

CAMBODIA: DENGUE HAEMORRHAGIC FEVER EPIDEMIC

27 May, 1999

appeal no. 24/98

situation report no. 6 (Final Report)

period covered: 12 August 1998 - 28 February 1999

In a seven month operation the Federation/Cambodian Red Cross (CRC), working closely with the Ministry of Health, helped bring a serious epidemic of dengue fever under control. The operation supplied medicines and insecticides to the health services in 13 affected provinces, promoted public information and preventive health campaigns, and trained 1,000 Red Cross volunteers in containment of the disease. Additional income allowed the programme to be expanded to cover additional needs, and it is proposed that the remaining funds be used to cover institutional development activities and delegation core costs under the 1999 Emergency Appeal.

The context

In 1998, the seasonal outbreak of Dengue Haemorrhagic Fever (DHF) in Cambodia turned into a severe epidemic, stretching from June to October. In the course of the year there were 16,216 recorded cases of DHF and 475 deaths. In August, when the epidemic peaked, 4,434 patients were admitted to hospital, of whom 142 died.

DHF is spread by the *Aedes Aegypti* mosquito and mainly affects children under the age of 14. There is no known vaccine. Preventive measures are the most effective way of controlling epidemics. The disease has become one of the worst and most complex public health problems in Cambodia. It has always been prevalent among the poorest urban population but last year it spread to previously untouched areas as well as into more rural areas.

The Federation Appeal, launched 12 August, sought funds to assist the Cambodia Red Cross (CRC) with medical supplies and insecticides, public information campaigns, training of volunteers and clean-up campaigns. The operation was originally planned to run until 12 December 1998, but this period was extended to 28 February 1999, in order to complete monitoring activities, and training and

campaign schedules. At first, it was estimated that medical supplies would be required only in the provincial hospitals of five provinces, but as the epidemic spread the distribution area was enlarged to cover 13 provinces and to include district hospitals.

Red Cross/Red Crescent action

Medical Supplies - Procurement and Distribution w

Over 32 MT of medical supplies were procured and airlifted to Cambodia. Reflecting consultations with the MoH/WHO, the bulk of supplies were for intravenous replacement therapy. In addition, drugs to treat DHF shock syndrome, usually fatal, were procured.

The CRC logistics service distributed supplies in September and October to 30 hospitals within the 13 most affected provinces. The MoH/WHO determined quantities and locations for distribution in line with statistical data. There were sufficient supplies to treat immediate cases, replace depleted stocks and build an emergency buffer stock. A monitoring system was put into place in order to track use of supplies against monthly DHF statistics supplied by the MoH/WHO.

Treatment guidelines were distributed with the supplies and during the distribution the MoH/WHO conducted a series of training seminars for medical personnel on correct treatment methods. Blood testing kits to ensure safe blood transfusions were provided to the Kantha Bopha paediatric hospital.

Larvicide and Insecticide w

A total of 16,350 MT of larvicide and 2,000 Lts of insecticide were provided to the MoH and the National Malaria Centre (CNM) for their prevention activities. Red Cross Volunteers (RCVs) assisted in the distribution of larvicide as well as providing health education with the MoH teams during the insecticide spraying. Sufficient stocks of "Abate" larvicide were left over to create an emergency stock.

Community Health Education and Clean-up Campaigns w

In August a nation-wide campaign promoting DHF awareness and preventive measures took place. This campaign was initiated by the Red Cross. Other participants included various Government departments at both national and local level, other agencies and many local communities, as well as Red Cross members, staff and volunteers. The campaign included TV slots, drama and song, distribution of posters and leaflets and neighbourhood clean-up activities. It was given maximum media coverage.

In November and December a second series of campaigns took place in ten provinces lying within the "at risk" sections of the country and where the CRC provincial branches had sufficient capacity to allow for such activities. These provinces were: Battambang, Siem Reap, Banteay Mean Chey, Pursat, Kampong Thom, Kampong Chhnang, Kratie, Kampong Speu, Prey Veng, Takeo and Phnom Penh Municipality. Environmental clean-ups were carried out in public areas by Red Cross youth (RCY) and RCVs, school children and members of the local authorities and other organisations. The events received full TV coverage.

CBFA Training w

During the early 1990s, more than 4,500 Cambodian Red Cross volunteers (RCVs) received CBFA training, but from 1996 onwards training, follow-up and provision of supplies lapsed and it became necessary to update the programme.

Specific modules on both DHF and cholera were added to the standard CRC CBFA curriculum and in October 1998, 500 RCVs in the 10 target provinces received refresher training and were reissued with standard First Aid Kits. In Phnom Penh, 50 volunteers received basic CBFA training and supplies (part funded by programmes related to this Appeal and supported by Japanese and Finnish RC

Societies). In February 1999, a further 500 RCVs (50 per target province) received refresher training and first aid supplies.

