

# DREF operation



International Federation  
of Red Cross and Red Crescent Societies

## Sri Lanka: Dengue Outbreak

DREF operation n° MDRLK001  
GLIDE n° [EP-2009-000163-LKA](#)  
4 September 2009

The International Federation's Disaster Relief Emergency Fund (DREF) is a source of unearmarked money created by the Federation in 1985 to ensure that immediate financial support is available for Red Cross and Red Crescent response to emergencies. The DREF is a vital part of the International Federation's disaster response system and increases the ability of national societies to respond to disasters.

CHF 99,412 (USD 94,343.2 or EUR 65,959.6) has been allocated from the Federation's Disaster Relief Emergency Fund (DREF) to support the National Society in delivering immediate assistance to some 300,000 beneficiaries. Unearmarked funds to repay DREF are encouraged. The major donors and partners of the DREF include the Danish Red Cross, Irish Red Cross/ Irish government, Japanese Red Cross, Monaco Red Cross/ Monaco government, Netherlands Red Cross/ Netherlands government, Norwegian Red Cross/ Norwegian government, Swedish Red Cross/ Swedish government, Italian government, United Kingdom Department for International Development (DFID), ECHO, OPEC Fund for International Development, and corporate and private donors. The International Federation, on behalf of the Sri Lanka Red Cross Society, would like to thank all donors for their generous contributions.

Details of all donors can be found on:

<http://www.ifrc.org/what/disasters/responding/drs/tools/dref/donors.asp>

**Summary:** Sri Lanka is facing one of its worst dengue outbreaks in years as health authorities scramble to contain the disease. According to the ministry of health, more than 24,000 cases of infection were reported as of 25 August 2009. Additionally, there have been more than 3,130 cases of dengue haemorrhagic fever (DHF) with 30 deaths, in Colombo district up until August this year<sup>1</sup>.

The Sri Lanka Red Cross Society (SLRCS) seeks to work with the government in addressing the problem. SLRCS has identified 12 district branches for the interventions. This operation is expected to be implemented over 6 months, and will therefore be completed by 1 March 2010; a Final Report will be made available three months after the end of the operation (by 1 June 2010).



The Sri Lanka Red Cross Society has identified 12 district branches for interventions as it seeks to work with the government to combat the dengue outbreak. Photo: SLRCS/International Federation

[<click here for the DREF budget, here for contact details, or here to view the map of the affected area>](#)

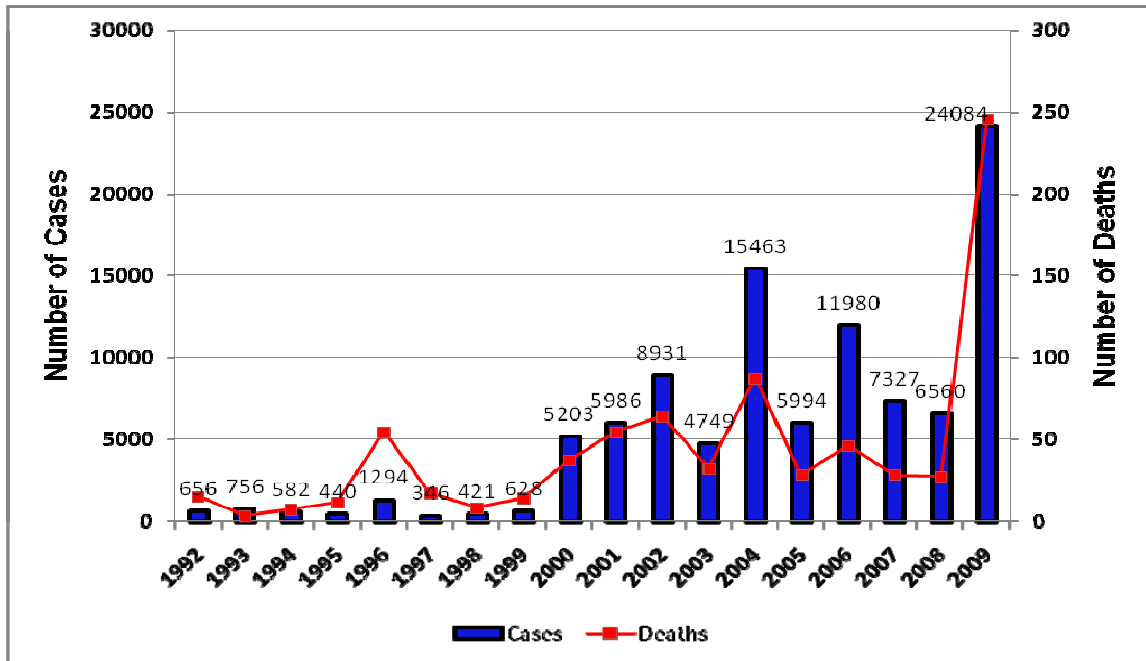
<sup>1</sup> Epidemiological unit, ministry of healthcare and nutrition ([www.epid.gov.lk](http://www.epid.gov.lk))

