

# FINAL REPORT



International Federation of Red Cross and Red Crescent Societies  
Fédération internationale des Sociétés de la Croix-Rouge et du Croissant-Rouge  
Federación Internacional de Sociedades de la Cruz Roja y de la Media Luna Roja  
الاتحاد الدولي لجمعيات الصليب الأحمر والهلال الأحمر

## CAMBODIA FLOODS 2000

3 January 2002

***This Final Report is intended for reporting on emergency appeals***

*Appeal No. 22/2000*

*Launched on: 12 September 2000 until 12 August 2001 for CHF 5,952,281*

*Beneficiaries: 500,000*

*Final Report*

### *“At a glance”*

*Appeal coverage: 84.1%*

*Related Appeals 01.31/2002 Cambodia*

*The Disaster/Situation The Cambodian Red Cross, with Federation support, reacted efficiently and effectively to the floods of 2000, providing much needed support to vulnerable people. Donor response was also good. A major evaluation of the operation has taken place and provides valuable lessons for the future, which is important as flooding is a persistent threat in the Mekong delta.*

### ***The Context***

In mid-July 2000, Cambodia was swept by early monsoon rains. This was followed by another wave of rain in late August-early September, which caused massive and prolonged flooding throughout the country. 21 of 24 provinces and municipalities were impacted by torrential downpours, swollen streams and rivers and flash flooding. The Bassac and Tonle Sap rivers around Phnom Penh were well above emergency levels from September to the end of October. The Royal Government of Cambodia (RGC) took effective measures to support the 40-year old dyke protecting Phnom Penh and thus the capital city was saved from serious flood damage.

The RGC stated that these floods were the worst in more than 70 years and caused damage to infrastructure and livestock, population displacement, food shortages and disease. A report, compiled by the National Committee for Disaster Management (NCDM) on 16 November 2000, put the death toll at 347 (80 percent of whom were children). Of the 750,618 families (3,448,629 individuals - over 25 % of the population), affected by flooding, about 85,000 families (387,000 individuals) were temporarily evacuated from their homes to safe areas.

Formal statistics of the Royal Government of Cambodia (RGC) state:

- Rice crop destroyed 374,107 ha
- Other crops destroyed 47,461 ha
- 988 schools affected (7,000 classrooms damaged)
- 158 health centres and hospitals damaged
- 317,975 houses were damaged
- 7,086 houses destroyed
- 2,621 km of national and provincial roads affected
- 1,500 km of secondary roads affected
- 115 bridges and culverts affected (3,025 m).

Based on the NCDM report, the Council of Ministers estimated the total physical and direct damage at US\$ 157-161 million.

The 2000 floods affected all four countries in the Mekong River Basin - Cambodia, Lao PDR, Thailand and Vietnam. According to the Mekong River Commission however, Cambodia suffered the most severe effects of the floods with 43% of the total number of deaths recorded and 40% of the estimated damage.

### ***The Federation Appeal***

The RGC effectively responded to the primary needs of the affected population but appealed to the international and national community to assist them in emergency response, recovery and rehabilitation. The Cambodian Red Cross (CRC), as the main partner to the RGC for emergency response, launched a local emergency appeal in July before requesting that the Federation launch an international appeal in September.

The Federation appealed for emergency relief supplies to assist 100,000 families (500,000 people) to cope and recover from the devastation. Items enunciated in the appeal included:

- 21-item emergency household kits comprising clothes, mosquito nets, hygiene and water and sanitation supplies, tools, cooking utensils, etc.
- Heavy duty plastic sheeting to be used as temporary shelter, repair and rebuilding of homes and protection of household possessions and livestock feed
- Metal water buckets for water purification while distributing aluminium sulphate and chloramine tablets and plastic Jerry cans for clean water storage
- Materials to accompany health education campaigns.

The appeal was revised twice during the operational period to better respond to the increasing number of affected people and their changing needs.

### ***Health Context***

The health situation following the floods was precarious. The overcrowded and unsanitary conditions in safe areas raised fears of major waterborne epidemics, such as cholera or acute diarrhoea. Fortunately preventative health measures and provision of water purification helped to avert a health crisis.

The Ministry of Health (MoH) took responsibility for the quality of water supplied in the initial emergency phase, with the Ministry of Rural Development (MRD) taking responsibility for the rehabilitation of fixed water points in the community.

In the post-emergency phase the focus was on preventative health activities; specifically water and sanitation, the prevention of flood associated diseases and health education to affected populations.

### **Objectives**

The following six main objectives were defined for the Red Cross flood operation:

- Objective 1:** Continue to provide immediate assistance to flood victims with further distributions of emergency food, clothing, soap, alum, oral rehydration salts (ORS) and estimated 5,000 household kits.
- Objective 2:** Improve Federation/CRC's implementation and monitoring capacity by recruiting of water and sanitation delegate, new health-in-emergency monitoring officer and other essential staff.
- Objective 3:** Minimise the risk of the wide scale spread of infectious diseases particularly diarrhoeal and vector borne diseases by giving health education, soap, ORS and improving hygiene and sanitation facilities in safe areas for both short and long term benefits.
- Objective 4:** Strengthen or establish a network of Red Cross Volunteer Leaders (RCVLs), Red Cross Volunteers (RCVs) in the affected areas by training 200 new RCVs in four provinces (50 RCVs/each in Koh Kong, Preah Vihear, Stung Treng and Svay Rieng) and by giving refresher training to 2,000 existing RCVs and MoH field workers in hygiene and use of ORS and to disseminate health, hygiene and preparedness information.
- Objective 5:** Strengthen or establish a network Red Cross Youth (RCY) in four affected provinces by training 52 new Red Cross Youth Advisors (RCYAs) and 1,200 RCY members in 24 schools in four provinces (Odtar Mean Chey, Stung Treng, Svay Rieng and Koh Kong) to disseminate health, hygiene and preparedness information.
- Objective 6:** Provide long term assistance with provision of clean water, and with the MoH and through the RCV and RCY network, provide mosquito nets and insecticide, vitamin A, deworming, and health education.

