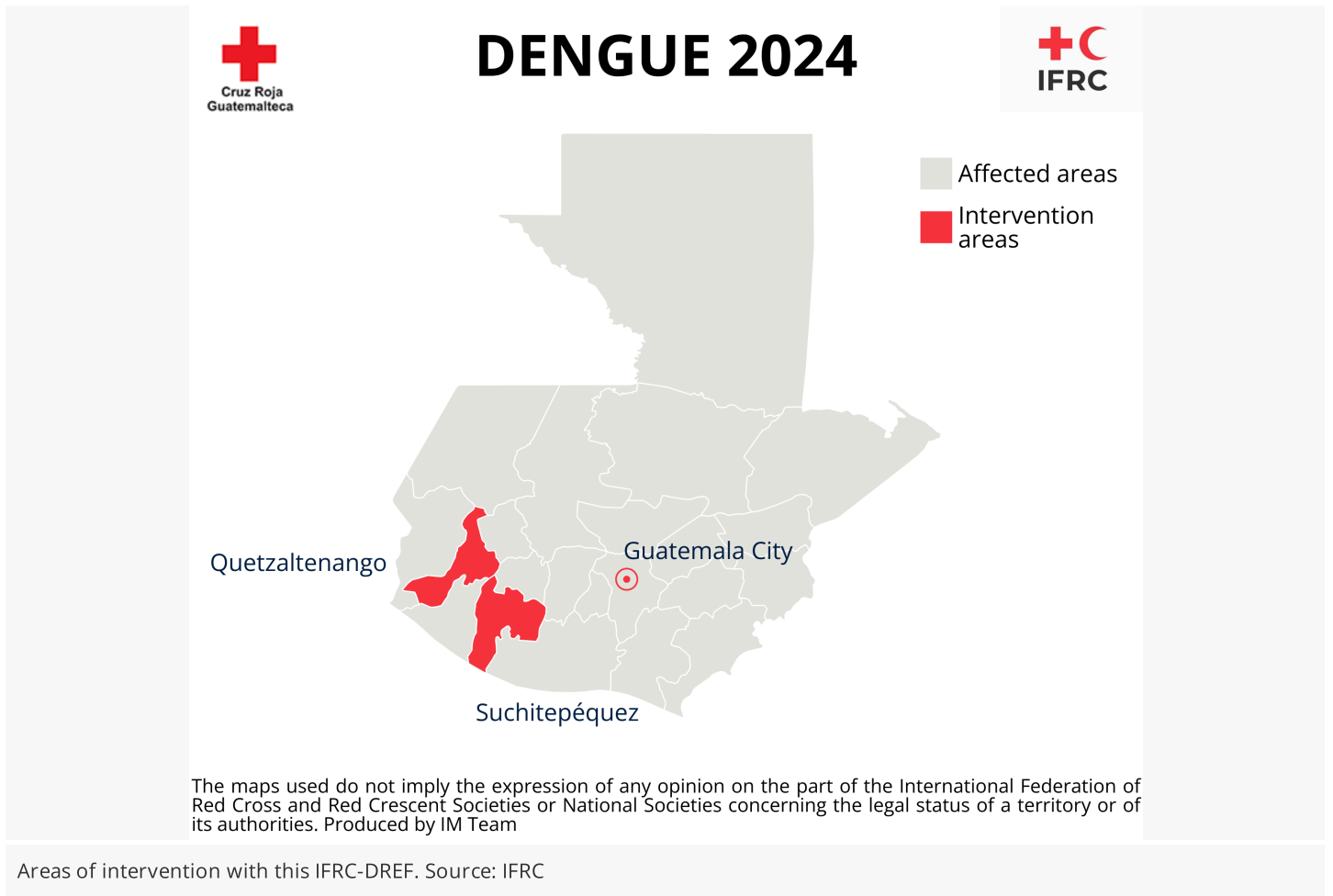
Distribution of dengue prevention kits to children. September 2024. Source: GRC

Appeal: MDRGT022	Total DREF Allocation: CHF 395,901	Crisis Category: Yellow	Hazard: Epidemic
Glide Number: EP-2024-000099-GTM	People Affected: 35,294 people	People Targeted: 5,000 people	People Assisted: 33,370 people
Event Onset: Slow	Operation Start Date: 23-05-2024	Operational End Date: 30-11-2024	Total Operating Timeframe: 6 months

Targeted Regions: **Quetzaltenango, Zacapa**

The major donors and partners of the IFRC-DREF include the Red Cross Societies and governments of Australia, Austria, Belgium, Britain, China, Czech, Canada, Denmark, German, Ireland, Italy, Japan, Luxembourg, Liechtenstein, Malta, Norway, Spain, Sweden, Switzerland, Thailand, and the Netherlands, as well as DG ECHO, Mondelez Foundation, and other corporate and private donors. The IFRC, on behalf of the National Society, would like to extend thanks to all for their generous contributions.

Description of the Event



Date when the trigger was met

27-06-2024

What happened, where and when?

Dengue remained the arbovirus with the highest number of reported cases in the Region of the Americas, with outbreaks occurring cyclically every 3 to 5 years. During 2024, between epidemiological weeks (EW) 1 and 25, a total of 10,363,448 suspected cases of dengue were reported in the region. The cumulative incidence was 1,098 cases per 100,000 population. This figure represented a 232% increase compared to the same period in 2023 and a 420% increase compared to the average of the past five years. Additionally, 140 cases of severe dengue were reported, of which 102 resulted in death (1).

On 16 February 2024, in view of the exponential increase in dengue cases observed during the first weeks of the year in several countries of the region, the Pan American Health Organization (PAHO) issued an urgent appeal to Member States. The organization emphasized the need to intensify vector control measures and maintain active surveillance, ensuring early diagnosis and timely treatment of cases (2).

On 7 March 2024, the Ministry of Public Health and Social Assistance (MSPAS) of Guatemala, through the Directorate of Epidemiology and Risk Management, issued an epidemiological alert for dengue (3). This alert aimed to strengthen dengue control and prevention plans, based on data accumulated up to epidemiological week 7, which ended on 17 February. By that date, a total of 6,760 cases of dengue had been recorded, of which 31 were severe, resulting in 3 deaths. The decision to issue the alert was motivated by the beginning of the high transmission season in the country. As part of the measure, specific epidemiological surveillance actions were reinforced, including standardized protocols for case detection, reporting, and registration in hospitals and health areas.