## The situation

Dengue is one of the most serious mosquito-borne viral infections in the world and is particularly endemic in most tropical countries. In Sri Lanka dengue is a major public health problem and a leading cause of hospitalization and deaths among children, according to WHO. While cyclical epidemics occur in urban areas the disease has now also moved to rural areas in the country with multiple serotypes of the virus in circulation (which could be one reason for a corresponding increase in the cases of DHF).

The number of dengue cases in the Sri Lanka has been on a rise in the past ten years with an average of 5,000 cases and 50 deaths annually (see figure 1).

**Figure 1: Dengue: Trends since 1992. (cases for 2009 are as on 25 August 2009)**



Source: Epidemiological unit, ministry of healthcare and nutrition.

The last major epidemic happened in 2004 when more than 15,000 cases and 88 deaths occurred. This year the morbidity and mortality due to dengue have been significantly higher than in the previous years, with 24,084 cases and 245 deaths (up until 25 August 2009). The case fatality ratio (CFR) of 1% is double that for the year 2004, indicating a more virulent nature of the infection this year. In addition, in 2009 there have been over 3,130 cases of DHF with 30 deaths in Colombo district (as of August)<sup>2</sup>.

A recent study has found that the distribution of dengue cases in Sri Lanka was closely associated with the post rainfall period. The incidence was lower during heavy rainfall period and increased after a lag of three to four weeks once the rainfall started to decrease<sup>3</sup>. Generally speaking, the peak number of DHF cases occur in June/July following the south-western monsoon and a second peak happens towards the end of the year after the north-eastern monsoon in October/November.

With the number of cases continuing to remain high after the summer monsoon, the ministry of health is taking steps to address the situation. There are fears that the epidemic will intensify further towards end of the year, with the arrival of the winter monsoon. In fact the government has already issued a warning to this effect through the national media. The situation is serious and demands urgent action by all stakeholders. The Sri Lanka Red Cross Society (SLRCS) seeks to work with the government in addressing the problem.

<sup>2</sup> Epidemiological unit, ministry of healthcare and nutrition ([www.epid.gov.lk](http://www.epid.gov.lk))

<sup>3</sup> Sumith Pathirana et al. Study of potential risk of dengue disease outbreak in Sri Lanka using GIS and statistical modeling. Journal of Rural and Tropical Public Health, 2009 Volume 8.

SLRCS has identified 12 district branches for the interventions, based on two criteria – the burden of disease in terms of the number of reported cases and deaths (with high risk areas as identified by the ministry of health); and, the presence of SLRCS branch disaster response teams (BDRT) in the district. Thus, the identified districts include: Keaglle, Kandy, Colombo district (including two branches), Kurunegala, Rathnapura, Matale, Kalutara, Hambantota, Batticaloa, Matara and Anuradhapura.

An estimated 300,000 people will be reached through dengue prevention and control interventions.

## Coordination and partnerships

The International Federation country office will coordinate with the partner national societies already working in the identified districts and discuss modalities of integrating dengue control interventions in their ongoing projects. The main partner national societies involved in the identified districts include the American Red Cross, Canadian Red Cross, German Red Cross and Norwegian Red Cross. Most of their respective projects cover a certain number of divisions in each district (not the entire district); SLRCS will aim to expand its outreach by taking on additional divisions in these districts while working with the partners.

