

INFORMATION BULLETIN



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

PAPUA NEW GUINEA: MANAM VOLCANO

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The Federation's mission is to improve the lives of vulnerable people by mobilizing the power of humanity. It is the world's largest humanitarian organization and its millions of volunteers are active in over 181 countries.

In Brief

This information bulletin (05/2005) is being issued to report on the Papua New Guinea Red Cross Society (PNGRCS) operation. No emergency appeal was launched but CHF 110,000 was allocated in two instalments from the Federation's Disaster Relief Emergency Fund (DREF)¹. It is anticipated that DREF funds will be used by May 2005.

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Background

Manam island, with an area of 83 square kilometres, lies 15 kilometres off the Papua New Guinea (PNG) coast near the town of Bogia in Madang province. It comprises 16 villages and close to 10,000 inhabitants. It is estimated that between 50 and 60 percent of the population are children under the age of 18 years. The volcano from which the island takes its name erupted before in October 1994, killing 13 people and sending ash some 10 kilometres into the sky above the island. The most recent volcanic activity began in October 2004 and intensified in November, spewing lava and ash that destroyed the island's food crops and contaminated water supplies. Low-level volcanic activity has continued to the time of writing and the Rabaul Volcano Observatory expects that further eruptions will occur in 2005.

People had begun to move to the mainland in small numbers from late October, but on November 27, the government of PNG began actively promoting voluntary evacuation and arranged for the transport of evacuees to the mainland. Three camps or "care centres" were established to receive the evacuees on plantation properties held by the government at Potsdam, Asurumba and Mangem.

¹ The DREF allocations will be used to procure relief materials to replenish the disaster preparedness (DP) containers, the contents of which were distributed to evacuees. This procurement was initially deferred to allow the PNGRCS to first conduct a review of the quality of materials stocked in its DP containers and, where necessary, to source materials of higher quality. This review has now been completed, stocks have been ordered and it is anticipated that monies from the DREF will have been used by the end of May 2005.

A lack of certainty regarding resettlement sites for island evacuees has been a significant impediment to aid agencies' efforts to assist. The government of PNG is in the process of setting up an authority specifically tasked with overseeing the entire operation.

As the PNGRCS had not been involved in an operation of this size in recent years, the Federation provided crucial coordination support for their operation, including liaison with the National Disaster Management Centre, the United Nations (UN) and other NGOs. The PNGRCS played a key role in the national response and continues to play an active part in the coordination mechanism established by the National Disaster Management Office (NDMO).

In March, a "lessons learned" workshop was held to review the operation. As a result of that workshop, changes are being made to the PNGRCS disaster management programme to make its goals for 2005 more realistic, particularly in relation to disaster-related training. The DP container project – maintenance of inventories and communication with headquarters, in particular – was an area of focus. Participants at the workshop also reviewed the current disaster preparedness and response plan in the context of the Manam operation and found that, in its present form, the plan was difficult to put into operation. The plan will therefore be reviewed to make it easier to operate, and training will then be tailored directly to the needs of the disaster plan. The PNGRCS has also indicated that it will undertake a critical review of the emergency management component of its Strategic Development Plan.

In addition to a DREF allocation of CHF 110,000, the Australian aid agency, AusAID, through the Australian Red Cross Society, provided financial support that allowed the purchase of relief materials and the deployment of a water and sanitation delegate. The New Zealand Red Cross Society also provided funds for the replenishment of relief items. UNICEF, in addition to the provision of water purification tablets, provided monetary assistance to go toward the operation's administration costs.

The first tranche of funds from DREF (CHF50,000) has been used to deploy Red Cross personnel to the field at various stages of the operation, and to purchase relief supplies after materials immediately available in the region's DP containers were exhausted. The second instalment of DREF (CHF 60,000) will be used to replenish pre-positioned relief stocks. Procurement of these materials has not yet taken place because the PNGRCS had concerns about the lifespan of materials distributed in the Manam operation. The society wanted to review whether this was a problem of quality or merely a case of materials being used for longer periods and in more adverse conditions than expected. Despite finding that the tarpaulins were used for a much longer period than intended and in punishing conditions, the PNGRCS decided to source higher quality materials for the replenishment of DP containers. The goods for procurement have now been identified and the purchase and delivery expected in late April or early May.