The two CRC Development Officers in each of the 10 target provinces received specific DHF training in August 1998. In February 1999, they also took a Training of Trainers course, given through the French Red Cross bilateral programme.

First Aid supplies were purchased locally. They will be sufficient for 1,000 RCVs for the remainder of 1999. A stock maintenance system was put into place as well as a system to monitor the supplies used.

A DHF prevention booklet was produced in the Khmer language by the CRC Programme Department. Ten thousand copies were printed and distributed.

Role of the NS w

In all aspects of the programme the role of the ONS was as partner to the Federation. A nine member DHF task force was set up at the national HQ under the leadership of the first Deputy Secretary General and included personnel from various programme and logistics departments.

A local Emergency Appeal was launched by the CRC concurrently with the Federation Appeal. This raised the equivalent of USD 11,352, which was used directly by the ONS for health promotion purposes.

Through the ONS, speedy customs clearance for imported goods was possible. The logistics service had the knowledge and both the human and material resources to efficiently carry out the distribution of materials. The finance and administration department was able to handle financial matters through a well established system. The Programme Department supervised the planning of campaigns, training and the design and distribution of promotional material.

At the provincial level the key people were the two Development Officers per target province. They were responsible for mobilising RCVs. RCY and the community, liaison with local authorities and agencies, organisation of campaigns, and training of personnel.

Needs Assessment w

A needs assessment was carried out in early August 1998, jointly by the Federation delegation in Cambodia and the ONS, in consultation with the MoH / WHO. It was supported by the Regional Health Co-ordinator and Regional Information delegate. The assessment turned out to be an accurate reflection of the situation and was not revised during the operation.

External relations - Government/UN/NGOs/Media

WHO was the principal partner throughout the operation. Information was exchanged with the other agencies involved (UNICEF, MSF, CESVI, WVI etc.) either informally or through regular meetings co-ordinated by the MoH. At the provincial level there was direct liaison between the CRC and agencies operational in the health sector (i.e. Australian RC, Swiss RC, and many other NGOs).

Working relations with the National Centre for Parasitology, Entomology and Malaria Control (CNM) within the MoH were established from the start of the operation. The CNM is responsible for the national strategy for the control of DHF. All medical matters were carried out in conjunction with the MoH and there was a continuous exchange of information, with them. Relations were also established with the Ministry of Education, Youth and Sport; the links were strongest at the provincial level.

Contributions

The total contributions received amounted to CHF 776,268.06. Whilst the programme was expanded to cover additional needs (based on the extra income), it is proposed that the remaining balance of CHF 108,905.68 be utilised to cover both institutional development activities and delegation core costs that are budgeted under the 1999 Emergency Appeal.

See Annex 1 for details.

Conclusion

The operation was completed on schedule, and the following objectives were met:

- { sufficient medical materials were distributed to ensure full coverage to medical institutions in the target areas;
- { through training and mobilisation of RCVs and RCY, health messages were spread throughout the community of the targeted areas;
- { sufficient quantities larvicide/insecticide were provided to ensure that the MoH could carry out comprehensive intervention activities in areas "at risk";
- { a highly effective nation-wide campaign took place at the onset of the epidemic, so alerting and educating a large part of the population;
- { by mobilising the Red Cross Volunteer and Youth network, a series of environmental clean ups with accompanying health messages were organised, thus ensuring continual DHF prevention awareness.

The objectives were achieved, in no small way, because of the existence of a Red Cross branch network and the dedication of its staff and volunteers, supported by the NHQ. The greatest practical strength of the CRC is its transport and logistics service, enabling distributions to be accomplished in a professional and timely manner.

Difficulties arose however in the management of the programme from the NHQ. Currently the capacity in certain key departments (notably the health department) and interdepartmental co-ordination needs reinforcing. Furthermore, key persons were absent during vital periods of the programme. These and

other issues are currently being addressed through the ongoing Institutional Development process co-ordinated by the Federation country delegation.

The general capacity of the health department caused difficulties in the co-ordination of planning, execution and follow-up of the operation. A initial concern was the ability to satisfactorily monitor the use of medical supplies, however, this was improved with the implementation of a more rigid monitoring system.

Through the execution of this programme it has been possible to introduce a planning process within the Programme Department, reinstate various administrative systems, update first aid techniques and revitalise the RCV programme. The capacity of the CRC has been strengthened to some degree, but much still remains to be done (*please refer to the Federation's Emergency Appeal 1999, programme 01.31/99 for an outline of plans and requirements*).

A major strength has been the excellent co-operation and information sharing between the Federation, the MoH and the WHO. This has ensured that all stages of the operation have been well co-ordinated.

This operation has demonstrated to national authorities and international organisations working in Cambodia that the CRC, in partnership with the Federation, is able to act effectively to combat a severe outbreak of a potentially fatal disease.

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