

# **INDIA : ORISSA CYCLONE**

11 April 2000

*appeal no. 28/99*

*situation report no. 8*

*period covered: 1 March to 5 April 2000*

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## ***The context***

A violent cyclone hit India's eastern coast on 29 October 1999. Winds of up to 260 kph (155 mph) lasting for over 36 hours, caused a 7 metre tidal wave which swept more than 20 km inland and brought massive destruction and death to coastal districts in the State of Orissa.

According to the Government of Orissa, more than 10 million people in 12 coastal belt districts were affected by the cyclone. At least 10,000 people died in the disaster, while tens of thousands of families from the worst affected coastal districts of Balasore, Bhadrak, Kendrapara, Jagatsinghpur, Puri and Ganjam were forced to evacuate their homes, or saw them washed away.

After the Indian Red Cross emergency relief distribution (first phase) immediately after the cyclone the joint Indian Red Cross/International Federation relief operation (second phase) for 50,000 beneficiary families started mid-November 1999 and ended on 31 January 2000. On 1 February 2000, the Orissa State Branch assisted by the International Federation embarked on a six month rehabilitation programme (third phase).

## ***Latest events***

The cyclone caused long-term effects which are becoming increasingly evident. Orissa, one of the poorest States in India, is struggling hard to restore its economy which is wholly dependent on agriculture. The coastal districts account for 2 million hectares of Orissa's total 6.5 million hectares of crop area. About 99% of the agricultural area in these coastal districts is under paddy cultivation.

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The farmers in Orissa experienced severe crop losses when the cyclone devastated the kharif crop (autumn harvest) and the prospects of a good rabi (summer) harvest are marred by pests, crop diseases, damaged irrigation and a shortage of power supply facilities.

Although the power distribution company claims to have restored power to 75% of the total 3,064 affected lift irrigation points in the cyclone-hit areas, the power supply has yet to be restored to 2,316 cyclone affected villages, four months after the disaster. In the district of Jagatsinghpur, 800 rice mills have been deprived of electricity and thousands of hectares of paddy crop have been destroyed due to the lack of water in different areas of the district. The extent of the damage inflicted by the cyclone is such that it would take at least six months to complete the restoration. In other areas, restoration activities have been paralysed due to lack of equipment like electric poles, wires and a lack of funds.

Fish production in Jagatsinghpur is likely to be reduced by over 40% this year due to the large-scale devastation, including pollution of ponds. The destruction of coconut, cashew nut and mango trees and reports that animals are starving due to an acute scarcity of fodder are further reasons to fear a food security crisis in the coming months.

A shortage of drinking water has already been reported in certain areas of the cyclone-affected districts. Many of the tube-wells destroyed in the super-cyclone are still polluted. Others are defunct or are unable to meet the demands for drinking water.

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

### **Rehabilitation Phase •**

A new staffing structure, designed to meet the needs of the rehabilitation phase, is now fully in place. Newly-appointed programme supervisors in the districts of Kendrapara, Jagatsinghpur and Puri, assisted by more experienced programme officers who were involved in the relief phase, are already closely monitoring scheduled activities in the field.

Professional consultants have been hired for the more technical aspects of the programme. The overall co-ordination of the rehabilitation phase is done by the programme co-ordinator who is assisted by the International Federation Senior Relief Co-ordinator and Logistics Delegate.

In order to fulfil the main objectives of the rehabilitation programme -- to build up the household coping mechanisms and rebuild destroyed community assets -- the Indian Red Cross is presently carrying out the following:

#### *Agricultural support*

This project comprises the distribution of agricultural kits to 1,000 marginal farmers dependent solely on agriculture, and with a maximum of 1 to 3 acres of land that was affected by the cyclone.

The kits consist of seeds, tools, fertilisers and a plough, plus chickens and goats. Since preparations for the summer harvest begin in May, the distribution of summer seeds and fertilisers has been finalised. (Samples of all seeds were tested for germination prior to their distribution.) Distribution of agricultural tools is scheduled for this month.

#### *Building material*

As most houses in the coastal districts were made of mud, many were completely destroyed in the cyclone. The Red Cross Rehabilitation Plan of Action will provide building materials in the form of cement blocks for low-cost cyclone resistant housing to 356 families in five villages in the coastal district of Jagatsinghpur.

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The beneficiary families in all the selected village communities are to be trained by masons to build their houses with the blocks. Five model houses (as a part of the training) are already under construction for orphans and widowers. The cement blocks are tested for their resistance to pressure on a regular basis i.e. every shipment to the field undergoes a prior random check.

#### *Reconstruction of schools*

Since 83% of school buildings in the worst affected area were completely destroyed or badly damaged, the reconstruction of schools is an important priority. The Government has decided that schools should in the future be designed as multipurpose buildings, known as school-cum-shelter projects.

