Papua New Guinea: Cholera, Dysentery and Influenza Outbreaks

The International Federation’s Disaster Relief Emergency Fund (DREF) is a source of un-earmarked money created by the Federation in 1985 to ensure that immediate financial support is available for Red Cross and Red Crescent response to emergencies. The DREF is a vital part of the International Federation’s disaster response system and increases the ability of National societies to respond to disasters.

**Period covered by this update:**
Update till the 30 May 2010

**Summary:**
The International Federation of Red Cross and Red Crescent Societies’ Disaster Relief Emergency Fund (DREF) extension was granted on 7 October 2009 for CHF 359,058 to the Papua New Guinea Red Cross Society to reach 300,000 people in 13 out of 20 provinces. Initially, CHF 43,878 (EUR 28,923 or USD 41,339) was allocated from DREF to support the Papua New Guinea Red Cross Society (PNGRCS) in delivering immediate assistance to some 5,000 beneficiaries on 7 September 2009 in response to the outbreak.

PNGRCS met the needs of people affected by extending the existing DREF and implemented a strategy that included hygiene information dissemination and community awareness to minimize or contain the spread of cholera, dysentery and influenza over the three month timeframe. The increased scope and budget for this operation, enabled the targeted population of approximately 300,000 people to be reached directly, and a further 2.4 million people indirectly. The original budget for the operation was increased to CHF 359,058 (EUR 237,112 or USD 348,498).

This operation was expected to be implemented in three months, i.e. by 7 January 2010, with a final report due by April 2010. A no cost extension was however requested and approved and as a consequence this operation was completed by 15 May 2010.

The implementation of activities for the operation was successfully concluded by May. However, there has been some delay in obtaining necessary financial acquittals from PNGRCS to enable the publication of a final financial report. The total reported expenditure to date is CHF 295,251 with a further CHF 4,599 booked in November. This includes a working advance with PNGRCS of CHF 45,519 to be returned to DREF. A further amount of CHF 63,807, currently held by IFRC will also be returned. Pending the completion of this process this final report is accompanied by an interim final financial report.
The situation

1. Background - Overall
The Papua New Guinea National Government declared a health emergency in the Morobe province following the cholera, dysentery and influenza outbreak on 11 September 2009. The provincial authorities, with assistance of the National Department of Health and partner agencies; particularly the World Health Organisation, established a provincial outbreak response committee comprising representatives from relevant national and provincial authorities and co-chaired by the provincial health advisor and the provincial health director in order to coordinate the management of the outbreak.

On 25 October 2009, cholera was confirmed in Madang Province and since that time the outbreak spread further with the movement of people to other provinces, particularly East Sepik, Central Province and the National Capital District (NCD) in early 2010.

A cholera treatment centre was set up in Kambaramba Village by 19 November. An additional 111 cases of acute watery diarrhoea, then confirmed cholera, were registered. Five deaths were also registered.

After the peak of cholera cases in September, October, November; and at the beginning of December 2009 the numbers of newly reported cases per week decreased in the Morobe Province and the situation stabilized.

2. Surveillance and Laboratory – National Department of Health

<table>
<thead>
<tr>
<th>Province</th>
<th>Cumulative</th>
<th>Cases</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morobe Province</td>
<td>Cumulative</td>
<td>658</td>
<td>32</td>
</tr>
<tr>
<td>Madang Province</td>
<td>Cumulative</td>
<td>987</td>
<td>5</td>
</tr>
<tr>
<td>East Sepik Province</td>
<td>Cumulative</td>
<td>656</td>
<td>16</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>Cumulative</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>NCD Central</td>
<td>Cumulative</td>
<td>873</td>
<td>21</td>
</tr>
<tr>
<td>Vanimo</td>
<td>Cumulative</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Cumulative</td>
<td><strong>2,304</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

The Red Cross & Red Crescent Action

Since October 2009, the Papua New Guinea government requested that the Papua New Guinea Red Cross Society (PNGRCS) worked in coordination with the government to establish a cholera task force. PNGRCS did so gradually; and established and implemented hygiene promotion activities in 13 provinces where the National Society has branches and volunteers available for disseminating information on cholera prevention and control; and basic hygiene messages.

The difficulties faced were mainly related to logistics and having the right management and operational systems and procedures in place as the provinces can be accessed only by air or boat. In addition, not all provinces have internet availability, and mobile phone coverage in some areas is very limited. Reports were received by the national headquarters (NHQ) from the branches by fax.

The 13 PNGRCS branches are strengthening their understanding of the importance of respecting finance procedures and of doing accurate reporting.

1. Reinforcing the overall PNGRCS Strategy and the Hygiene Promotion Campaign

Following the implementation of the Nationwide Hygiene Promotion Campaign between October – December 2009, PNGRCS’s Senior Governance realized that the support provided to the branches by NHQ was not effective and there needs to be change.