Given the increase in dengue cases in the country, MSPAS declared a National Health Emergency on 30 April 2024 (4), through Ministerial Agreement Number 152-2024, published in the Official Gazette of Central America. The agreement emphasized the responsibility of health sector institutions to carry out, within their areas of competence, epidemiological surveillance, outbreak investigation, and entomological surveillance. These actions were fundamental for the implementation of integrated vector control strategies aimed at mitigating the

spread of dengue.

On 13 May 2024, the vector-borne disease control program of the health area in the department of Quetzaltenango formally requested direct support from the Guatemalan Red Cross. The request mainly focused on health promotion, larviciding, fogging, and the cleaning of mosquito breeding sites. Similarly, on 14 May 2024, the endemic disease control program of the health area in the department of Suchitepéquez also requested the support of the Guatemalan Red Cross to carry out dengue prevention and mitigation actions. These requests were made due to a lack of personnel and resources needed to implement the actions outlined in the national dengue emergency.

On 27 June, during a meeting of the Emergency Operations Center (EOC) at the national level, MSPAS verbally requested the National Society to shift its intervention from the department of Suchitepéquez to that of Zacapa. This request was based on the significant increase in dengue cases in Zacapa and a considerable decrease in Suchitepéquez. The request was made in response to the identification of the most affected areas and the shortage of MSPAS personnel and resources to address the national dengue emergency.

By epidemiological week 34, a total of 80,234 cases of dengue had been reported in the country. According to the same report, 14 of the 29 Departmental Directorates of Integrated Health Services Networks (DDRIS) reported dengue incidence rates above the national average. The most affected departments included Jutiapa, Santa Rosa, Zacapa, El Progreso, Baja Verapaz, Sacatepéquez, Quetzaltenango, Retalhuleu, Jalapa, Escuintla, Suchitepéquez, Chiquimula, and the northwestern and northeastern regions of the country. Notably, the DDRIS of Zacapa, Suchitepéquez, and Jutiapa recorded the highest incidence of dengue with warning signs.

During inter-institutional meetings held in August, MSPAS reiterated its call and requested support from both local and national organizations present in Guatemalan territory to continue and intensify efforts in the fight against dengue.



Fogging campaign in Quetzaltenango. July 2024. Source: GRC



Proper use of household water cleaning kit. Aug 2024. Source: GRC



Delivery of equipment to the vector control unit. October 2024. Source: GRC

Scope and Scale

According to the Pan American Health Organization (PAHO), nearly 500 million people in the Americas were at risk of contracting dengue (5). In Guatemala, the Ministry of Public Health and Social Assistance (MSPAS) reported that, as of epidemiological week 34 of 2024, a total of 80,234 dengue cases had been registered in the country. Of these, 81% (65,178 cases) corresponded to dengue without warning signs, while 18% (14,653 cases) were classified as dengue with warning signs. The total number of cases reported to date represented an incidence rate of 449.7 cases per 100,000 population—3.8 times higher than that recorded during the same period in 2023.

In 2024, the predominant circulating dengue serotype was DEN-3, which accounted for 83% of all positive cases. The co-circulation of multiple serotypes—particularly in the Departmental Directorates of Integrated Health Services Networks (DDRIS) such as Suchitepéquez, Central Guatemala, Retalhuleu, San Marcos, and Northwestern Guatemala, where all four serotypes were identified—heightened the risk of severe forms of the disease. Up to week 34, a total of 100 confirmed deaths due to dengue had been reported, with the highest numbers occurring during weeks 20 and 24. The national case fatality rate stood at 0.12%.

Dengue remained the most prevalent of the arboviral diseases monitored in the country, underscoring its sustained transmission and significant impact on public health in Guatemala. The MSPAS also confirmed a notable concentration of cases among children under 15 years of age, with the highest incidence rates recorded in the 5–9 and 10–14 age groups.

At the individual level, dengue caused a wide spectrum of symptoms ranging from high fever and headaches to severe complications such as hemorrhage and shock, which could require prolonged hospitalization and, in some cases, lead to death. Beyond the physical toll, dengue also affected individuals' emotional well-being and economic stability due to missed workdays and the cost of medical care.

At the societal level, dengue outbreaks placed considerable strain on the healthcare system, diverting critical resources away from other essential health services and limiting the ability to respond to concurrent medical emergencies. Socially, outbreaks generated fear and anxiety within communities, disrupting daily life and weakening social cohesion. Economically, dengue reduced labor productivity and had a negative impact on tourism in affected areas, ultimately harming local economies.

According to data provided by MSPAS, based on information from the National Institute of Seismology, Volcanology, Meteorology, and Hydrology (INSIVUMEH), there was a notable increase in arboviral disease cases between June and August 2024. This trend was expected to continue beyond September. The surge in cases was attributed to increased rainfall during those months, which facilitated the proliferation of disease vectors. Additionally, the heatwaves that occurred between the second half of July and the first half of August—shorter than anticipated—contributed to heavier rainfall and a delayed onset of the winter season. These combined climatic conditions likely intensified arbovirus transmission throughout the country during and beyond September (6).

Source Information

Source Name	Source Link
1. Government of the Republic of Guatemala - Health Declares National Emergency due to Dengue Epidemic	https://prensa.gob.gt/comunicado/salud-declara-emergencia-nacional-por-la-epidemia-de-dengue
2. PAHO - Incidence of dengue fever in the Americas	https://www.paho.org/es/temas/dengue#:~:text=Cerca%20de%20500%20millones%20de,en%20riesgo%20de%20contraer%20dengue.&text=El%202023%20fue%20el%20a%C3%B1o,de%20letalidad%20de%200%2C051%25).
3. Diario de Centro América - MSPAS on alert for dengue	https://dca.gob.gt/noticias-guatemala-diario-centro-america/en-alerta-por-dengue/
4. PAHO - Situation Report No. 25. Epidemiological Situation of Dengue in the Americas - Epidemiological Week 16, 2024	https://www.paho.org/es/documentos/informe-situacion-no-25-situacion-epidemiologica-dengue-americas-semana-epidemiologica
5. PAHO - Epidemiological Alert: Increase in Dengue Cases in the Region of the Americas, 16 February 2024	https://www.paho.org/es/documentos/alerta-epidemiologica-aumento-casos-dengue-region-americas-16-febrero-2024
6. Prensa Libre - Health Declares Dengue Alert	https://www.prensalibre.com/guatemala/salud-declara-alerta-por-dengue-en-guatemala-al-sumar-7-mil-casos-en-2024/