## ***Red Cross/Red Crescent action***

The Cambodian Red Cross responded to the needs of some 470,000 families. Many required assistance, especially food aid, for several months due to the prolonged period of flooding and high waters. Food aid was therefore distributed several times.

A total number of beneficiaries originally planned for this operation was 100,000 families (500,000 people) but due to the revised budget we were able to reach more beneficiaries than planned:

- Essential relief items: max 500,000 beneficiaries
- Water and sanitation activities: max 154,000 beneficiaries
- Health and related activities: max 3.4 million beneficiaries

Progress against the objectives defined in the Federation emergency appeal was as follows:

### **1. Emergency Relief**

**Objective 1:** *Continue to provide immediate assistance to flood victims with further distributions of emergency food, clothing, soap, plastic sheets (shelter material), ORS and some 5,000 household kits*

### *1.1 Assessments to identify the needs and beneficiaries*

Joint assessment teams comprised members of Provincial Committees for Disaster Management (PCDM), CRC PRC staff and Red Cross volunteers. These teams were supplemented by CRC Disaster Management Department (DMD) staff from headquarters. At the provincial level, teams were dispatched to the worst affected districts, communes and villages to determine the impact of flooding and immediate emergency needs of victims and prioritise the most vulnerable by predetermined criteria. The selection criteria prioritises the following for emergency assistance by CRC:

1. Unaccompanied elderly with no means of support.
2. Handicapped with no means of support.
3. Chronically ill with no means of support.
4. Single female head of household with dependent children.
5. Families whose main income earner has been injured or killed by flood.
6. Families who have depleted their food reserves and have little or no income.
7. Families suffering serious economic disruption due to flooding (loss of income).
8. Families who have lost significant amounts of personal possessions due to flood.
9. Families who have been evacuees due to flooding for a significant time.
10. Others based on individual circumstances.

Village and commune chiefs were the primary source of information on the number of families affected and their locations. Through a process of participatory interviews and information gathering with families, village residents, village elders and leaders, the needs as well as who were the most vulnerable were identified.

Due to the scale of the flood the assessment process required multilevel participation taking into consideration genuine needs of individuals and families widely dispersed, those at evacuation and safe areas, several families living together to share resources, families and villages cut off by flood waters refusing to evacuate. These and other situations required input and information from several sources to determine and accurately verify needs and beneficiaries.

### *1.2 Procurement Procedures*

The CRC and Delegation in Cambodia follow Federation global procurement procedures.

### *1.3 Registration of beneficiaries and preparations for the distribution*

The registration of beneficiaries was based on the assessment findings. The CRC registration team co-ordinated with local authorities and handed over distribution ration cards to each beneficiary family a few days before a distribution took place. A full set of the household kit beneficiary lists with thumb prints is available at the Federation Delegation.

### *1.4 Relief distributions*

CRC commenced relief distributions on 21 July, at the onset of the flooding with stocks pre-positioned in their central warehouse and Red Cross provincial offices (3,000 household kits). CRC distributions, funded and supported by various donors, included assistance to some 500'000 families (or 2.5 million people). The table below shows the items purchased, transported and distributed with the Federation assistance under this appeal:

<b>No.</b>	<b>Relief Items</b>	<b>Unit</b>	<b>Total Distributed</b>
1	Household Kits (21 items)	kit	13,000
2	Plastic Sheets (3.50 m X 4.5 m)	sheet	30,000

3	Metal Water Buckets (15 litres)	bucket	20,000
4	Plastic Jerry Cans (20 litres)	Jerry can	5,000
5	Soap (8 pieces/family)	piece	800,000
6	Powder Soap	kg	100,000
7	Water Container (10 litres)	container	3,200
8	Mosquito Nets (impregnated)	mosquito net	20,000
9	Shoes	pair	10,000
10	Hammock	piece	10,000
11	Rice	metric tonne	75
12	Krama	piece	3,000
13	Sarong	piece	3,000

## 2. Water and Sanitation

The water and sanitation component of the Federation flood appeal had the following three aims through the objectives stated below:

1. Respond to the short term immediate water supply needs
2. Rehabilitation of affected water points through a co-ordinated approach with other organisations and agencies
3. Development of permanent water and sanitation facilities in key safe areas.

**Objective 2:** *Minimise the risk of the wide-scale spread of infectious diseases, particularly diarrhoea and vector borne disease, by giving health education, supplying soap and ORS and improving hygiene and sanitation facilities in safe areas for both short and long term benefits.*

**Activity 1:** *To assist the Provincial Health Department to maximise access to safe drinking water through a co-ordinated approach with other agencies.*

**Activity 2:** *To support the Provincial Department of Rural Development (PDRD) in improving sanitation in temporary safe areas.*

**Activity 3:** *To assist the PDRD in undertaking the rehabilitation and repair of affected water points in a co-ordinated approach with other agencies.*

**Activity 4:** *To assist the PDRD to develop permanent water and sanitation facilities in key safe areas.*

### 2.1 Aluminium sulphate and water purification tablets

135 metric tonne (MT) of aluminium sulphate (Alum) and 15 million water purification tablets (Chloramine) were procured, packed, transported and distributed to 300'000 families (approximately 1'500'000 people) in the 13 worst affected provinces. This was done in partnership with the Cambodian Red Cross and the Ministry of Health as part of the post-flood rehabilitation phase. The distribution included education sessions to the community on the correct use of Alum and Chloramine. Information, education and communication (IEC) materials were developed, field tested and made available to the community. Suitable water containers such as 5,000 x 20 litre Jerry cans, 3,200 x 10 litre water containers and 20,000 x 20 litre metal buckets were distributed to the families who did not have appropriate storage facilities for safe drinking water.

