

# ***EL NIÑO 1997-1998 IN THE AMERICAS***

**appeal no: 27/97  
25 November 1997**

***THIS APPEAL SEEKS CHF 13,880,000.-  
IN CASH, KIND AND SERVICES  
TO ASSIST 600,000 BENEFICIARIES FOR 6 MONTHS***

## ***Summary***

The 1997-1998 El Niño weather phenomenon is showing signs of being particularly lethal. To ensure that nine "front line" National Societies in the Americas are ready for the seasonal floods and drought that observers are predicting El Niño will cause in the next few months, the Federation is seeking funds to identify at risk communities and their needs and to pre-position 8,195.5 Mt. of food, roofing for 20,000 houses, 120,000 blankets and other relief items -- sufficient for 600,000 beneficiaries -- throughout the region.

## ***The Background***

Annually around Christmas time a weak, warm current lasting less than a month appears along the coast of Ecuador and Peru. Local fishermen named this phenomenon El Niño. Every three to seven years El Niño may last for several months or even more than a year, creating significant atmospheric and economic repercussions not only along the South American Pacific coast but world wide. Since the 1940s twelve of these major El Niño events have been recorded. The worst occurred in 1982-1983, causing more than CHF 18 billion in damage. Behind this figure lies untold human tragedy. Mexico suffered a drought on a scale previously unknown in the country and a malaria outbreak following severe flooding took the lives of hundreds of people in Colombia and Peru -- to name just two of the major disasters attributed to El Niño in those years.

Whereas 15 years ago meteorologists had no clear explanation of the El Niño event scientists have now discovered a pattern behind this occurrence: the Southern Oscillation phenomenon, which moves the waters of the Pacific Ocean from East to West and back again. Steady trade winds generally drive the tropical Pacific's surface waters westwards, resulting in a progressive increase of the sea surface temperatures (SSTs) due to the longer exposure to solar heating.

This westward move and the evaporation of the surface waters along the Asian coasts is compensated by the rise of deeper, colder water to shallower depths along the American Pacific coast. But eventually during the winter months of the northern hemisphere the easterly trade winds weaken and the uprising of the ocean waters is altered resulting in the phenomenon of El Niño: the warmer, nutrient-depleted surface waters of the western Pacific flow back to the American coast replacing the cool nutrient-rich sea water normally found along the coast of Peru.

Because of its short duration this phenomenon has normally only a limited local atmospheric and economic impact. But when SSTs stay well above average levels for several months, the so called El Niño years occur. 1997 seems to be no exception. A layer of warm water has already appeared along the Peruvian coast, steadily pumping energy into the atmosphere due to higher than normal evaporation levels, as SSTs are up to 5 C above average.

## *The Disaster*

It is not yet clear whether El Niño 1997-1998 will cause the same devastation as its predecessor, but at this early stage unexpected weather phenomena are giving a first glimpse of what may be in store for the coming months. The Pacific hurricanes Nora and Pauline (Mexico, Appeal 25/97) with their landfalls way up to the north developed in warm (at least 27 C) Pacific waters. These exceptional conditions along the American West coast are driving warm humid air around the Equator, leading to severe rainfalls and flooding in Ecuador, Bolivia and Peru, as well as from Central Chile eastwards across northern Argentina, Uruguay and Southern Brazil. More torrential rains and floods are expected along these countries' littoral provinces. According to the Peruvian National Meteorological and Hydrological Service (SENAMHI), there are strong indications that rainfalls may increase in November and December 1997 and last until March 1998.

But as the easterly trade winds over the Pacific weaken the Atlantic trade winds also lose strength, producing drought conditions along the tropical Atlantic coast, the Caribbean and the Gulf of Mexico. There are already alarming signs of drought in Central America, threatening this year's harvest, in Nicaragua (Appeal 16/97), Honduras, and Panama where an estimated 110,000 people are suffering the consequences of drought. While some areas of Colombia have been affected by flooding, other parts of the country are preparing for a drought as temperatures rise and precipitation levels drop. Widespread drought is already reported in northern Brazil.

## *The Response so far*

### **Government Action •**

The Government of **Panama** initiated a nation wide contingency plan in September targeting preventive health and sanitation and food and water supply problems in order to cope with the effects of the El Niño phenomenon.