National Society Actions

Have the National Society conducted any intervention additionally to those part of this DREF Operation?	No
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IFRC Network Actions Related To The Current Event

Secretariat	<p>The International Federation of Red Cross and Red Crescent Societies (IFRC), through its Central America Country Cluster Delegation (CCD), provided continuous support to the Guatemalan Red Cross in the analysis and formulation of the IFRC-DREF. Additionally, during the implementation phase, targeted support was expected from specific departments within the IFRC Americas Regional Office.</p> <p>The National Society also coordinated follow-up actions with IFRC personnel throughout the implementation period to ensure that the action plan was executed in alignment with the established quality standards.</p>
Participating National Societies	<p>The Spanish Red Cross, through the Pilot Programmatic Partnership (ECHO-PPP) project, supported the National Society in advance planning and preparedness efforts aimed at strengthening epidemiological surveillance in anticipation of the high-risk dengue outbreak season. This collaboration involved close monitoring of dengue cases and early detection of potential outbreaks, which enabled a timely and effective response. These actions were implemented prior to the declaration of a dengue emergency by the Ministry of Public Health and Social Assistance (MSPAS).</p>



ICRC Actions Related To The Current Event

The International Committee of the Red Cross (ICRC) did not participate in the formulation or implementation of this IFRC-DREF.

Other Actors Actions Related To The Current Event

Government has requested international assistance	No
National authorities	<p>Since January 2024, the Ministry of Public Health and Social Assistance (MSPAS) of Guatemala initiated and reinforced various actions to address the dengue situation in the country. These actions included the stratification of at-risk localities by municipality through entomological surveys, the implementation of fogging and larviciding activities, as well as community engagement through health promotion and training of healthcare personnel. Meetings of the Health Emergency Operations Center (EOC) and the National Coordinator for Disaster Reduction (CONRED) were also convened to develop and coordinate comprehensive response strategies.</p> <p>Following the declaration of a national health emergency due to dengue, MSPAS emphasized the need for health sector institutions to carry out epidemiological surveillance, outbreak investigations, and entomological monitoring. Special attention was given to the implementation of integrated vector management strategies targeting <i>Aedes aegypti</i>, and to the promotion of prevention and health education measures. These actions were considered essential for reducing morbidity by eliminating mosquito breeding sites and strengthening communication campaigns to raise community awareness about the risks and prevention of dengue.</p> <p>MSPAS underscored the importance of ensuring that health entities provided the necessary resources—such as personnel, vehicles, funding, and supplies including insecticides, larvicides, and fogging equipment. In the context of the emergency and within the framework of the CONRED system, MSPAS activated the Health Emergency Operations Center to coordinate both sectoral and intersectoral actions, in accordance with Article 5 of Ministerial Agreement Number 152-2024 on the National Health Emergency, published in the Official Gazette of Central America.</p> <p>In response to the emergency, MSPAS implemented a National Emergency Plan for the prevention, control, and care of arboviral disease cases, with a special focus on dengue. The plan aimed to reduce dengue incidence across the country through a comprehensive set of actions encompassing prevention, mitigation, and patient care within the Integrated Health Services Network. It also sought to prevent an increase in dengue-related mortality at the national level. To achieve these objectives, the plan incorporated strategies across several key areas: governance and leadership, epidemiological and laboratory surveillance, case management, integrated vector and environmental management, risk communication, health promotion and education, as well as financial and administrative management.</p>
UN or other actors	During the reporting period, there were no other institutions, organizations, or cooperation agencies carrying out dengue prevention or containment actions in the two departments prioritized by this IFRC-DREF.

Are there major coordination mechanism in place?



In the municipalities of Coatepeque, Quetzaltenango, and Gualán, Zacapa, the Ministry of Public Health and Social Assistance (MSPAS) established technical roundtables to address the dengue outbreak and to coordinate prevention and response efforts. Red Cross delegations participated actively in both roundtables.

Additionally, in the municipality of Gualán, Zacapa, MSPAS invited the National Society to take part in local-level technical meetings. These meetings aimed to initiate actions focused on raising community awareness about dengue prevention and to implement both physical and chemical vector control measures in targeted areas.

Needs (Gaps) Identified



Health

The lack of continuous training and updating of health personnel had represented a major obstacle to effectively responding to dengue outbreaks. This situation had been further worsened by the limited presence of health personnel in the most vulnerable communities, which had restricted the implementation of health promotion and prevention activities. In addition, the Ministry of Health had faced limitations in resources to purchase supplies and equipment necessary for chemical vector control—essential for the elimination of larvae and adult mosquitoes during outbreak response.

The situation had also been compounded by the limited presence of risk communication campaigns, which had been crucial for promoting health and disease prevention. Therefore, it had been necessary to implement effective and accessible communication strategies, such as the distribution of posters, radio announcements, and community radio broadcasts, to inform the population about practical and essential preventive measures. In this regard, there had been a need to identify in advance the type of information required, determine the appropriate methods of delivery, and validate it with the community prior to dissemination.

Regarding diagnostic methods, there had been an urgent need to address the scarcity of dengue rapid tests, which were key for early diagnosis. The Ministry of Public Health and Social Assistance (MSPAS) had faced financial constraints that limited its ability to acquire these supplies, and there had been limited response from national and international health organizations in terms of donations of such materials.

Likewise, the lack of Personal Protective Equipment (PPE) for COVID-19 had remained a critical need, especially for the staff and volunteers of the National Society conducting home visits in areas with high virus transmission. The absence of PPE had not only put the health of workers and volunteers at risk but had also threatened the continuity of dengue control activities.



Water, Sanitation And Hygiene

Lack of access to safe drinking water had forced people to store water in containers which, in the absence of proper management practices, had become potential breeding grounds for the dengue vector. The accumulation of solid waste and insufficient cleanliness in rural, peri-urban, and urban areas had further aggravated the situation by providing numerous breeding sites for mosquitoes. In many communities, there had been a lack of basic tools, such as shovels and carts, necessary for effectively cleaning public roads and community spaces, including schools, parks, and primary healthcare posts. This had prevented the systematic elimination of mosquito breeding sites.