The sites selected for the ten schools to be rebuilt by the Red Cross are within 10 km of the coast. The schools have been designed as shelters and are to be built on pillars. Tenders for the buildings have been received and the selection process is under way.

#### *Tube-wells*

The Red Cross objective is to construct or rehabilitate 135 tubewells. As the latest assessments show that water conditions in the affected districts are deteriorating and health hazards increasing, it was determined that only sealed shallow tube-wells with pumps and drainage would be constructed. All tube-wells are designed to be 15 to 20 metres deep depending on the position of the first solid rock layer which serves as a natural purification filter of fresh water. In more saline soil conditions, however, the tube-wells could run as deep as 30 metres.

(A water quality and quantity survey carried out by Oxfam in the blocks of the coastal belt took 500 samples from a variety of water sources. In general, the deep tube-well water was found to be of good quality (90%) while most of the samples taken from shallow tube-wells (80%) and unprotected dug-wells (100%) showed indications of faecal contamination.)

Sites have been selected in villages by the Red Cross water/sanitation consultant with the co-operation of the local community representatives. The criteria used in selection of beneficiaries was accessibility of safe drinking water, with special emphasis on bringing safe water to lower caste and tribal areas. Tenders have been received from all districts, and finalisation is underway.

According to the Plan of Action, the rehabilitation (third) phase is scheduled to run through July 2000. Construction and reconstruction activities, however, require major effort, time and funds. With upcoming constraints in the form of worsening weather conditions (a heat-wave expected in May and the monsoon starting mid-June) and because preparatory work (tendering, selection of locations, clearing of sites, etc.) is taking longer than initially planned, the time frame for construction activities may have to be extended.

#### *Food distribution*

As the relief phase of the Orissa operation was drawing to a close, it became increasingly evident that food security would be one of the main problems in the next period.

The Red Cross project aims to provide food assistance for three months to 5,000 most vulnerable families (selected from the original 50,000 families assisted in the relief phase) who cannot benefit from the State government food-for-work scheme. These families include those left without a breadwinner i.e. mostly widows with small children, orphans, elderly, disabled. A monthly ration consists of 50 kg of rice, 10 kg of dal, 2 litres of cooking oil.

Strict beneficiary criteria, however, make it increasingly difficult for programme officers and supervisors to carry out distributions. As the food situation in general is getting worse, it is hard to avoid misunderstandings on the Red Cross criteria with other members of the local community. In two cases distributions had to be stopped and continued the next day due to disturbances provoked by the members of local communities not receiving food. This situation is further aggravated by the fact that the government scheme of food-for-work has not been really implemented in the field, thus creating a

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gap between those who receive food and those who do not. The Orissa State Branch might be forced, therefore, to reconsider its food distribution plans and objectives within the rehabilitation phase.

#### *Mosquito nets*

The Red Cross Committee met at the end of March to select suppliers following the tendering process. The 20,000 families selected to receive mosquito nets are the Red Cross beneficiary families targeted in phase one and living in the most affected coastal areas with a high level of malaria cases.

#### **Current activities per geographical location:**

DISTRICT	BLOCK	GP	Villages	Benef. Families food	Tube wells*	Core houses	Schools & shelters	Agricult. kits
<b>Kendrapara</b>								
	Mohakalpada	Kharinisi	3	500	15			50
		Jambo	4	500	15			50
	Mahakalapada	Batighar	8	300	15			50
		Suniti	5	600				100
		Barakhanda	7	600	15			50
		Mangalpur	1					100
		Gagua	1					50
		Kendrapara	Ramanimohan				1	
	Rajnagar	Brahmansahi	Patakuman				1	
		Dera	Gokeraswar				1	
<b>Puri</b>	Kakatpur	Bangurigaon						
			Saraswati Academy				1	
			Nateswar Prachi Vidy				1	
	Astaranga	Nagar	5	500	15			50
		Nuagarh	6	500	13			100
<b>Jagatsinghpur</b>	Erasama	Kunjakothi	7	500	15	153		75
			Karunakar Sanskrit S.				1	
		Padmapur	6	500	15	203	1	100
		Nuagoon	1		9			125
		Goda						
			Banagadi MES				1	
		G.Harishpur						
			Jagannath Vidzapitha				1	
			Markanda Vidzapitha				1	
	Balikuda	Naharana	10	500	15			100
<b>GRAND TOTAL</b>			<b>64</b>	<b>5000</b>	<b>135</b>	<b>356</b>	<b>10</b>	<b>1000</b>

\* The number of sites presently selected for tube-wells is 142, this will be reduced to the scheduled total of 135 tube-wells, to be built as follows: Kendrapara 60, Puri 28 and Jagatsinghpur 47.