Operational Developments

The PNGRCS was the first non-governmental agency to respond to the Manam emergency, and in the weeks that followed, it came to be seen as a key source of reliable information by the many agencies that expressed an interest in providing assistance.

Following the initial eruptions, the PNGRCS and the Federation undertook a needs assessment in October. At that stage, the effects of the eruptions were very localised and the team decided that no immediate response was necessary, although the situation would continue to be monitored. Following the major explosive eruption that took place on 10 to 12 November, a second Red Cross assessment team visited the island on 19 to 21 November and reported that volcanic ash had caused extensive damage to food crops. In the worst affected areas, crops had been completely destroyed. Some traditionally built houses had also collapsed under the weight of ash deposits soaked by recent rains.

The National Disaster Management Centre convened an emergency meeting, at which the PNGRCS assessment team shared their findings with all in attendance. In the delineation of roles established at the meeting, it was determined that the PNGRC would provide non-food relief items.

The PNGRCS deployed FACT-trained volunteers for the first week of the operation to set up a field office and oversee the initial relief distribution. The field office was based in the Asurumba camp, from where the PNGRCS community-based self-reliance (CBSR) officer oversaw activities throughout the operation, and two more volunteer units were established in the Potsdam and Mangem camps. Service provision in all three locations drew on people among the evacuee population who had previously received CBSR training. These volunteers distributed relief materials and undertook dissemination on health and hygiene. As the evacuation progressed, a number of evacuees settled in surrounding villages where they had family, and a further group of volunteers was formed to ensure that Red Cross support was offered there as well.

The priority in the PNGRCS response was to help evacuees meet their water and initial shelter needs by providing jerry cans and tarpaulins. The Australian Red Cross Society (ARCS) dispatched a water and sanitation delegate to the field on December 4 to investigate unconfirmed reports that potable water was not available within the camps. It was found that immediate water needs could be met from existing sources, but those sources would need to be protected and further wells dug to ensure adequate quantity and quality of drinking water meets ongoing needs. Latrines were also urgently needed to prevent contamination of water sources and the environment. NGOs present at the second stakeholders' meeting committed to undertake this work.

Relief items	Number distributed	Target
Tarpaulins	4657*	3000
Tents (100 x 24 feet)	3	
20-litre jerry cans	1087**	2000
44-gallon drums for latrine construction	24	
Roll of plastic sheeting for water catchment	1	
Water purification tablets	12,760	24, 000
* Number of tarpaulins exceeds target due to varying sizes available for distribution and the need to replace a number of tarps because of the extended period for which temporary shelter was required.		
** Although early evacuees needed water containers, later arrivals brought their own, so fewer jerry cans were distributed than initially expected.		

Shelter

Objective: Provision of tarpaulins for temporary shelter.

PNGRCS volunteers, overseen by the CBSR officer, dispatched stocks of relief goods – including tarpaulins – available at the Madang branch of the PNGRCS immediately to the camps for distribution. Transport of relief goods was provided free of charge by the provincial authorities. Further relief supplies from the PNGRCS headquarters in Port Moresby were sent to Madang within 48 hours of the start of the evacuation. The PNG national airline, Air Niugini, transported these goods at just 30 percent of the normal cost.

The distribution of tarpaulins for temporary shelters ended in January 2005. Although this activity was originally expected to continue for one month, the government's evacuation of Manam island took considerably longer than was initially indicated and the timeline for the distribution of relief items was extended accordingly.

During the monitoring of the Manam operation, the PNGRCS found that a number of tarpaulins had to be replaced due to damage. An investigation of the reasons for this determined that the damage was primarily due to severe weather conditions and the use of the tarps for longer periods than envisaged. The PNGRCS decided to investigate the availability of better quality materials before replacing stocks distributed in this operation. Although this has delayed the replenishment, the improved reliability of materials available is adequate justification for this course of action.