Where appropriate, the distribution of Alum and Chloramine was combined with the distribution of Vitamin A and Oral Rehydration Salts (ORS).

## 2.2 *Static water tanks*

During the initial emergency phase, clean drinking water was distributed using 20 x 3,000 litre static water tanks. The tanks were positioned for 31 days on Road No 5 and 41 days on Road No 6A. A total of 1,160,000 litres of water were distributed to the community benefiting over 11,000 people. Five of the water tanks were then installed in schools and a health centre in Kandal province to be utilised in future emergencies. The remaining tanks were either pre-positioned to selected provinces or kept at the CRC warehouse to be used as emergency response materials during the next disaster.

## 2.3 *Construction of water points and latrines in 44 safe areas*

The provincial Red Cross Branches were requested to select safe areas in co-operation with the local authorities and community members based on the flood 2000 evacuation process. A plan was developed to establish water and sanitation facilities in 44 safe areas in 8 provinces:

- 45 water points constructed
- 4 new hand pump wells drilled
- 149 latrines constructed
- 2 elevated and bridged water points constructed along road side
- 3 x 3,000 litre water tanks deployed in one of the safe areas which does not have water source for drilling hand pump well
- 385 hygiene education sessions conducted by 96 RCVs; 23,806 attended the sessions
- 3,000 posters on the use of latrines developed, field tested and printed; 2,350 posters distributed to safe areas and other community latrines; 650 posters kept at the CRC central warehouse for future use .

A total of 96 RCVs (2 RCVs/safe area) were assigned to safe areas to co-ordinate and monitor water and sanitation activities. RCVs gained experience in hygiene education during the rehabilitation of water points and were able to conduct the hygiene education sessions in safe areas by themselves.

Finally a committee for a water and sanitation facility management and maintenance were set up by RCVs for each safe area. These committees include the head monk, the village chief, the commune chief and RCVs. Since most of the safe areas are in temples (pagodas), the head monk is the leader of the committee.

It is estimated that some 13,000 families (68,000 people) will benefit from this activity during the next disaster.

## 2.4 *Water point rehabilitation in 8 provinces*

Provinces	Planned Repair by Red Cross	Number of water points repaired	Number of Hygiene Awareness sessions conducted
Svay Rieng	281	293	253
Kandal	145	311	90
Kg Cham	120	141	45
Kg Chhnang	310	306	72
Kg Thom	90	138	139
Pursat	290	375	380
Prey Veng	160	541	175
Takeo	240	258	258
<b>Total</b>	<b>1'636</b>	<b>2'363</b>	<b>1'412</b>

Following a detailed water supply assessment, provincial implementation plans were developed for the rehabilitation of community wells once the flood waters receded. The Ministry of Rural Development utilised the technical expertise of Provincial Departments of Rural Development (PDRD), the authority responsible for rural community water supplies, and the resources of Provincial Red Cross branches.

This co-ordinated approach was implemented through regular meetings at the MRD and will agreement on:

- Standards for cleaning and disinfecting water points
- Production of IEC material for hygiene education
- Development of implementation matrix showing water point rehabilitation and coverage area by agency.

This approach targeted community water points in 8 provinces, identified by CRC as areas most affected by flooding and where there was minimal support for water and sanitation activities by other organisations.

The communities, including Red Cross Volunteers (RCVs), were involved in all aspects of the rehabilitation work, from water point identification to the actual rehabilitation/repair. This has provided the skills and a sustainable mechanism within communities to carry out similar work in the future. Twenty five RCVs were also involved in a full damage assessment of community infrastructure focusing on safe water and sanitation needs of the worst affected communities.

Initial estimates from the MRD estimated the number of damaged water points at over 21,000. These figures included private and community water points. An agency support matrix showed that only an estimated 25% of the water points were rehabilitated.

### *2.5 Hygiene education for the community members*

Hygiene awareness education sessions were conducted to communities prior to the rehabilitation of the water points. Forty six RCVs were involved in the hygiene education sessions together with the PRC and PDRD staff.

## **3. Health**

***Objective 3:** Provide assistance with the provision of clean water, and in co-operation with the Ministry of Health, through the Red Cross volunteers and Red Cross youth network, provide mosquito nets and insecticide, Vitamin A/ORS, de-worming tablets and health education.*

The health situation in the affected provinces remained stable throughout the disaster with no major epidemics reported. Regular monitoring visits confirmed that the main problems were diarrhoea in under-5s, scabies and typhoid in some areas. The biggest health issue throughout the post-rehabilitation phase was food security.

Monitoring visits by Red Cross contributed to strengthening the local co-operation between the CRC and MoH, and enabled the identification of any problems that were barriers to successful implementation. The monitoring also included, where possible, site visits to villages that received distributions of both Vitamin A/ORS and alum/chloramine. Informal interviews with beneficiaries were carried out to ensure that the essential health education messages were given and understood, and that the planned items were received. As this joint collaboration was a new initiative for all stakeholders, it was crucial to identify any problems and look for creative solutions.

### *3.1 Vitamin A and ORS*

Vitamin A and ORS distributions were conducted in 11 provinces in cooperation with the health authorities. Ministry of Health stocks were utilized for the Vit-A and ORS distributions and over 130'000 children received Vit-A and over 100,000 families were given ORS as part of the distribution schedule.

A formal debriefing workshop was conducted for the National Mobile Teams who were responsible for training distribution teams at the provincial level. The workshop was organised by the CRC health sub-department and attended by representatives of the MoH. It provided very useful feedback as to the strengths and weaknesses of the planning and training process. Specific recommendations were then made that could assist in and improve any future emergency response.

### 3.2 *Malaria*

In response to requests from the Ministry of Health/National Malaria Centre (NMC), the Federation provided additional supplies of anti-malaria drug treatments and impregnated bednets to address the high incidence of malaria in the post-flood phase.