The three main departments, each with three staff members: Disaster Risk Management (DRM), Health and HIV, and Organizational Development (OD) were in charge of implementing activities and of supporting PNGRCS. The reason behind the need of restructuring was that the three departments were working without
integration and without taking ownership of the overall programmes. There were also important gaps in communication and in the sharing of information.

The decision to restructure the national society was taken at the end of January 2010 by PNGRCS’s governance. The main change was to have one National Coordinator, based at NHQ, in charge of programme implementation within the national society, and four regional coordinators at NHQ, in charge of supporting the branches in their respective regions. Each regional coordinator took responsibility for Health and HIV, DRM and OD.

PNGRCS now has a holistic and more integrated approach, which was to empower the branches, and aim to focus on implementation at community level. PNGRCS staff needed several days to digest and fully understand the restructure, so the overall Nationwide Hygiene Promotion Campaign slowed down over the end of January and the beginning of February 2010.

At that time, the positive feeling of the National and Regional Coordinators was that the National Society responded faster in supporting the branches in solving issues; especially in speeding up the system and procedures established within PNGRCS.

2. Volunteer Training – Intermediate Level – Orientation & Health

The objective was to train volunteers from PNGRCS’s 13 branches in order to implement hygiene promotion activities in their respective communities.

Currently, 99 volunteers have been trained to a “basic level” for health orientation and 267 volunteers have been trained to an intermediate level, which includes disease prevention and health promotion. The technical information used during these trainings were from the IFRC’s community based health and first aid (CBHFA) manual and volunteers guide for epidemic disease control guide. The volunteers from 11 out of 13 branches have received the orientation and health training that allowed them to implement hygiene promotion activities at community level. Please refer to below table for further details on this.

<table>
<thead>
<tr>
<th>Branches</th>
<th>Duration</th>
<th>Type of Volunteers</th>
<th>Content of the training</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Level training</td>
<td>Morobe and NCD Central</td>
<td>2-5 days 3 different trainings, New volunteers and defaulted volunteers for specific deployment</td>
<td>Red cross orientation, refresher, working with community, communication skills, health hygiene orientation, cholera specific prevention messages, disease transmission concepts, Red Cross way of working,</td>
<td>Morobe/ and Central NCD branches had 3 different trainings</td>
</tr>
</tbody>
</table>
practical sessions to prepare and equip the volunteers for door to door cholera response.

2-5 days basic health training focusing on the cholera

Red Cross Movement, how the Movement works, health and disease orientation concepts, communicable disease transmission and control, air borne, water borne and food borne diseases, including signs and symptoms, providing first aid assistance and referral services, water and sanitation software prevention

more detailed training

---

<table>
<thead>
<tr>
<th>Intermediate health</th>
<th>As listed in below table</th>
<th>5 full days</th>
<th>Branch core volunteers, who have had previous work experience with RC in other fields e.g. first aid, disaster risk management, and youth</th>
<th>Red Cross Movement, how the Movement works, health and disease concepts, communicable disease transmission and control, air borne, water borne and food borne diseases, including signs, and symptoms, providing First aid assistance and referral services, water and sanitation software prevention</th>
</tr>
</thead>
</table>

The training sessions were focused and targeted to mobilize, and to prepare new and existing volunteers for door to door cholera prevention and control activities in the branches. Previously, there were no health volunteers apart from the first aid and youth volunteers throughout the country. Therefore, the need to have trained health volunteers became critical for the response. The National Society used this opportunity to mobilize and train other branches volunteers to prepare for future cholera epidemics and response.

The main difficulties in providing training to the National Society’s branches were related to internal communications. The majority of the branches do not have internet access or fax, and mobile phone network coverage is often poor. This delays the flow of information between NHQ and the branches, resulting in the delayed dispatch of training materials to the branches, which in turn delayed the implementation of the operation.

During the reporting period training was delivered to 11 branches: these are Morobe, Eastern Highlands, NCD Central, Oro, Madang, West New Britain, Western Highlands, Manus, East New Britain, Sandaun, and Bougainville.

The following table shows the number of volunteers trained in each branch. The first row refers to the volunteers trained to the Basic Level, and the second row refers to volunteers trained to the Intermediate Level in the different provinces in Papua New Guinea.
One of the outcomes of the training session is that each branch will set its own activities with a Plan of Action; and the three main approaches to carry out hygiene promotion activities are Public Places Awareness, Information Booths (Info Booths), and Door to Door Dissemination, as guided by NHQ in line with the overall coordinated response.