At the household level, the absence of adequate cleaning supplies—such as disinfectants and brushes for washing sinks—had made it difficult to prevent breeding sites inside homes. Additionally, the insufficient availability of supplies like bed nets and repellents had represented a significant gap in the dengue containment strategy. These resources had been essential to protect the most vulnerable groups, such as pregnant women, children, the elderly, people with disabilities, and those with reduced mobility. Furthermore, these prevention measures had aligned with both community practices and national public health regulations. Bed nets, being culturally accepted, had facilitated their effective adoption, which had significantly increased their impact on reducing dengue transmission.

In terms of personnel protection, adequate personal protective equipment—such as gloves, full-face masks, and respiratory filters—had been necessary to protect staff and volunteers during chemical vector control activities.

Improving entomological control management had also been a key need. Training for both Ministry of Public Health and Social Assistance (MSPAS) personnel and National Society staff had been required to ensure a more effective and coordinated response to dengue outbreaks. Continuous training had been an essential element in improving entomological surveillance and control practices. Additionally, there had been a notable lack of specialized equipment and supplies, such as thermal foggers and chemicals, essential for



physical and chemical vector control through spraying and abatization in high-incidence areas.

These identified needs had allowed for the design of an effective response based on the alert issued by MSPAS, which had included social mobilization, health promotion and education, and entomological control. Social mobilization had involved the engagement of communities in dengue prevention and control efforts, encouraging active participation and cooperation. Health promotion and education had aimed to raise public awareness about dengue prevention measures, while entomological control had been essential to monitor and reduce the mosquito population responsible for transmission of the disease.



Protection, Gender And Inclusion

In the face of the dengue emergency response, it had been essential to identify and address the main gaps in protection, gender, and inclusion to ensure an equitable and effective intervention. First, there had been a lack of a differentiated approach that took into account the specific needs of women, children, the elderly, people with disabilities, and individuals with pre-existing medical conditions—groups that had been more vulnerable during epidemics. In addition, the limited participation of women in decision-making and in the implementation of response actions had reduced the effectiveness of the interventions. Gender-based violence, which had been exacerbated in crisis situations, had also represented a significant gap, as women and girls had faced greater risks of abuse and exploitation.

Furthermore, training and refresher training on minimum standards of protection, gender, and inclusion for staff and volunteers had needed to be strengthened to ensure an adequate and sensitive response to these specific needs. The lack of safe spaces for children during community activities had also been a significant gap. Children had required protected environments while their families participated in dengue prevention and control actions. These spaces had provided not only physical safety, but also an environment conducive to their continued emotional and physical development. In times of crisis, such environments had helped reduce stress and anxiety in children. They had also provided an opportunity for children to learn about dengue prevention measures. Kits that included educational materials and practical resources—such as books with key messages, crayons, and repellent—had been essential to support this educational work in the community.

The inclusion of indigenous communities had been insufficient, often due to linguistic and cultural barriers that had impeded access to information and services. To address these gaps, it had been essential to implement response strategies that ensured all people—regardless of gender, age, or status—received the necessary support and had the opportunity to actively participate in dengue prevention and control.



Community Engagement And Accountability

Identifying the most recurrent and immediate needs related to Community Engagement and Accountability had been essential for a comprehensive approach in the response to the dengue emergency. First, there had been a lack of effective mechanisms to involve affected communities in the design and implementation of dengue control and prevention strategies. Communication between health authorities and community leaders had been poor, resulting in limited ownership of the measures by the local population.

In addition, accountability had been affected by poor socialization in resource management and decision-making, which had generated distrust and a perception of ineffectiveness in the response. There had also been a lack of adequate and accessible information, as well as the absence of mediation or translation of information into local languages. This had made it difficult for indigenous communities and other linguistic groups present in the affected areas to understand and adhere to health recommendations.

Likewise, myths and rumors related to dengue and its prevention and treatment methods had been insufficiently addressed. This had contributed to the spread of misinformation, which in turn had hindered disease control efforts.

These gaps had underscored the need to strengthen communication channels, encourage the active participation of communities, ensure clear and transparent processes, and develop specific strategies for cultural and linguistic mediation, as well as education and demystification of erroneous beliefs. All of this had been crucial to improve the effectiveness of interventions and public confidence in health authorities and all organizations supporting the emergency response.



Operational Strategy

Overall objective of the operation

Through this IFRC-DREF allocation, the Guatemalan Red Cross aimed to contribute to the National Health Emergency response to dengue by addressing the immediate needs of 5,000 people (1,000 families) in the sectors of health, water, sanitation and hygiene (WASH), protection, gender and inclusion (PGI), and community engagement and accountability (CEA) in the departments of Quetzaltenango and Zacapa over a six-month period.

Through the implementation of the planned actions, the National Society successfully reached a total of 33,570 people in the two prioritized departments.

Operation strategy rationale

The strategy of this IFRC-DREF focused on providing direct support to the health areas of the departments of Quetzaltenango and Zacapa, within the framework of the national emergency declaration issued in response to the dengue epidemic. The main objective was to mitigate harm and control environmental risk factors, ensuring that the joint and coordinated efforts between the Ministry of Public Health and Social Assistance and the Guatemalan Red Cross contributed to containing the spread of the disease and safeguarding the well-being of Guatemalan families.

The proposed actions centered on entomological surveillance to support the implementation of comprehensive dengue management strategies. In addition, prevention and health promotion activities were carried out, which were essential in reducing morbidity. These actions included the control and elimination of mosquito breeding sites, as well as risk communication campaigns for prevention within communities and households, with the active participation of the population.

Actions by Priority Sectors:

HEALTH: Educational sessions were held in the community on the signs, symptoms, and practical measures for dengue prevention. Educational materials were developed and validated with the community, as well as informational spots and announcements with key messages on dengue prevention, hygiene promotion, protection, participation, and other emerging issues. Loudspeaker campaigns were carried out to disseminate information and announcements. Refresher workshops on dengue management, including identification of warning signs, were also organized for MSPAS personnel and Guatemalan Red Cross volunteers.

In addition, dengue rapid tests were procured and donated to MSPAS in response to a bilateral request, given the urgent need and the limited response from other organizations. Personal protective equipment against COVID-19 was distributed to staff and volunteers, due to the country's continued high infection rates. This preventive measure was essential during home visits and to protect community members. Lastly, two health technicians were hired to lead the implementation of the planned actions.

WATER, SANITATION AND HYGIENE (WASH): Educational sessions and home visits were carried out to demonstrate dengue prevention strategies using the "UNTADITA" and "VELITA" (flip, remove, clean, and cover) methods. Fogging, larvicide application, and mosquito breeding site elimination campaigns were conducted. Cleaning kits for sinks (chlorine, detergent, cleaning brushes, etc.) were purchased and distributed.