A total of 1 million units of artesunate, together with 30,000 bednets and 2,400l of permethrin was provided to the NMC for malaria prevention and treatment efforts through their National Malaria Control programme.

### 3.3 *Intestinal Parasite (deworming)*

In response to advice from the NMC and UNICEF, the Federation and CRC provided 1 million unit of additional anti-parasite drugs (mebendazole) to the national deworming program supplementing existing stocks in national schools in Takeo, Kampot, Kompong Speu, Svay Rieng, Kompong Cham, Kratie and Stung Treng.

### 3.4 *Dengue Haemorrhagic Fever (DHF)*

In response to requests from the World Health Organisation (WHO) and the MoH, the Federation signed a Memorandum of Understanding with the MoH to provide financial support for a nationwide larvacide distribution at the household level in the fight against DHF. An outbreak of DHF was expected to peak in May-June 2001. An estimated 3.4 million people in 15 provinces (or 38 districts) benefited from this massive abate distribution from 30 April to 13 May when 703,269 households were reached through this activity.

Prior to the abate distribution, the CRC/Federation in cooperation with the MoH/National Malaria Centre and WHO, conducted health education and clean up campaigns in 11 Provinces through provincial Red Cross staff, volunteer and youth networks. IEC material on DHF prevention were used to disseminate health messages amongst the target population. Community members, authorities, NGOs and the general public participated in practical and visible clean up campaigns which demonstrated cleaning of water containers, home environment and public sites for prevention of mosquito breeding.

## 4. Capacity building efforts through an emergency

**Objective 4:** *Improve the CRC's implementation and monitoring capacity through the recruitment of a water and sanitation delegate, a health-in-emergency monitoring officer (HEMO) and other essential staff.*

### 4.1 *Health Sub-department*

Throughout the operation, the Federation supported the CRC health sub-department to strengthen its capacity to manage health emergency issues. A Federation Water and Sanitation delegate and an Emergency Health delegate were recruited to provide essential support to the CRC national headquarters and provincial counterparts. A CRC Health Emergencies Monitoring Officer (HEMO) was appointed during the operation and is now an integral part of the Health Sub-department. Towards the end of the rehabilitation phase, the CRC was able to rehabilitate water points in some provinces in co-operation with the Ministry of Rural Development without Federation support.

**Objective 5:** *Strengthen or establish networks of Red Cross volunteer leaders and Red Cross volunteers in the affected areas by training a total of 200 new volunteers in four provinces (Koh Kong, Preah Vihear, Stung Treng and Svay Rieng), and by giving refresher training to 2,000 existing volunteers and Ministry of Health field workers in hygiene and use of ORS and to disseminate health, hygiene and preparedness information.*

#### 4.2 Red Cross Volunteers

Insufficient funds available.

**Objective 6:** *Strengthen or establish a network of Red Cross youth in four affected provinces by training 52 new Red Cross youth advisors and 1'200 Red Cross youth members in 24 schools in four provinces (Odtar Mean Chey, Stung Treng, Svay Rieng, Koh Kong).*

#### 4.3 Red Cross Youth

Insufficient funds available.

### **Monitoring and reporting of the flood operation**

#### *Federation and CRC headquarters presence in the field*

At the onset of the emergency, the CRC put into effect standard reporting procedures to gather information, analyse, develop action plans and implement relief and recovery activities. The Federation, through its delegates and staff, supported and assisted CRC in a participatory process of monitoring and evaluating the ongoing operation.

The Federation's Disaster Preparedness (DP) Co-ordinator actively took part in the assessment and relief process at the *field level* in the worst affected Provinces (Kompong Cham, Prey Veng and Kandal) to observe and monitor the assessment, verification and distribution process. Working with provincial, local officials and CRC staff, the DP Co-ordinator travelled to isolated villages, safe areas and interviewed victims to determine the viability of initiated monitoring procedures and verify accuracy of information and reports.

Detailed planning and relief activity reports were compiled by CRC and the Federation and widely distributed to RGC, IOs, NGOs and others on a routine basis, especially through Emergency Response Group meetings.

Circumstances proved a challenge where monitoring was concerned; whole communes evacuating, locating victims, identifying safe areas, & addressing the immediate emergency needs of victims hampered the whole process of gathering information, receiving accurate and timely reports and monitoring activities. Ingenuity, creativity and flexibility was required to adapt and respond to the ever changing situation.

Many donor representatives took part in CRC distributions. Federation delegates travelled extensively in the field and monitored the Red Cross assistance, not only during relief distribution but also during development project field visits.

#### *Lessons Learned workshops and Regional Emergency Response Lessons Learnt Study of Mekong Flood 2000 response.*

As an organizational system striving for learning and professional development, the International Federation Southeast Asia needs to note the factors that contributed to the success and likewise address the issues from the flood operations. For these reasons several lesson learning sessions took place within the Federation Delegation and the CRC during the operation. Experiences, findings and recommendations of these workshops were summarized through the *Federation Regional Emergency*

*Response Lessons Learnt Study* that took place in July 2001 in three countries that launched an emergency appeal (Cambodia, Lao PDR and Vietnam).

This participatory lessons learnt study aimed at stimulating the process of knowledge and experience sharing among the National Societies in the region and can be noted to be an important step for practical cooperation of experience sharing in flood preparedness and emergency response in the Lower Mekong River Basin countries of Cambodia, Lao PDR and Vietnam. The text below summarizes the major findings and recommendations identified in relation to the Cambodia flood operation through the Federation Mekong Flood 2000 Emergency Response Lessons Learnt Study through six guiding questions:

QUESTION 1: *How well did the National Societies and Federation country delegations follow the path of an objective needs assessment?*

RECOMMENDATIONS: Improve capacity in damage & needs assessment and relief assistance planning through:

1. Direct participation and support to capacity building of government's national and local disaster management coordination offices (roles and responsibilities, damage and needs assessment data gathering and reporting system, standardization of information management system, local and national coordination mechanism).
2. Formation, organisation & training of in-country assessment teams: Red Cross level (inter-departmental) and inter-sectoral/ interagency level.
3. Continue to institutionalize "management team" within the National Society, & with support of Delegation and PNS in country to enhance ability to plan and coordinate relief assistance.