In **Colombia** the Government is putting in place a contingency plan to prevent and control possible bush and forest fires that may be brought on by the expected drought.

**Ecuador** declared a state of emergency in July following severe flooding and damage to crops and housing. A high level commission was set up to co-ordinate the Government's preparedness measures and the Civil Defence has a contingency plan ready. In October an interagency governmental committee was established not only to co-ordinate activities related to El Niño but

also to provide technical assessment and to make recommendations for a study of the phenomenon.

In **Honduras** the government is providing support to small scale irrigation work and building water reservoirs.

Government agencies in almost all South American states have set up a network of NGOs, universities, and private institutes to monitor this year's El Niño phenomenon.

#### **Red Cross/Red Crescent Action •**

All National Societies are well informed about the El Niño phenomenon and have activated their emergency plans. These have two components: (1) capacity building measures in the area of disaster preparedness in order to achieve a high level of institutional preparedness -- including propositioning of emergency stocks -- and (2) immediate local level preparedness training and awareness activities to respond to the El Niño threat.

#### **Other Agencies' Action •**

ECHO in consultation with the Federation and other specialised agencies is monitoring the situation and preparing to help. A prevention and mitigation programme established by the UN Disaster Management Team and the UN Department of Humanitarian Affairs (DHA) is being implemented in Ecuador. The World Bank and the Inter American Development Bank have carried out an assessment of the costs of repairing the effects of El Niño. In almost all countries threatened by the El Niño effect interagency committees have been created to monitor the development of the phenomenon. In Honduras, already stricken by floods, the World Food Programme, together with the government and NGOs, is implementing a food for work programme.

#### **Co-ordination •**

Responsibility for co-ordinating the response has been delegated to governmental Emergency Committees. The Red Cross Societies have shared their emergency plans with the public authorities and other agencies involved in disaster response.

## ***The Intended Operation***

National Red Cross Societies in the Americas have collected valuable experience over the years in preparing for and responding to seasonal disasters. Nevertheless, at a time when national resources to prepare for and cope with disasters are shrinking and populations in high risk areas are increasing, a severe El Niño year could be a scenario for disaster. The National Societies of Mexico, Honduras, Nicaragua, Panama, Colombia, Ecuador, Peru, Bolivia, Chile, Argentina and Brazil have recognised the challenge and are moving to improve their disaster response capacity. The Federation will back their efforts by pre-positioning emergency supplies throughout the region and supporting local level preparedness training and awareness activities.

#### **Assessment of Needs •**

In co-ordination with local authorities, the National Societies in Panama, Colombia, Ecuador and Peru have conducted initial assessments in risk areas, resulting in requests for international assistance through the Federation. Honduras, Bolivia, Chile, Argentina and Brazil are preparing to do the same. Planned programmes take into account the need to increase the present institutional preparedness and response capacity of each National Society. Federation Delegates will assist in mapping risk areas and identifying vulnerable population groups in each country. This will be carried out in collaboration with national and international institutes and reflect the role of the respective National Societies as auxiliary bodies to their public authorities.

In parallel, the Federation will develop a standardised data collection and information system for use by National Societies in identified high risk regions. The data will be compiled and bi-monthly reports will be issued, to help National Societies play their part in local and national disaster response plans.

**Immediate Needs •**

- In Honduras, Panama, Ecuador and Peru approximately 80,000 families already affected by drought and floods due to El Niño need relief goods and emergency food supplies. Response will be carried out in parallel with emergency, rehabilitation and reconstruction operations in Mexico and Nicaragua.
- Furthermore, the provision of a minimum of pre stocked emergency supplies will be necessary in the short term to guarantee immediate Red Cross disaster response in risk areas in all of the countries covered by this appeal.
- Immediate local preparedness and awareness activities must begin in vulnerable population groups living in risk areas, in order to strengthen community capacity to cope with the El Niño phenomenon. They will include topics like risk mapping, managing of emergency committees and temporary shelters which have already proved successful in an ECHO funded Community Based Disaster Preparedness Programme in 10 National Societies in Latin America.
- National Societies' capacity to respond to seasonal disasters will be improved by identifying the strengths and weaknesses of the National Societies' preparedness and response structures and then defining immediate follow-up activities to increase both Red Cross and community preparedness levels.