Second-phase plans for the procurement and distribution of village resettlement packs were dependant on government approval for long-term settlement. Land ownership issues and questions of longer-term settlement of evacuees remain unresolved however, so these activities have not commenced.

Impact

A total of 1880 families (10677 people) from 16 villages have received tarpaulins to establish temporary shelters. PNGRCS volunteers have also helped evacuees and provincial authorities set up temporary shelters, clear wells and establish latrines. The review of the effectiveness and lifespan of tarpaulins distributed has further resulted in higher quality tarpaulins being sourced for future procurement.

Water and sanitation

Objective: Provision of water containers and purification tablets to ensure access to clean water.

PNGRCS volunteers distributed 1087 jerry cans to 1750 families.

Following the report from the ARCS water and sanitation delegate, the PNGRCS requested a coordination meeting, at which UNICEF agreed to provide a two-week supply of water purification tablets (24,000 tablets) to be distributed by PNGRCS volunteers. A total of 12,760 tablets were distributed to 1880 families, a figure that was well short of the number of tablets available. The volunteers observed that evacuees complained about the taste of the water after treatment, and despite dissemination on the importance of clean water, many did not return for further supplies after receiving their first allocation. The volunteers also provided information on the need to boil and decant drinking water and protect water sources.

The PNGRCS originally indicated a willingness to facilitate the construction of pit latrines and wells. Other agencies subsequently committed to ensuring water and sanitation needs were met however, and the PNGRCS took a more minor, supporting role, providing assistance when requested, such as supplying 44-gallon drums to build latrines and plastic sheeting for water harvesting.

Impact

Following the initial assessments of the care centres and the washing and toilet habits of evacuees, there were concerns about the potential for a large-scale breakout of diseases related to poor hygiene practices. It can be assumed that the work carried out by PNGRCS volunteers made a significant contribution to the fact that such an outbreak did not occur.

Health and hygiene promotion

Objective: Support health department activities through dissemination on basic hygiene, safe water and HIV/AIDS.

Dissemination activities by PNGRCS volunteers included health and hygiene information, safe water (discussed above) and HIV/AIDS.

Operational constraints

The longer-term future of the care centres is uncertain because the land in question has become the focus of a dispute between government and traditional landowners. In the face of such uncertainty, it has been difficult to choose the most appropriate response to evacuees' needs. Some NGOs committed to support evacuees are facing significant challenges as a result.

Communication between the care centres and between the field and headquarters was also problematic. Telephone services do not exist there and the radio systems promised by provincial authorities did not materialise until mid-November. Even then, the only reliable link to the field was via the PNGRCS satellite phone.

Coordination

The Federation's PNG delegation has played a central role in coordinating the PNG National Disaster Management Office, the Madang provincial disaster committee, international donors and the PNGRCS. The

national society has, from the outset, shared information gathered in the field and has cooperated closely with all stakeholders, in particular UNICEF, Care Australia, Oxfam, World Vision and PNG Council of Churches.

Constraints

Some stakeholders' response plans and timeframes proved to be unrealistic. More realistic assessments of what they could deliver might have allowed the PNGRCS to provide further interim support, ensuring evacuees' needs were more adequately met.

National Society capacity building

The Federation has provided extensive guidance to the national society throughout this operation, particularly in formulating plans, preparing reports and monitoring the effectiveness of the operation. It is also envisaged that the national society, with assistance from the Federation, will evaluate the effectiveness of current disaster plans and policies as part of the review of the PNGRCS response to this emergency, particularly those relating to the mobilisation of volunteers (especially at branch level) and the training provided to them.

This operation has increased the profile of the PNGRCS and its standing within the community of organisations concerned with disaster response. This will be of benefit to the national society as it negotiates a Memorandum of Understanding with the PNG government in relation to disaster management.

Advocacy and public information

The PNGRCS has developed a strong relationship with national media outlets, with a series of newspaper articles between late October and the end of December 2004 making specific and positive reference to the PNGRCS role in the Manam emergency response. Radio and television stations have also highlighted the PNGRCS role in the Manam emergency, helping the society increase the public's awareness of its role in that specific operation and its humanitarian mission in general.