QUESTION 2: *How well did each relief programme seek to address the most critical unmet needs as defined within the Sphere standards? What is the scope for improving the ability of the National Societies (NSs) and the Delegations to meet Sphere standards?*

RECOMMENDATIONS: Improvement of ability of the National Society to meet the most critical needs as defined within the SPHERE Standards through:

1. Formation of a management mechanism within the National Society to develop an institutional plan on how Project SPHERE Standards are to be applied.
2. Dissemination and training of key personnel within the National Society on Project SPHERE
3. Management monitoring and review of compliance to Standards.
4. Incentives scheme for those who have achieved satisfactory level of compliance.

Improvement of the management & infrastructure of the National Society in:

1. Assessment, logistics management, coordination, management information system through assistance in training and additional capital expenditures in telecommunications, computers, warehousing and transportation.
2. Financial management and resource mobilization.

QUESTION 3: *Was each operation timely in its initiation and in its various revisions as the flood threat and response operations evolved? How could this timeliness be improved upon?*

## RECOMMENDATION:

Special attention is needed to improve the capacity of the CRC in emergency health, water and sanitation interventions when they are required.

QUESTION 4: *In what ways did the relief programmes add to long-term capacities of the NSs and how could this developmental objective be improved upon in the future?*

Common to all three countries, the National Societies and the Federation have set a target to: strengthen the national and local disaster preparedness and response capacity enabling them to reduce loss of life and loss of livelihood from the most frequent disasters. This development goal had been a programme priority prior to the flood and again given emphasis in National Societies and Federation plans of 2001-2002.

In Cambodia, the relief programme clearly added to long term capacities of the NS through:

- i. Increasing the Profile and Credibility of the National Society
- ii. Promoting the Culture of Volunteerism in the Country
- iii. Improving co-ordination and co-operation to be successful in disaster preparedness and response

The desire for further improvements of NS capacities were also cited related to the following:

1. Strengthening capacities of the Red Cross Volunteers in order to become active individuals in community based disaster preparedness and response. The geographical scope and magnitude of the flood exposed the fact that RC volunteers' coverage, quantity and capacity in disaster response were not adequate.
2. Preparing action plans especially emergency responses during the flood. In this context, respondents believe that emergency health, water and sanitation need special attention. Additionally, the current guidelines for disaster response need to be expanded to develop a comprehensive national relief plan or a "master plan". This prioritises; strengthening capacities in collecting and sharing information in an effective and timely manner and the strengthening of the Management Committee as a mechanism for analysis, decision making and co-ordination of various Departments of CRC.
3. Strengthening the financial management systems of CRC. Along with other organisational development objectives, CRC must be continuously assisted to improve on this. This includes:
  - i. elevating their capacity to move from "activity based" to monthly based budgeting and expenditures
  - ii. developing a written financial procedures and manual
  - iii. standardising financial systems at all levels
  - iv. extensive use of banking system.
4. Proper assessment of needs of CRC, selection and timeliness of assignment of Federation Delegate. The magnitude of the flood was so huge that there was a "heavy toll" on human resources of the Delegation. Lessons learned included the importance of the timely arrival of the WatSan Delegate and the need for Federation support to logistics management indicating a need for a Logistics Delegate.

QUESTION 5:

### How well did each programme co-ordinate with the National Government Response Plan?

The nature of capacities of national and provincial government in disaster management varies widely from one country to another and this reflects on the effectiveness of co-ordination between the National Societies/Federation and the national government focal points.

In Cambodia, based on the actual work done by the Royal Government of Cambodia's National Committee for Disaster Management (NCDM) during the flood of 2000, the Report of the Capability and Capacity of NCDM stated that there was a significant difference between the official mandate of NCDM and the actual actions performed. Article 4 of Sub Decree no. 54 on the Modification of the Organisation and Functioning of NCDM lists the roles and responsibilities of the national and inter-ministerial co-ordinating body. No verbal discussion or written report indicates that this role was exercised and no formal inter-ministerial meeting was convened during the flood of 2000. On the other hand, the involvement of the Prime Minister, acting in his capacity as the President of NCDM was the most critical "co-ordinating" function at the highest level of the RGC Ministries. The involvement of the Prime Minister and his designation of a Senior Minister at NCDM were cited as very timely and appropriate policy decision. The Report further commented that the roles and responsibilities of National level Ministries have to be further reviewed to address the following issues:

1. There are some Ministries who should be included in the NCDM. They are the Ministry of Health and Ministry of Environment. The role of the Ministry of Health in preventing impacts to the health of the population and their important responsibility over emergency health was also stated as an important concern. Additionally, the report noted the need to include the National Mekong River Commission at NCDM who has been involved in flood management and mitigation (such as early warning) in the riparian countries.
2. The draft National Disaster Management Policy was first written in 1997 and had undergone two additional revisions. However, the Policy is yet to be approved by the RGC.
3. Because the Policy is not officially approved and not disseminated, NCDM Secretariat is severely constrained to perform its mandate to:
  - i. Provide recommendations to the (NCDM) regarding the declaration on an emergency in devastated areas at the national level as well as the declaration of an emergency by Governors at provincial/Municipal levels;
  - ii. Develop guidelines on emergency preparedness, emergency operations, prevention and mitigation measures, and proposals for rehabilitation projects to be submitted to the NCDM for approval and implementation;
  - iii. Co-ordinate efforts with institutions and organisations and the Cambodian Red Cross in order to enhance assistance in terms of evacuation, provision of a safe haven, security, establishing a public awareness program with regard to disaster preparedness, and preparing other programs;

The capacity of NCDM is elaborated in this Mekong Flood Study because this issue has significant impact to the perceived and actual role of the Cambodian Red Cross and the Federation in disaster management in this country. CRC, had thus worked so far in a situation where no government response plan exists and had in fact assumed the traditional leadership role in disaster management in the country.