A workshop on the operation and maintenance of environmental sanitation equipment was held for active volunteers, and maintenance and repairs were conducted on existing equipment (thermo-nebulizers, pumps). Thermo-nebulizers (two per branch and one for headquarters), along with tools for mosquito breeding site elimination (wheelbarrows, hammers, shovels, rakes, etc.) were purchased for community and branch use.

Repellents and mosquito nets were also distributed. Mosquito nets, a key dengue containment measure used by the National Society, were prioritized for vulnerable groups such as women, children, older persons, people with disabilities, and those with limited mobility. This intervention, aligned with national public health practices, was culturally appropriate and widely accepted, facilitating its implementation and increasing its impact on reducing dengue transmission.

Vector control supplies were also procured and distributed to strengthen health services and branches (chemicals for adult mosquito and larva elimination, gloves, flashlights, pressure washers, etc.). Personal protective equipment (boots, full-face masks, gloves, mask filters, goggles, etc.) was distributed to volunteers exposed to chemicals during spraying campaigns. A dedicated IFRC-DREF coordinator was hired to lead these activities.

PROTECTION, GENDER AND INCLUSION (PGI): PGI training and refresher workshops were held for staff and volunteers involved in the dengue response. PGI-related materials were developed and printed for use in health and WASH sessions. Dengue prevention kits for



children and adolescents (repellent, coloring books with key messages, crayons, etc.) were purchased and distributed. Materials and supplies were also procured to create and/or promote safe spaces for children and adolescents during community activities. A child protection risk analysis was conducted in accordance with IFRC guidelines.

COMMUNITY ENGAGEMENT AND ACCOUNTABILITY (CEA): A CEA workshop focused on the dengue emergency context was conducted for MSPAS personnel, and staff and volunteers of the National Society involved in the response. Since this was an emergency operation, health, WASH, and PGI actions were prioritized based on preliminary needs assessments. These actions were strengthened based on internal and community feedback to determine a baseline CEA mechanism (suggestion boxes, satisfaction surveys, focus groups, etc.).

Materials were developed and printed to share key messages related to CEA and other emerging needs in accordance with the selected mechanism. Dissemination of messages related to health, WASH, PGI, and others was supported through the most trusted communication channels in the community.

NATIONAL SOCIETY STRENGTHENING: Insurance coverage was provided for volunteers involved in the operation. Visibility materials (banners, tarpaulins, etc.) were purchased and distributed. Communication expenses were covered for staff and volunteers (phones, internet) and for the operation (field visits by communications staff, production of audiovisual materials). Lodging, transportation, and office supplies were also covered. An administrative technician was hired specifically for the IFRC-DREF. A lessons learned workshop was held at the end of the operation as part of the National Society's accountability and capacity strengthening mechanisms.

To ensure that the strategy was implemented in accordance with established parameters, the Guatemalan Red Cross held regular bilateral meetings with representatives from the IFRC Central America Country Cluster Delegation (CCD), National Society branch representatives, and officials from the Ministry of Public Health and Social Assistance (MSPAS). These meetings enabled real-time monitoring and timely implementation of necessary adjustments.

It is important to note that the ECHO-PPP project carried out interventions in specific communities within the municipality of Coatepeque, located in the department of Quetzaltenango. These actions focused exclusively on prevention and the strengthening of community surveillance systems, including informative sessions for local leaders on dengue prevention. However, it is important to recognize that these efforts reached only a small portion of the population in both departments.

In this context, the IFRC-DREF served as a complement to the activities carried out under the ECHO-PPP project, enabling an expansion of the target population for educational initiatives and the incorporation of specific vector control actions in coordination with MSPAS. This was particularly relevant given that the ECHO-PPP project lacked funding for the procurement of essential equipment and supplies required for the dengue emergency response—such as thermal foggers, chemicals for physical and chemical vector control, rapid diagnostic tests, sinkhole cleaning kits, and tools for the elimination of mosquito breeding sites, among others. In contrast, the IFRC-DREF allocation planned to finance the acquisition of these critical items, which were essential to support the comprehensive dengue response strategy led by MSPAS.

Targeting Strategy

Who was targeted by this operation?

This IFRC-DREF provided direct assistance to people in the departments of Quetzaltenango and Zacapa. The Guatemalan Red Cross prioritized children between 5 and 9 years of age, of both sexes, as well as women.

Explain the selection criteria for the targeted population

The target population was determined based on estimates established during bilateral meetings between the Ministry of Public Health and Social Assistance (MSPAS) and the National Society, using data from dengue cases reported in epidemiological week 25 of 2024, in relation to the number of cases recorded in the two prioritized departments.

These departments were among the fourteen that form part of the Departmental Directorates of Integrated Health Services Networks (DDRIS), which, according to MSPAS, had a higher incidence of dengue than the national average.

The prioritization of children between 5 and 9 years of age, of both sexes, as well as women, was based on MSPAS epidemiological reports indicating that these groups showed the highest rates of impact. However, the National Society conducted ongoing monitoring to identify additional population groups requiring priority attention.



Total Assisted Population

Assisted Women	9,231	Rural	58%
Assisted Girls (under 18)	7,825	Urban	42%
Assisted Men	8,700	People with disabilities (estimated)	0%
Assisted Boys (under 18)	7,814		
Total Assisted Population	33,570		
Total Targeted Population	5,000		

Risk and Security Considerations (including "management")

Does your National Society have anti-fraud and corruption policy?	Yes
Does your National Society have prevention of sexual exploitation and abuse policy?	No
Does your National Society have child protection/child safeguarding policy?	Yes
Does your National Society have whistleblower protection policy?	No
Does your National Society have anti-sexual harassment policy?	Yes

Please analyse and indicate potential risks for this operation, its root causes and mitigation actions.

Risk	Mitigation action
Safety of staff and volunteers in the field	Implement safety protocols, including measures to protect staff and volunteers from health and safety risks. This may include the proper use of personal protective equipment, training in safety measures, and coordination with local law enforcement to ensure protection in potentially hazardous areas.
Difficulty in accessing remote communities and affected areas	Preparation and training of personnel and volunteers, along with collaboration with local organizations and government authorities, can facilitate access to remote areas. In addition, the contingency plan will be used to transport personnel and supplies in case of adverse weather conditions or security situations.
Disinformation and community resilience	A comprehensive communication strategy is essential to address disinformation and community resistance. This includes working with community leaders and local organizations to promote understanding and acceptance of dengue control measures. Communication should be clear, culturally sensitive, and based on scientific evidence. Community feedback should be collected and used to adapt communication and action strategies.
Lack of coordination between the institutions involved	Establish clear lines of communication and inter-institutional coordination to ensure collaboration between the Ministry of



Public Health and Social Assistance (MSPAS), Guatemalan Red Cross, and other organizations. In addition, implement regular follow-up and coordination meetings. Also use digital platforms for communication and information exchange in real time.