**Anticipated Later Needs •**

Any later needs, including extending the operation to other countries, will depend on the evolution of the El Niño phenomenon. Nevertheless, provision should be made for emergency, rehabilitation and reconstruction operations which may be needed in the next few months. Although this appeal explicitly covers only nine National Societies, country specific appeals may become necessary, as has already been the case with Nicaragua and Mexico.

**Red Cross Objectives •**

The overall objective of this appeal is

- to reduce the exposure of vulnerable population groups in Honduras, Panama, Colombia, Ecuador, Peru, Bolivia, Chile, Argentina and Brazil to the secondary effects of the 1997-1998 El Niño phenomenon, while maintaining emergency programmes in Mexico (Appeal 25/97) and Nicaragua (Appeal 16/97).
- This will be achieved by improving immediate preparedness and awareness levels to respond to seasonal disasters such as floods and droughts. The most critical factor will be the timely pre-positioning of regional emergency buffer stocks of food and non-food items to meet projected needs in these countries.
- Lessons from this operation will be used to enhance the disaster preparedness and response of National Societies and Federation Delegations in other parts of the world where this year's El Niño phenomenon is expected to have an impact. National Societies will be encouraged to develop the use of regional approaches in preparedness and disaster relief, with the support of the Federation Secretariat's regional departments and technical services, to ensure a standardised and co-ordinated approach.

## ***National Society/Federation Plan of Action***

### **Emergency Phase: *October - December 1997* •**

Relief goods and emergency food supplies for approximately 80,000 affected families in Honduras, Panama, Ecuador and Peru will be procured and distributed.

### **Phase Two: *November 1997 - April 1998* •**

All National Societies covered by this appeal will conduct or revise needs assessments in order to determine what emergency stocks are needed. They will carry out local level preparedness training in risk areas.

Planning tools and the organisation of activities prior to and during disasters will be improved through action oriented workshops for key Red Cross personnel, in which representatives of the government and organisations involved in disaster response will also participate.

Relief goods will be purchased locally and strategically positioned throughout the region.

### **Capacity of the National Society •**

The **Mexican Red Cross**, with 7,300 paid staff and 300,000 volunteers, is very experienced in disaster relief and preparedness activities and has wide spread territorial coverage. The **Honduran Red Cross** has good experience in relief and rehabilitation programmes and counts on a well developed branch network, with close to 4,000 members. The **Nicaraguan Red Cross Society** has approximately 2,000 members and has recently gained experience in disaster preparedness and community development through technical assistance provided through the Federation. The **Red Cross Society of Panama** runs an ambulance service, an emergency operations centre, and rescue services. In recent years special emphasis has been given to train the trainers workshops in Community Based Disaster Preparedness. There are around 2,000 members. Because of frequent natural disasters, the **Colombian Red Cross** invests significantly in maintaining a state of disaster response readiness, and has gained considerable expertise which it can share with others. The Society has a resource base of around 110,000 volunteers. The **Ecuadorian Red Cross** has a smooth-running disaster management system, developed with assistance from the American and German Red Cross Societies in the early 1990s. The society has approximately 3,500 members and a well developed territorial presence. The main activities of the **Peruvian Red Cross** are primary medical care services and relief work. The National Society has about 1,000 members. The **Bolivian Red Cross** has vast experience in community health and disaster preparedness activities and in disaster relief operations. In 1994, it had about 1,180 members. **Chilean Red Cross'** priorities include disaster preparedness activities carried out by its approximately 6,000 volunteers. Since 1995 the **Argentinean Red Cross** has been promoting activities in the area of disaster preparedness through its estimated 2,000 active members. The **Brazilian Red Cross** will build its activities on the experience of its special relief group at the Headquarters.

### **Present Capacity of the Federation in Central and South America •**

The Federation is represented in the region through its Guatemala and Buenos Aires Regional Delegations. National Societies can count on the services of regional development, health and disaster preparedness delegates. Country delegates will be sent on three to six-month missions to National Societies upon request by the National Societies.