The Cambodian Red Cross is officially recognised by the Royal Government of Cambodia as an independent voluntary aid society, auxiliary to public authorities in the humanitarian field, in accordance with the Geneva Convention. CRC also plays a very important role in RGC's National Committee for Disaster Management as embodied in Government Sub-decree No. 54, which

describes the roles and responsibilities of RGC's Ministries. It is deeply involved in national level co-ordination emergency response mechanisms such as the Emergency Response Group which they share the chair with NCDM. Recently, CRC was a major player in the assessment of NCDM and in the development and approval of a Five Year Institutional Development Strategy of the National Committee for Disaster Management. It is fair to say that CRC, with assistance from the Federation had ably performed the majority of their mandated roles during the flood of 2000. More so, stakeholders interviewed during the Study stated that it was CRC/Federation who took the major and leading role in information gathering and sharing and in relief management, and they have done so in a satisfactory manner.

QUESTION 6: Could the relief programmes have benefited in efficiency from the pooling of any functions or resources across the region and could they have benefited in effectiveness from any specific regional activities or networking?

Flooding in the Mekong River is a serious problem shared by Laos, Cambodia and Vietnam. The populations of these countries are exposed to high deaths or illness risks, and their homes; sources of livelihood and properties are threatened annually. Due to this threat, intergovernmental bodies such as the Mekong River Commission (MRC) have been actively promoting regional cooperation for sustainable development, flood management and mitigation since 1995. The severity of the flood in 2000 caused great concerns and thus, MRC is currently involved in formulating a Regional Strategy and Program for Flood Management and Mitigation. Additionally, the UN system distributed an issue paper indicating their support for a regional approach to disaster management in Cambodia and the Lower Mekong River Basin.

No formal networking among National Societies and Federation to address disaster preparedness and response regionally was evident prior and during the flood of 2000. There is however, clear support for this. The opportunities for networking are in the following aspects:

1. Vulnerability and Capacity Assessment
2. Early Warning Systems and Information Sharing
3. Regional Stakeholders
4. International Media
5. Cross Visits and Exchange of Trainers

An Executive Summary and/or the full report will shortly be available from the Federation, Southeast Asia Regional Delegation in Bangkok.

#### *Appreciation by beneficiaries, RGC and the Royal Palace*

Beneficiaries were found to be satisfied to receive the assistance during the distributions and the Royal Government of Cambodia as well as Her Majesty the Queen have expressed their appreciation through letters to the Red Cross efforts for assisting the flood victims.

#### *Documentation of the distributions: photos and videos and dissemination through mass media*

Most of the distributions are documented with photographs and videos. Red Cross distributions were widely disseminated through local TV-news on a regular basis. Many press articles appeared with photos in relation to Red Cross assistance to flood victims. This enabled the public and donors to monitor the assistance given.

#### *Donor participation in the distributions*

CRC invited donors to participate in distributions. This gave an opportunity for the donors to witness the assistance given and interview the beneficiaries on the spot.

#### *Emergency Response Group (ERG) Meetings*

Since July 2000, regular Emergency Response Group (ERG) meetings were held throughout the disaster, co-chaired by the CRC and the National Committee for Disaster Management. The meetings provided an invaluable forum for information sharing, co-ordination and monitoring the overall flood operation.

#### *Federation Situation Reports*

Since the Federation emergency appeal for floods no. 22/2000 was launched on 13 September 2000, the Federation issued seven Situation Reports, which were widely circulated in-country to all Government Ministries, Diplomatic Missions, UN Agencies, International Organisations and NGOs. They are also available on the Federation web site: [www.ifrc.org](http://www.ifrc.org).

### ***Problems and Constraints***

#### *Scope and magnitude of the disaster*

The scope and magnitude of the flooding, the worst in more than 70 years, caused monumental logistical problems in locating and transporting relief supplies to victims. Compounding the problem was the continuous increase in water levels and subsequent damage and destruction to major infrastructure, specifically roads, bridges and communications links.

The recovery and rebuilding of damaged and destroyed homes, community buildings and infrastructure will be a long and arduous process exacerbated by the significant economic disruption brought on by the massive and prolonged floods. The RGC estimate that it will take some three years before the rehabilitation work is complete provided that the country does not face another serious disaster.

#### *The Red Cross resources exhausted*

Several large pledges were received for the Flood 2000 appeal and CRC logistics were fully engaged in the process of fulfilling donor requirements through its procurement unit. Several donors attached specific demands to their contributions, which compounded the challenges of meeting the changing needs of the beneficiaries. Several donor requirement timelines were compromised by the ever increasing needs of the victims for immediate emergency food aid which had to be prioritised. At several points during the operation the time critical needs of victims for food required all resources be redirected to address the growing number of victims that were facing serious food problems. In October food distributions reached such a high priority within the affected areas that a collaborative working relationship was formed with World Food Programme (WFP). Working in conjunction with the CRC logistics and procurement department the necessary rice supplies were prioritised and distributed to the widely dispersed and sometimes isolated victims.

#### *Implementation time frame*

The situation rapidly worsened in September-October 2000, and a large number of people were temporarily displaced to safe areas, it was therefore not possible to equip all safe areas with water and sanitation facilities adequately during the emergency phase. Instead, water and sanitation activities were implemented after the majority of people returned to their homes. The participatory approach used, to include community members, was slow and the Federation was obliged to extend the operation for an additional two months in order to allow the proper implementation of planned activities.