Please indicate any security and safety concerns for this operation:

Social conflicts, demonstrations and/or road closures due to discontent of the population with particular groups within the governmental structures at central and local levels.

From the headquarters of the Guatemalan Red Cross, the mobilization of personnel and volunteers was monitored, along with the continuous follow-up of official sources to prevent displacements in the event of demonstrations, roadblocks, or other incidents. In addition, information and mechanisms related to safe access were shared. From the beginning of the operation, the local protocols established by each branch for this type of situation were also communicated.

Has the child safeguarding risk analysis assessment been completed?

Yes

Implementation



Budget: CHF 64,814

Targeted Persons: 5,000

Assisted Persons: 6,549

Targeted Male: 1,820

Targeted Female: 4,754

Indicators

Title	Target	Actual
Number of people who participated in educational sessions on practical measures for the prevention of dengue.	5,000	6,524
Number of communities reached with loudspeaker announcement actions.	10	17
Number of MSPAS personnel and Red Cross volunteers trained/updated in the proper management of dengue.	50	50

Narrative description of achievements

The Guatemalan Red Cross effectively distributed essential printed materials for educational sessions and dengue prevention trainings. This included the production and placement of informative posters in public spaces within the prioritized communities. These posters provided clear information on the symptoms of dengue and recommended prevention measures.

In addition, loudspeaker campaigns were carried out in 17 communities—10 in Coatepeque and 7 in Gualán, Zacapa—exceeding the initial target of 10 communities. This expansion was in response to requests from local authorities who identified the need to reach more people with preventive and vector control messages.

The National Society also conducted educational sessions on dengue prevention and control, covering topics such as recognizing signs and symptoms, proper basin cleaning, application of the VELITA method, and the importance of correctly using mosquito nets. These sessions reached 5,757 people in the affected communities, surpassing the initial target of 5,000 participants due to high community engagement. Additionally, in coordination with local schools, informational sessions were conducted for 767 primary school students, sharing personal and family protection practices.



In parallel, two technical refresher workshops on dengue management were organized for staff from the Ministry of Public Health and Social Assistance (MSPAS) and active Guatemalan Red Cross volunteers, reaching 50 participants. These workshops focused on the timely identification of warning signs, based on the latest approaches.

To strengthen technical capacities, operational entomological surveillance manuals were printed for volunteers, MSPAS staff, and community representatives. Internal briefings were conducted with the boards of directors of the involved branches of National Society, and external briefings were held with Regional Health Directorate staff, health centers, community leaders, and local representatives.

In terms of resources, the Guatemalan Red Cross acquired and donated 500 rapid dengue tests to the health centers of Gualán and Catepeque, responding to an urgent request from MSPAS. Personal protective equipment was also provided to Guatemalan Red Cross volunteers and staff, as well as to MSPAS personnel involved in the educational and community health activities.

To ensure effective implementation in line with the identified needs of affected communities and local authorities, the operation was supported by two health technicians, hired with IFRC-DREF funds, who led field activities and ensured coordinated and effective response delivery.

Lessons Learnt

- Educational sessions exceeded their initial targets thanks to the active involvement of the population, demonstrating the community's interest and need for practical information on dengue prevention, especially when promoted through community and school spaces.
- Continuous coordination with community leaders and municipal authorities made it possible to extend loudspeaker campaigns to more communities than initially planned, responding to local demands and strengthening community acceptance of the activities.
- The technical refresher workshops on dengue management strengthened the capacities of health personnel and volunteers, enabling them to identify warning signs based on updated approaches and provide reliable information to the community.

Challenges

- The need to align activities with various stakeholders, including health authorities, community leaders, and educational institutions, occasionally led to delays in implementation, requiring greater flexibility and coordination capacity.
- A low level of male engagement was identified in educational sessions and community activities, limiting the reach of prevention messages within households, considering that men are also key actors in promoting healthy practices at home and in the community.



Water, Sanitation And Hygiene

Budget: CHF 250,871

Targeted Persons: 5,000

Assisted Persons: 33,600

Targeted Male: 14,125

Targeted Female: 19,475

Indicators

Title	Target	Actual
Number of people reached with actions related to water, sanitation and hygiene.	5,000	33,570
Percentage of families visited that implement practical actions for the prevention of dengue.	90	95
Number of sink washing kits distributed.	1,000	1,100
Number of repellents and mosquito nets distributed.	1,000	1,800
Number of Guatemalan Red Cross staff and volunteers trained and strengthened in environmental sanitation equipment operation and	50	25



maintenance skills.		
Number of volunteers who have received personal protective equipment.	50	67

Narrative description of achievements

As part of the dengue prevention and response strategies, the Guatemalan Red Cross ensured the availability of all essential supplies for the timely implementation of planned activities. The National Society carried out specific procurement processes to secure thermal fogging equipment, chemicals such as Vectorcide 4.5 for adult mosquito control, and larvicide (temephos) for larval breeding site treatment.

As part of the community-level activities, abatement campaigns were conducted in 6,714 households, reaching 33,570 people, along with fogging operations in 4,023 households, benefiting 20,115 people in the communities of Gualán and Coatepeque, areas with the highest dengue incidence rates. These actions exceeded the initial target, as household surveys and field assessments identified the need to reach additional homes within the targeted geographic areas. Moreover, these activities strengthened the efforts of the Ministry of Public Health and Social Assistance (MSPAS) vector control teams and contributed directly to containing the outbreak in the prioritized communities.

The National Society also carried out household visits to provide information and conduct physical vector control, reaching 6,714 families. Follow-up visits confirmed that 95% of the households were implementing basic dengue prevention measures, demonstrating a positive change in community practices, reinforced by the range of activities conducted throughout the operation.

To support families, 1,100 basin cleaning kits were distributed, exceeding the original target thanks to favorable pricing that allowed coverage to be extended to additional households in need. In addition, 935 barrel covers containers distributed, although not all were used, as assessments revealed that many families already had their own solutions for covering water containers. 800 mosquito nets and 1,000 repellents were also distributed in the communities of Gualán, Zacapa.