The International Federation will also support SLRCS in linking up with local health authorities in these districts to identify modalities of working together and support the government district action plan. Corroborating the information coming from media, government and local branches, the main gaps in addressing dengue epidemic include lack of awareness among the people and poor environmental sanitation in several places including improper waste disposal. The national society will build branch capacity as part of the response operation, to better support local authorities in dengue control measures.

## Red Cross and Red Crescent action

The SLRCS health unit will train 25 branch disaster response team (BDRT) members on dengue and its prevention and control, in each selected district<sup>4</sup>. These trained BDRT members will then train at least 100 community volunteers in each district on dengue prevention. They will also support the work of local health authorities, particularly in surveillance activities. The branches will also conduct a rapid assessment of the situation and population needs in their respective catchment areas, in liaison with the local health authorities.

All volunteers will go to each house and look for mosquito breeding places and take suitable corrective measures, if required, with the support from household members. One volunteer will work two days each week and will cover 25 houses daily. The same batch of houses will be re-examined every other week. In addition, the volunteers will distribute relevant information, education and communication material and take part in local awareness campaigns.

A total of 1,200 hundred community volunteers will be trained (100 per branch) with each volunteer covering 50 households per week (i.e. 5,000 households by each branch). Thus, 60,000 households will be covered by the 12 branches reaching out to a population of approximately 300,000 people **each week**.

This project will be managed at branch level by the branch executive officer supported by the health project coordinator in the branches. Five leaders per district will be selected amongst the volunteers, to monitor and report on the activities. The branch executive officers will send weekly reports/updates to the health programme officer at the national headquarters. The area public health inspector and other relevant local health authorities shall supervise the ground-level activities.

The main expected results of this operation are:

1. Increased community knowledge on dengue and its spread;
2. Improved sanitation practices in the targeted communities;
3. Improved waste management practices in the targeted communities;
4. Enhanced branch capacity in working with the communities and supporting the local government on dengue control; and
5. Enhanced recognition of SLRCS in the target communities and local government.

Beyond the six-month timeframe of this operation, SLRCS will seek to ensure that the benefits are sustained for a longer time. One major aim of this programme is to mobilize the community through its volunteer activities, and to sustain a capacity of the national society to deliver health programmes. SLRCS branch

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<sup>4</sup> This training will be based on the International Federation community-based health and first aid toolkit and epidemic control for volunteers.

volunteers and autonomous health committees comprising of community volunteers (trained by SLRCS) will be able to continue “good health behaviour” in the communities with limited external technical and financial input to control dengue in those areas.

By integrating the dengue prevention activities with disaster management interventions in the district, the branches can carry them out for a longer time using disaster management resources. Additionally, SLRCS will also work with partner national societies in their respective working areas and seek to integrate dengue prevention interventions as part of their longer-term community-based health projects.

## The needs

The current dengue epidemic is a health emergency that has affected the entire country. There has been a steady rise in the number of cases and deaths due to the disease.

Over the last 15 years there has been a change in age distribution of the dengue fever and DHF cases in the country with a greater number of cases moving from the under-15 age group (1996) to the over-25 year age group (2006). According to the figures given by the ministry of health for 2009, nearly 60% of the reported deaths have occurred in people over-25 years of age and 33% in the under-15 year age group. This would indicate a lack of immunity to a new type of the virus subtype (amongst the prevailing serotypes) in the general population.

While reaching out to the target population, it will be ensured that all age groups are covered with equitable gender distribution. The focus will be on involving young adults and school-going children as part of the interventions. BDRTs usually comprise of young adult members and the selection of community volunteers will also reflect a higher proportion of young adults.

At least two schools will be identified in each target high risk area in a district and involved in environmental sanitation and dengue awareness interventions. The number of schools selected will depend on the total available schools in the area identified as high risk during the assessment period. Therefore, the final figure will only be known once the assessments are complete in each district.