#### *Red Cross lead role in co-ordination and information sharing*

The Federation and CRC played a lead role in co-ordination and information sharing within the local and international communities. There was no other organisation in-country capable of taking up the role and therefore a significant amount of time was dedicated to these activities throughout the 11-month operation.

#### *Specific donor requirements*

Earmarking of funds for specific items and activities, restrictive time frames for the utilisation of funds and individual donor reporting, in addition to Federation situation reports, placed a significant burden on both CRC and the Federation.

## ***External relations - Government/UN/NGOs/Media***

In 2000, there was neither a formal co-ordination mechanism for disaster management nor a centralised disaster information service in place in Cambodia. An initiative to establish a temporary data management team was not successful. The Federation and CRC played a lead role in co-ordination and information sharing since the RGC's National Committee for Disaster Management did not have the capacity to take on the role entrusted to them in Government Sub-decree no. 54. Emergency Response Group (ERG) meetings were co-chaired by the CRC and NCDM and provided the main forum for co-ordination and information sharing at the national level.

A co-ordination mechanism between the four key players namely NCDM, CRC, Federation and UN-DMT/OCHA was put in place in October 2000 to support the Emergency Response Group (ERG) and four sub-groups - emergency relief, food security, health and water and sanitation.

Despite these joint efforts, information sharing and co-ordination of the overall operation, especially the rehabilitation phase, presented a challenge.

In order to strengthen the capacity of the NCDM, the CRC and Federation supported and financed a joint NCDM Capability and Capacity Assessment and assisted the NCDM in developing a 5-Year Institutional Development Strategy and a more detailed 2-Year Plan of Action. Close co-operation was sought and maintained with UN-DMT during the assessment and WFP and OCHA co-operated effectively during the process.

Media relations are one of the strengths of the Cambodian Red Cross and the Federation benefits from the National Society publicity. The Red Cross flood operation was effectively covered by local TV-news, stories, radio announcements and news articles throughout the operation. Seven Cambodia Flood situation reports were issued during the operation period through the web site ([www.ifrc.org](http://www.ifrc.org)) and additional web site stories added to the information provided to partners and donors. The Federation's Regional Information Unit also issued an Insight of Mekong Floods in July 2001 describing the Red Cross flood operation in three countries namely Cambodia, Laos and Vietnam. All these publications were widely distributed in-country to the Royal Government of Cambodia, Diplomatic Missions, UN, other international organizations and NGOs.

## ***Contributions***

See Annex 1 for details

## ***Conclusion***

The Cambodian Red Cross has a good reputation for its effective emergency response capacity and therefore several partners who did not have this capacity themselves turned to the CRC with their in kind and cash donations. CRC's ability to cope with a disaster of this magnitude was outstanding and was clearly recognised by all concerned. The rapid response from donors enabled the Federation to effectively and efficiently respond to the needs of the most vulnerable. The usefulness of the assistance, especially in the safe areas, has already been proved since Cambodia faced another flood emergency in 2001. Many of the safe areas equipped with watsan facilities are once again in use. The Red Cross objectives set for this operation were 80% met. Co-ordination between the two main implementing

partners of the entire operation, the NCDM and the CRC, was strengthened and many lessons were learned both individually and collectively for future operations. The major findings and recommendations were already taken into consideration during the drafting of the Cambodia Appeal 2002-2003. A preparedness programme for disaster response was developed in order to further improve the response capacity of the Red Cross in Cambodia.

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*All International Federation Operations seek to adhere to the Code of Conduct and are committed to the Humanitarian Charter and Minimum Standards in Disaster Response (SPHERE Project) in delivering assistance to the most vulnerable.*

*For support to or for further information concerning Federation operations in this or other countries, please access the Federation website at <http://www.ifrc.org>.*

*This operation sought to administer to the immediate requirements of the victims of this disaster. Subsequent operations to promote sustainable development or long-term capacity building will require additional support, and these programmes are outlined on the Federation's website.*

Peter Rees-Gildea  
Director  
Operations Funding and  
Reporting Department

Hiroshi Higashiura  
Director  
Asia Pacific Department

**This and other reports on Federation operations are available on the Federation's website:  
<http://www.ifrc.org>**

**INTERNATIONAL FEDERATION OF RED CROSS AND RED CRESCENT SOCIETIES**

Interim report	
Annual report	
Final report	X

Appeal No & title: 22/2000 Cambodia floods

Period: years 2000 / 2001 Provis.