In Coatepeque, two mass mosquito breeding site elimination campaigns were conducted in 10 sectors, and in Gualán, two additional campaigns were carried out in the targeted communities, reinforcing the removal of mosquito breeding sites.

To strengthen local capacities, a technical workshop on the operation and maintenance of environmental sanitation equipment was conducted for IFRC-DREF volunteers and MSPAS vector control personnel, reaching 25 participants. Although the plan originally included separate workshops in each department, the methodology had to be adjusted to a single workshop due to delays in the delivery of equipment by the supplier.

Additionally, personal protective equipment and operational supplies were provided, benefiting 30 members of the MSPAS vector control program in Gualán and Coatepeque, as well as 37 volunteers, branch board members, and Guatemalan Red Cross staff actively involved in the community activities.

As part of the strengthening efforts for the vector control units of the Health Centers in the two intervention departments, the Guatemalan Red Cross distributed various supplies, including power generators, portable fogging machines, chairs, tables, storage boxes, among others.

Additionally, further supplies (tables, chairs, tents, portable thermal foggers, and more) were distributed to the Guatemalan Red Cross branches in the two intervention departments to enhance their capacity to continue dengue prevention activities beyond the IFRC-DREF implementation period.

Finally, the National Society hired a dedicated IFRC-DREF coordinator, ensuring efficient management and timely implementation of all actions, in compliance with the required quality standards.

Lessons Learnt

- The community census allowed for the accurate selection of families in need, making the response more effective and evidence-based.
- The ability to adapt activities based on field findings and emerging demands strengthened the response, allowing greater coverage in the areas most affected by the outbreak.
- Experience showed that practical workshops, such as the one on the operation and maintenance of environmental sanitation equipment, are crucial to ensure that health personnel and volunteers can correctly apply knowledge and safely operate equipment.



Challenges

• Expanding activities to additional communities posed operational challenges that required rescheduling and logistical adjustments to avoid affecting other planned activities.



Protection, Gender And Inclusion

Budget: CHF 36,341

Targeted Persons: 1,000

Assisted Persons: 1,190

Targeted Male: 614

Targeted Female: 576

Indicators

Title	Target	Actual
Number of children and adolescents who received dengue prevention kits.	1,000	1,190
Number of Guatemalan Red Cross communities and branches that received materials and supplies for the creation and promotion of safe spaces for children and adolescents.	16	16
Number of Red Cross staff and volunteers trained or updated in PGI related topics.	50	25

Narrative description of achievements

The Guatemalan Red Cross successfully ensured the availability and effective use of printed materials to disseminate information and key messages on dengue in the sectors prioritized by the IFRC-DREF. Among these materials, resources on gender-based violence prevention in the context of the dengue emergency were included and promoted through virtual sessions targeting volunteers, who later applied these materials in their community activities.

In collaboration with the communications department, the National Society designed a coloring book as part of an educational kit for children, which included the coloring book with key messages and crayons. Although the original plan was to distribute 800 kits, a review of pre-positioned supplies from the previous IFRC-DREF revealed a stock of volunteer uniforms, which were distributed in this operation. This allowed the reallocation of the originally budgeted funds to increase the distribution of kits to 1,190 units, surpassing the initial target.

Additionally, as part of its commitment to include all community members in dengue prevention activities, the National Society established safe spaces for the participation of children in community sessions. These spaces offered age-appropriate activities, allowing children to learn about preventive actions for their homes and communities. The supplies for these spaces (chairs, tables, board games, mats, among others) were donated to Red Cross branches and health centers in the two intervention departments, enabling these structures to replicate the safe spaces in future community activities beyond the IFRC-DREF implementation period.

Regarding the training process, and considering the volunteers' availability and the complementarity of the Protection, Gender, and Inclusion (PGI) and Community Engagement and Accountability (CEA) approaches, a single integrated workshop was conducted. This session explored how both approaches can be combined to strengthen operations in epidemic contexts such as dengue. Although not all expected volunteers were able to participate due to personal constraints, local replication strategies were put in place. Workshop participants committed to sharing the knowledge gained within their branches, expanding the reach and impact of the training to more volunteers and communities.

Lessons Learnt

• The creation of recreational and educational spaces for boys and girls facilitated their integration into community activities and strengthened family ownership of prevention measures.



Challenges

• Low attendance at the workshops, due to personal factors and time availability, limited the expected training coverage, highlighting the need for more flexible training strategies.



Community Engagement And Accountability

Budget: CHF 1,913

Targeted Persons: 1,000

Assisted Persons: 663

Targeted Male: 313

Targeted Female: 350

Indicators

Title	Target	Actual
Number of people reached with CEA actions (use of mechanism, key messages, etc.)	1,000	663
Number of CEA mechanisms implemented.	1	1
Number of MSPAS staff and Guatemalan Red Cross volunteers trained or updated on CEA related topics.	50	25

Narrative description of achievements

As part of its commitment to accountability, the Guatemalan Red Cross conducted a strategic meeting with the Communications Department and the Community Engagement and Accountability (CEA) focal point. As a result of this coordination, a community census was designed and implemented in the departments prioritized by the IFRC-DREF. This process allowed the team to accurately identify and select families in need of assistance, while also detecting additional families with specific needs to be included in the planned activities.

During the census, the team also identified the preferred feedback channel within the National Society CEA mechanism, which was satisfaction surveys. These surveys were later applied through sampling after distributions and educational sessions, strengthening active listening and gathering valuable information on community perceptions of the activities carried out.

In addition, the census and community consultations helped adapt the key dengue prevention messages, in collaboration with the technical focal points for Health, WASH, PGI, and community representatives. These adapted messages formed the basis for the loudspeaker campaigns, ensuring that the content was relevant and understandable for the community.

The National Society also presented the IFRC-DREF to the Guatemalan Red Cross branch teams in the prioritized departments, community leaders, and representatives from the Ministry of Public Health and Social Assistance (MSPAS). Before conducting the census, community assemblies were organized in all selected communities and sectors, which were key to informing people about the planned activities, promoting community participation, and ensuring process transparency.

Through these efforts, 663 people were reached through socialization and accountability activities. Although this number was lower than the target, it was identified that many community members could not participate due to prior personal and family commitments.