## The proposed operation

### **Community awareness and capacity building on responding to dengue**

**Objective: Build community resilience and capacity, through training and awareness campaigns reaching out to at least 300,000 people.**

#### **Activities planned:**

- Conduct rapid needs and capacity assessments in the targeted communities and develop plan of action<sup>5</sup>.
- Identify and train 100 community volunteers in each of the 12 branch catchment areas (1,200 overall)
- Conduct waste disposal drives in the community.
- Print and distribute information, education and communication material on dengue prevention and environment sanitation.
- Conduct house-to-house visits and identify fever cases and mosquito breeding sites.

### **Build branch capacity and strengthen partnership with government**

**Objective: Strengthened branch capacity in responding to dengue (and other epidemics) and its ability to support the local government in responding to health emergencies.**

#### **Activities planned:**

- Convene BDRT members at the branch headquarters.
- Procure appropriate Red Cross visibility material for the volunteers and staff<sup>6</sup>.
- Conduct training-of-trainers for 25 BDRT members in each district (300 overall) and staff members on epidemic control, with a focus on dengue.
- Procure and pre-position fogging equipment with all branches and utilize them jointly with local health authorities.

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<sup>5</sup> Target communities will be identified in areas identified as high risk by the ministry of health in the selected districts.

<sup>6</sup> The materials include a Red Cross cap for each volunteer, and a small Red Cross bag to carry items.

- Conduct meetings with local government officials and work on a joint plan of action.
- Notify the local authorities of fever cases and mosquito breeding sites.
- Conduct review meeting after six months jointly with the national headquarters team and partners.
- Prepare monthly reports.
- Develop an exit strategy with all the relevant partners.

## How we work

*All International Federation assistance seeks to adhere to the [Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations \(NGOs\) in Disaster Relief](#) and is committed to the [Humanitarian Charter and Minimum Standards in Disaster Response \(Sphere\)](#) in delivering assistance to the most vulnerable.*

The International Federation's activities are aligned with its Global Agenda, which sets out four broad goals to meet the Federation's mission to "improve the lives of vulnerable people by mobilizing the power of humanity".

### Global Agenda Goals:

- Reduce the numbers of deaths, injuries and impact from disasters.
- Reduce the number of deaths, illnesses and impact from diseases and public health emergencies.
- Increase local community, civil society and Red Cross Red Crescent capacity to address the most urgent situations of vulnerability.
- Reduce intolerance, discrimination and social exclusion and promote respect for diversity and human dignity.