Project(s): PKH517

Currency: CHF

**I - CONSOLIDATED RESPONSE TO APPEAL**

FUNDING	CASH		KIND & SERVICES		TOTAL INCOME
	Contributions	Reallocations	Goods/Services	Personnel	
Appeal budget	5,952,281				
less					
Cash brought forward					
<b>TOTAL ASSISTANCE SOUGHT</b>	<b>5,952,281</b>				
<u>Contributions from Donors</u>					
American Govt.via American Red Cross	514,936				514,936
Australian Govt.via Australian Red C (DC	231,600				231,600
Australian Red Cross (DNAU)	44,849				44,849
Austrian Red Cross (DNAT)	38,159				38,159
Cambodia - Private Donors (DPKH)	89				89
Cambodia - Private Donors (DPKH)	514				514
Cambodia - Private Donors (DPKH)	603				603
Cambodia - Private Donors (DPKH)	3,441				3,441
Cambodia - Private Donors (DPKH)	913				913
Cambodia - Private Donors (DPKH)	177				177
Cambodia - Private Donors (DPKH)	856				856
Cambodia - Private Donors (DPKH)	44				44
Cambodia - Private Donors (DPKH)	220				220
Cambodia - Private Donors (DPKH)	44				44
Cambodia - Private Donors (DPKH)	62				62
Cambodia - Private Donors (DPKH)	124				124
Cambodia - Private Donors (DPKH)	355				355
Canadian Govt.via Canadian Red Cross	56,816				56,816
Canadian Red Cross (DNCA)	5,930				5,930
DFID - British Government (DFID)	750,589				750,589
DFID - British Government (DFID)	627,573				627,573
Danish Government (DGDK)	48,355				48,355
Danish Govt.via Danish Red Cross (DGN	579,975				579,975
Danish Red Cross (DNNDK)	-579,975				-579,975
Danish Red Cross (DNNDK)	579,975				579,975
ECHO-Cambodia Floods 2000 (DE8005)	488,939				488,939
Finnish Red Cross (DNFI)	50,524				50,524
German Govt.via German Red Cross (DC	153,541				153,541
German Govt.via German Red Cross (DC	64,033				64,033
German Red Cross (DNDE)	7,970				7,970
German Red Cross (DNDE)	586				586
German Red Cross (DNDE)	18,977				18,977
Icelandic Red Cross (DNIS)	4,160				4,160
Japanese Red Cross (DNJP)	82,000				82,000
Netherlands Govt.via Netherlands RC (D	337,864				337,864
Netherlands Red Cross (DNNL)	25,000				25,000
Netherlands Red Cross (DNNL)	2,750				2,750
Netherlands Red Cross (DNNL)	37,748				37,748
New Zealand Govt.via New Zealand RC	34,355				34,355
Norwegian Govt.via Norwegian Red Cro	168,750				168,750
Norwegian Red Cross (DNNO)	18,750				18,750
Red Crescent of Islamic Rep. of Iran (DN	49,269				49,269
Republic of Korea Red Cross (DNKR)	50,000				50,000
Singapore Private donors (DPSG)	30				30
Swedish Govt.via Swedish Red Cross (D	176,000				176,000
Swedish Red Cross (DNSE)	88,000				88,000
Swiss Government (DGCH)	53,085				53,085
Swiss Red Cross (DNCH)	71,200				71,200
Swiss Red Cross (DNCH)	8,800				8,800
United States - Private Donors (DPUS)	118				118
United States - Private Donors (DPUS)	335				335
United States - Private Donors (DPUS)	929				929
United States - Private Donors (DPUS)	335				335
DFID - British Government (DFID)	-56,100				-56,100
Donor - Disaster Relief Emergency Fu (	-100,000				-100,000
Donor - Disaster Relief Emergency Fu (	250,000				250,000
German Govt			11,717		11,717
<b>TOTAL</b>	<b>4,994,170</b>		<b>11,717</b>		<b>5,005,887</b>
<b>Coverage</b>	<b>83.9%</b>		<b>0.2%</b>		<b>84.1%</b>

**II - Balance of funds**

Opening balance	
CASH INCOME Rcv'd	4,994,170
CASH EXPENDITURE	-5,031,401
<b>CASH BALANCE</b>	<b>-37,231</b>

## Appeal No & title: 22/2000 Cambodia floods

Period: years 2000 / 2001 Provis.

Project(s): PKH517

Currency: CHF

### III - Budget analysis / Breakdown of expenditures

Description	Appeal Budget	CASH Expenditures	KIND & SERVICES		TOTAL Expenditures	Variance
			Goods/services	Personnel		
<u>SUPPLIES</u>						
Shelter & Construction	1,331,450	674,225			674,225	657,225
Clothing & Textiles	643,280	600,267			600,267	43,013
Food/Seeds		23,199			23,199	-23,199
Water		217,415			217,415	-217,415
Medical & First Aid	278,040	484,157			484,157	-206,117
Teaching materials		6,774			6,774	-6,774
Utensils & Tools	635,020	484,635	11,717		496,352	138,668
Other relief supplies	869,495	684,804			684,804	184,691
<b>Sub-Total</b>	<b>3,757,285</b>	<b>3,175,475</b>	<b>11,717</b>		<b>3,187,192</b>	<b>570,093</b>
<u>CAPITAL EXPENSES</u>						
Land & Buildings						
Vehicles	306,425	15,930			15,930	290,495
Computers & Telecom equip.	17,850	29,152			29,152	-11,302
Medical equipment						
Other capital expenditures		5,538			5,538	-5,538
<b>Sub-Total</b>	<b>324,275</b>	<b>50,620</b>			<b>50,620</b>	<b>273,655</b>
<u>TRANSPORT &amp; STORAGE</u>						
	254,150	227,349			227,349	26,801
<b>Sub-Total</b>	<b>254,150</b>	<b>227,349</b>			<b>227,349</b>	<b>26,801</b>
<u>PERSONNEL</u>						
Personnel (delegates)	164,860	69,764			69,764	95,096
Personnel (local staff)	40,324	316,221			316,221	-275,897
Training						
<b>Sub-Total</b>	<b>205,184</b>	<b>385,985</b>			<b>385,985</b>	<b>-180,801</b>
<u>GENERAL &amp; ADMINISTRATION</u>						
Assessment/Monitoring/experts		30,782			30,782	-30,782
Travel & related expenses	5,100	83,764			83,764	-78,664
Information expenses	380,188	463,078			463,078	-82,890
Administrative expenses	31,280	66,074			66,074	-34,794
External workshops & Seminars	340,068	14,462			14,462	325,606
<b>Sub-Total</b>	<b>756,636</b>	<b>658,159</b>			<b>658,159</b>	<b>98,477</b>
<u>PROGRAMME SUPPORT</u>	654,751	533,813			533,813	120,938
<u>OPERATIONAL PROVISIONS</u>						
Transfer to National Societies						
<b>TOTAL BUDGET</b>	<b>5,952,281</b>	<b>5,031,401</b>	<b>11,717</b>		<b>5,043,118</b>	<b>909,163</b>

**Consumption rate:** Expenditures versus income 101%  
Expenditures versus budget 85%