### **Evaluation •**

The evaluation will take into account the state of preparedness of the National Societies before this year's El Niño phenomenon and examine the initiation, implementation and monitoring of eventual response operations during the next 5 to 6 months to expected seasonal disasters. Recommendations concerning improvements in disaster response related areas like operational

procedures, co-ordination, material and human resources will be drawn up. The review will be incorporated into the ongoing Disaster Preparedness Programme of the Federation in the Americas Region.

## ***Budget summary***

See Annex 1 and 2 for details.

## ***Conclusion***

Today advances in the understanding of the El Niño and the Southern Oscillation phenomena (ENSO) have made major natural disasters like floods and droughts more predictable, enabling the necessary preparedness measures to be taken. Although it is not yet clear whether this year's El Niño will be as devastating as that of 1982-1983, the forecasts cannot be ignored. National Societies must be given the necessary support to put in place better preparedness and provide assistance to the most vulnerable. Finally, the planned review of emergency operations and the identification of institutional strengths and weaknesses will not only strengthen response capacities in the region but will also enable the International Federation to better target its support to National Societies' capacity building efforts in the field of disaster preparedness in other parts of the world prone to seasonal disasters.

For more information, please contact the director of the Americas Department Santiago Gil (Tel: ++4122730 4391, e-mail: gil@ifrc.org) or desk officers Jan Schütt (Tel: ++41227304428, e-mail: schuett@ifrc.org) and Luis Luna (Tel: ++41227304274, e-mail: luna@ifrc.org).

Margareta Wahlström  
Under Secretary General,  
Disaster Response & Operations Coordination

George Weber  
Secretary General

**BUDGET SUMMARY**APPEAL No. 27/97-  
IN CHF**SUPPLIES***(See detailed list in annex 2)*

Non Food supplies	6,668,000.00
Food Supplies (FOB prices)	1,932,000.00
Other Supplies (FOB prices)	2,453,000.00
<b>TOTAL SUPPLIES</b>	<b>11,053,000.00</b>

**NEEDS IN CASH****Capital equipment**

Office equipment for NS branches 300,000.00

**Transport, storage, insurance, custom fees,  
vehicle costs** 300,000.00**Personnel**

Expatriate staff (9 Delegates x 6 months) 540,000.00

Personnel (support to NS staff/payroll) 150,000.00

Training NS Staff /Community training 350,000.00

Regional Delegation Support 270,000.00

**Travel & communications** 160,000.00**Monitoring/Evaluations** 170,000.00**Information /Awareness** 100,000.00**Administrative, office & general expenses** 90,000.00

Secretariat operational support 397,000.00

**TOTAL NEEDS IN CASH** 2,827,000.00**TOTAL APPEAL CASH & KIND****13,880,000.00**

LESS CASH ON HAND

0.00

**NET REQUEST CASH & KIND****13,880,000.00**

Note: all items can be purchased locally.

In kind donations can be accepted subject to agreement with the Secretariat and National Societies on quality specification and delivery time

ANNEX 2DETAILED LIST OF SUPPLIESAPPEAL No. 27/97-  
IN CHFNON FOOD SUPPLIES**6,668,000.00**

Construction Material (including roofing material for 20,000 houses)	4,500,000.00
Tools: Hammer, saws, nails for 20,000 houses	168,000.00
Agricultural equipment for farmers & fishermen : seeds, fertilisers, implements for fishermen	2,000,000.00

FOOD SUPPLIES**1,932,000.00**

Rice: 1.200 Mt.	360,000.00
Beans: 1.200 Mt.	540,000.00
Maize: 1.200 Mt.	222,000.00
Oats & Barley: 1200 Mt.	480,000.00
Salt: 200 Mt.	42,000.00
Oil: 319.5 Mt.	288,000.00

OTHER SUPPLIES**2,453,000.00**

Soap : 80,000 boxes	123,000.00
Kitchen sets: 120,000 sets	300,000.00
Water containers/jerrycans: 20,000 units/20 Lt.	900,000.00
Blankets: 120,000 pieces	840,000.00
Packing material	90,000.00
Miscellaneous items (ropes/stretchers/footwear/clothing)	200,000.00

GRAND TOTAL SUPPLIES**11,053,000.00**