## Contact information

### For further information specifically related to this operation please contact:

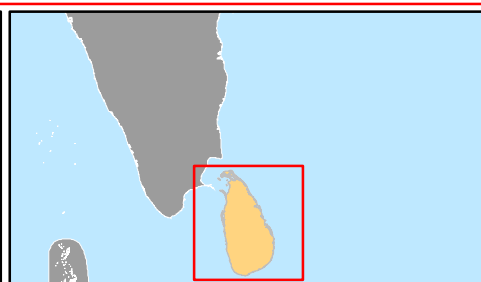
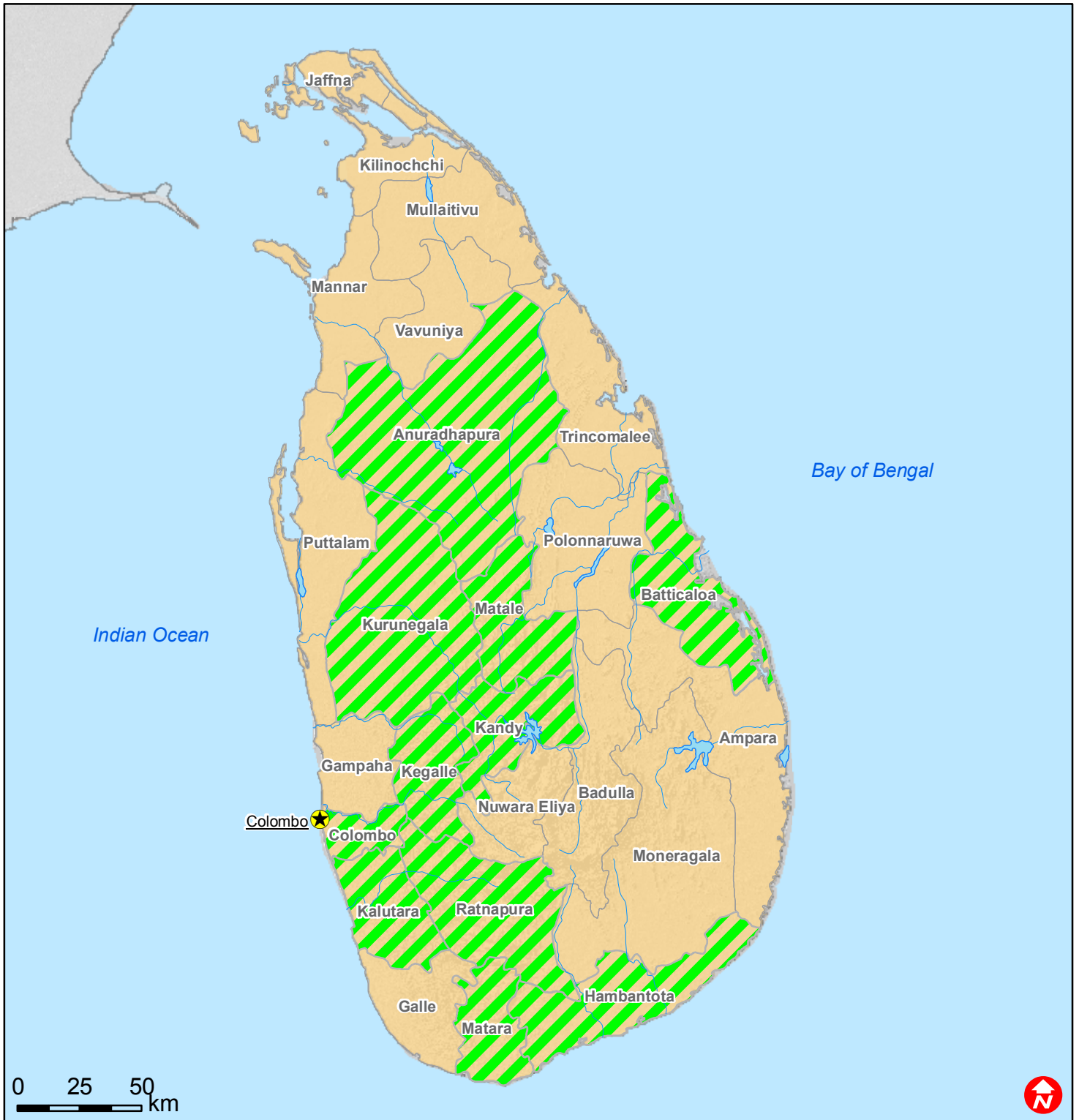
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  - Resource mobilization & planning, monitoring, evaluation and reporting (PMER) unit: Ms. Penny Elghady (resource mobilization & PMER coordinator), email: [penny.elghady@ifrc.org](mailto:penny.elghady@ifrc.org), phone: +603 9207 5771

For pledges of funding: [zonerm.asiapacific@ifrc.org](mailto:zonerm.asiapacific@ifrc.org)

[<DREF budget and map below; click here to return to the title page>](#)



# Sri Lanka: Dengue



- ★ Capitals
- Rivers
- Lakes
- Districts
- ▨ Affected areas

## **DREF BUDGET SUMMARY**

Sri Lanka : Dengue Outbreak

Annex 1

MDRLK001

### **RELIEF NEEDS**

Water & Sanitation	25,000
Teaching Materials	14,000
Other Supplies & Services	20,000
<b>Total Relief Needs</b>	<b>59,000</b>

### **TRANSPORT, STORAGE & VEHICLES**

Transport & Vehicles Costs	3,000
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### **PERSONNEL**

National Society Staff	18,600
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### **WORKSHOPS & TRAINING**

Workshops & Training	9,350
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### **GENERAL EXPENSES**

Information & Public Relations	3,000
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### **PROGRAMME SUPPORT**

Programme Support - PSR (6.5% of total)	6,462
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<b>Total Operational Needs</b>	<b>40,412</b>
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<b>Total Appeal Budget (Cash &amp; Kind)</b>	<b>99,412</b>
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Available Resources

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<b>Net Request</b>	<b>99,412</b>
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