#### **Other developments •**

The newly appointed Secretary General of the Indian Red Cross, Dr. (Mrs) Vimala Ramalingum, visited the Orissa State Branch and the field on 3 and 4 April, approving the ongoing rehabilitation phase of the

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		Mangalpur	1					100
		Gagua	1					50
		Kendrapara	Ramanimohan				1	
	Rajnaragar	Brahmansahi	Patakuman				1	
		Dera	Gokeraswar				1	
<b>Puri</b>	Kakatpur	Bangurigaon						
			Saraswati Academy				1	
			Nateswar Prachi Vidy				1	
	Astaranga	Nagar	5	500	15			50
		Nuagarh	6	500	13			100
<b>Jagatsinghpur</b>	Erasama	Kunjakothi	7	500	15	153		75
			Karunakar Sanskrit S.				1	
		Padmapur	6	500	15	203	1	100
		Nuagoon	1		9			125
		Goda						
			Banagadi MES				1	
		G.Harishpur						
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Orissa Cyclone operation and confirming further support of the Indian Red Cross headquarters to the efforts of the Orissa State Branch. An officer responsible solely for the Orissa Cyclone operation is to be appointed at the headquarters.

On 12 March, the Inter-college Workshop of Youth Red Cross Girl Volunteers, focusing on disaster-preparedness and management, was held in Bhubaneswar. Personal cyclone experiences of the Youth members were used as case studies in their discussion on "lessons learnt" during and after the Orissa cyclone.

On 15-16 March, an evaluation session (lessons learnt based on SWOT) of the relief phase of the Orissa operation as well as of the future prospects and sustainability of the Branch's activities took place at the Disaster Preparedness Training Centre of the Orissa State Branch. This evaluation was a part of the DP workshop prepared bilaterally with the German Red Cross which has been carrying out a long-term Orissa Disaster Mitigation Programme (ODMP) with the Orissa State Branch.

As the ODMP staff were actually the core Red Cross staff involved in the Orissa relief operation, the "lessons learnt" session was also attended by the ODMP staff, including the Orissa State Branch Joint Secretary and Assistant Secretary. The participants were given the opportunity to reflect on past events and express their views on possible strategy in the future. They highlighted the need for stronger efforts in institutional development and capacity. A report on this workshop will be prepared by the German Red Cross.

## ***Outstanding needs***

The Orissa State Branch has decided that the rehabilitation phase will be the final phase of this operation. The Branch needs time to consolidate, to concentrate on other humanitarian needs and to continue the Orissa Disaster Mitigation Programme.

The capacity building of the State Branch as part of the rehabilitation programme and the problem of the sustainability of the operation and of the staffing structure after the departure of the International Federation delegates is currently a widely debated issue. The need for institutional development and capacity building has been highlighted on many occasions but a practical approach to the concept, apart from introducing a computerised financial management system, is still lacking.

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

The UN weekly interagency meetings continue to focus on the current problems in Orissa, specially those in the most-affected areas. The main concerns are food security, livelihoods, heat-wave, reconstruction and construction of schools, shelters, tube-wells, hospitals and health. The agencies are taking an active part in preparations for the anticipated heat-wave and are working alongside the Government on improving public awareness, construction of summer-shelters, establishment of water points and planning the preparation of drinks from locally available fruits and herbs.

An exhaustive and precise database of overall activities of international agencies and NGOs in Orissa was created in order to help all parties to co-ordinate and avoid duplication. The database is now accessible on the web at [www.orissa.fsnet.co.uk](http://www.orissa.fsnet.co.uk). Users can extract the relevant data per geographical location, activity, organisation, etc.

In order to improve information on the food security situation, a rapid nutritional assessment of children under six years of age and pregnant women was carried out in 11 cyclone-affected blocks of four coastal districts. The study clearly indicates that malnutrition among children under six years of age has

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got worse. From approximately 20 to 30 per cent in the pre-cyclone period, it rose to 62 to 64% in the post-cyclone period. An assessment of the general food situation in certain districts made by WFP for the use of international agencies and NGOs found indicators that the districts of Cuttack, Jagatsingpur, Jajpur and Kendrapara would face serious food shortages by the end of March.

A UN-convened consultation on post-cyclone shelter rehabilitation strategy was held on 25 March with the participation of the Red Cross and some NGOs. Orissa Government agencies presented the Government strategy and approach to this issue. Four working groups were created in order to improve transparency with the Government and involve their agencies more actively in addressing the problem of shelter. The importance of direct involvement of local communities in the building process was emphasised.

The UN, Red Cross and NGOs decision to advocate community based disaster preparedness will lead to recommendations to be shared with the Government of Orissa and its Disaster Mitigation Authority and hopefully will contribute to the modification of the Orissa Relief Code and introduction in it of the concept of the community based disaster preparedness

The Indian Society of Remote Sensing held a symposium on "Remote sensing applications for natural resources with special emphasis on watershed management" including lectures on early warning, relief and rescue operations. The State Training and Development Communication Channels (TDCC), as a part of a disaster warning system, should enable district and block level officials to have access to a database on weather parameters, rainfall and better prediction about floods and cyclones.

## *Contributions*

See Annex 1 for details.

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