Lessons Learnt

- The community census allowed for the accurate selection of families in need, making the response more effective and evidence-based.
- Conducting community assemblies before the start of activities fostered trust and clarity about the operation scope and objectives.
- Collaborating with technical focal points and community representatives ensured that dengue prevention messages were culturally and contextually appropriate.



Challenges

- Despite outreach efforts, not all targeted individuals could attend due to personal and family commitments.
- Sustaining the same level of community participation over time remains a challenge, especially when activities extend over several weeks or months.



Secretariat Services

Budget: CHF 13,994

Targeted Persons: 0

Assisted Persons: 0

Targeted Male: 0

Targeted Female: 0

Indicators

Title	Target	Actual
Number of field monitoring visits conducted.	3	1

Narrative description of achievements

Representatives from the IFRC Central America Country Cluster Delegation held regular virtual meetings with the Guatemalan Red Cross IFRC-DREF implementation team, ensuring continuous technical follow-up and support throughout the operation.

To optimize resources and avoid overloading the operational capacity of the National Society, it was agreed to carry out a single field visit, which was strategically scheduled to coincide with the pre-planned humanitarian aid distributions as well as the lessons learned workshop, where facilitation support was provided.

Key representatives from the Delegation participated in this visit, including the Risk Management Coordinator, the Health Assistant, and the Planning, Monitoring, Evaluation, and Reporting (PMER) Assistant, who accompanied the National Society team in supervising field activities and supporting the technical closure of the project.

Lessons Learnt

- Periodic virtual meetings provided constant technical support while reducing the logistical burden on the National Society.
- Aligning the field visit with scheduled distributions and the lessons learned workshop allowed for efficient use of time and resources.

Challenges

- Although the visit was strategically organized, its geographic coverage was limited, leaving out other communities that also required supervision and on-site support.



National Society Strengthening

Budget: CHF 27,968

Targeted Persons: 50

Assisted Persons: 0

Targeted Male: 0

Targeted Female: 0



Indicators

Title	Target	Actual
Number of volunteers active in the operation with insurance.	50	50
Number of lessons learned workshops developed.	1	1

Narrative description of achievements

The Guatemalan Red Cross hired a dedicated administrative technician for the IFRC-DREF, who provided continuous support and follow-up on the various procurement processes and monthly budget allocations required for field operations.

Additionally, the National Society conducted several training workshops for volunteers and staff, building the capacity of individuals currently available in the branches that participated in dengue prevention and control activities. These trained volunteers and staff are now able to replicate the knowledge acquired and support future epidemic control actions, particularly those related to the *Aedes aegypti* mosquito.

The National Society also ensured accident and medical insurance coverage for all volunteers actively involved in the operation, thus strengthening the protection and safety conditions for those engaged in community activities.

On the other hand, although the National Society had initially planned to purchase new uniforms for volunteers, an internal review identified a stock of unused uniforms from the previous IFRC-DREF dengue operation that had not been delivered on time by the supplier and were still available in storage. As a result, the National Society decided not to proceed with the purchase of new uniforms and instead utilized the existing stock. The funds originally allocated for this purchase were redirected to the Protection, Gender, and Inclusion (PGI) sector, allowing the distribution of additional dengue prevention kits for children.

Finally, the National Society held an in-person lessons learned workshop, bringing together branch board members, volunteers, and technical staff who were involved in the planning and/or implementation of the operation in the two intervention departments. This workshop contributes to the institutional analysis that the National Society, with IFRC support, is carrying out to strengthen its emergency response system.

Lessons Learnt

- The trained volunteers and staff strengthened the capacity of the branches to continue carrying out vector control activities.
- The joint implementation of actions by the National Society and other stakeholders helped build trust with communities, enabled more accurate identification of priority needs, and improved the effectiveness of dengue prevention messaging.

Challenges

- Ensuring the timely contracting of an insurance policy that meets the needs of volunteers and the specific characteristics of the emergency from the start of the operation, in order to provide comprehensive protection for those participating in field activities.



Financial Report

DREF Operation

FINAL FINANCIAL REPORT

MDRGT022 - Guatemala - Dengue

Operating Timeframe: 23 May 2024 to 30 Nov 2024

Selected Parameters			
Reporting Timeframe	2024/5-2025/4	Operation	MDRGT022
Budget Timeframe	2024-2025	Budget	APPROVED

Prepared on 27/May/2025

All figures are in Swiss Francs (CHF)

I. Summary

Opening Balance	0
Funds & Other Income	395,901
DREF Response Pillar	395,901
Expenditure	-337,454
Closing Balance	58,447

II. Expenditure by planned operations / enabling approaches

Description	Budget	Expenditure	Variance
PO01 - Shelter and Basic Household Items			0
PO02 - Livelihoods			0
PO03 - Multi-purpose Cash			0
PO04 - Health	68,606	52,406	16,200
PO05 - Water, Sanitation & Hygiene	218,924	212,467	6,457
PO06 - Protection, Gender and Inclusion	37,099	37,532	-433
PO07 - Education			0
PO08 - Migration			0
PO09 - Risk Reduction, Climate Adaptation and Recovery	24,163	0	24,163
PO10 - Community Engagement and Accountability	1,796	1,824	-28
PO11 - Environmental Sustainability			0
Planned Operations Total	350,588	304,228	46,359
EA01 - Coordination and Partnerships			0
EA02 - Secretariat Services	13,139	4,162	8,977
EA03 - National Society Strengthening	32,175	29,064	3,111
Enabling Approaches Total	45,314	33,226	12,088
Grand Total	395,902	337,454	58,448

[Click here for the complete financial report](#)

Please explain variances (if any)

A total of CHF 395,901 was allocated from the Disaster Response Emergency Fund (DREF) for the implementation of this operation. By the end of the operation, total expenditures amounted to CHF 337,454. The unspent balance of CHF 58,447 will be returned to the DREF.

The main variances between the approved budget and actual expenditure are due to the following factors:

-Some supplies could not be purchased because providers did not have immediate availability. In response, alternative strategies were implemented to ensure that activities continued without compromising the planned objectives. Additionally, some suppliers offered



lower-than-expected prices for certain items, which helped achieve operational goals at a reduced cost.

-Strategies were also implemented to optimize travel allowances and fuel consumption, resulting in lower expenses related to the mobilization of staff and volunteers.

-Moreover, the methodology of some training workshops was adjusted, leading to the participation of fewer volunteers than originally planned. This change contributed to a reduction in logistical and organizational costs.



Contact Information

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[Click here for reference](#)