Recently, additional PNGRCS branches decided to implement hygiene promotion activities in schools as well, especially in the schools close to the main affected areas. The methodology used is practical and participatory; volunteers with buckets of water and soap show younger students the correct technique for washing hands with soap and highlight the key times for hand washing. Appropriate information, education, and communication (IEC) materials aimed at reaching the student’s family members are provided to the students. The schools sent letters of appreciation to PNGRCS.

3. Public Place Awareness

Following “Intermediate Level – Orientation & Health” training received by the volunteers, the branches started to disseminate, with the support of a loud speaker and IEC materials. Then hygiene promotion information was distributed to communities at selected places where people converge (i.e. market places, bus stops, and schools).

Up to 5 March 2010 the Nationwide Hygiene Promotion Campaign disseminated hygiene information to 48,535 people in eight provinces in Papua New Guinea; and currently approximately 116 volunteers are involved in Red Cross activities daily.

The eight branches who implemented public place awareness following the training received were Morobe in Lae; Eastern Highlands in Goroka; NCD Central in Port Moresby; Oro in Popondetta; Madang; West New Britain in Kimbe; Western Highlands in Mt. Hagen; and Manus.

Volunteers supported by IEC Material produced by PNGRCS in line with the National Department of Health’s Cholera Task Force and Communication Working Group, disseminate information on cholera, on how to prevent it, and on the importance of having good hygiene practices. Up to the 5 March, 32,043 IEC leaflets were distributed in eight provinces in Papua New Guinea.

Normally daily activities ran from 09.30am till 03.30pm every three or four days a week depending on branch capacity and on the availability of volunteers.

Following is a table that shows the progress from the Public Places Awareness campaign at that time.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Activities</th>
<th>PNG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morobe Area, PNG Province</td>
<td>Morobe</td>
<td>Total</td>
</tr>
<tr>
<td>Public Place Awareness - People Reached</td>
<td>5,469</td>
<td>59,535</td>
</tr>
<tr>
<td>Public Place Awareness - Volunteers Involved x Day</td>
<td>12</td>
<td>116</td>
</tr>
<tr>
<td>Public Place Awareness - IEC Material Delivered</td>
<td>9,000</td>
<td>36,032</td>
</tr>
</tbody>
</table>

3.1 Morobe Province – Lae

The Public Place Awareness campaign was conducted three days per week and started on 25 September 2009.

During the reporting period 5,469 people received information on cholera, how to prevent it, and on the importance of having good hygiene practices to minimize the risk of infections. Each day ten volunteers were involved in this activity, and an average of 200 handouts was distributed per day.
Then, at the beginning of December 2009, PNGRCS’s Morobe Branch had to stop its activities due to internal issues.

Cholera cases coming from the Provincial Department of Health in Lae were rising and it was necessary to restart hygiene promotion activities within the Morobe province. The NCD Central branch Chairman was deployed to the city of Lae. The main objective was to mobilize six trained volunteers and together with them identify and contact schools in the most affected areas, and implement hygiene promotion activities at the schools.

3.2 Eastern Highlands – Goroka

The Public Place Awareness campaign was conducted four days per week and started on 26 October 2009.

During the reporting period 4,026 people received information on cholera and the importance of good hygiene practices to minimize the risk of infections. Each day ten volunteers were involved in this activity, and an average of 120 handouts was distributed per day.

After the start of the campaign, internal issues between PNGRC’s NHQ and the provincial branch caused the activities to stop for a while. Later the Regional Coordinator in charge encouraged the branch to start hygiene promotion again at a community level; and with close monitoring activities were carried out.

3.3 NCD Central – Port Moresby

The Public Places Awareness campaign was conducted three days per week and it started on 1 October 2009.

During PNGRCS’s response to the cholera outbreak the branch provided 7,183 people with information on cholera and on the importance of good hygiene practices to minimize the risk of infection from cholera. Each day ten volunteers were involved in this activity, and an average of 40 handouts was distributed per day.

In addition, the “orientation & health” training package was officially delivered to the NCD Central Branch, and 22 volunteers were trained. As a consequence activities started again.

3.4 Oro – Oro

The Public Places Awareness campaign was directed at the same beneficiaries who received drinkable water during the Oro Floods response. To date 10,148 people have received information on cholera and on the importance of good hygiene practices to minimize the risk of infection from cholera.

Each day 22 volunteers were involved in this activity, and an average of 550 handouts was distributed per day.

3.5 Madang – Madang

The Public Places Awareness campaign was run three days per week and it started the first week of November 2009.

Up to this reporting period 2,236 people received information on cholera and on the importance of good hygiene practices to minimize the risk of infections from cholera.

Each day 14 volunteers were involved in this activity, and an average of 386 handouts was distributed per day.

The Madang Province is one of the provinces most affected by cholera cases within Papua New Guinea, so the branch is going to implement additional hygiene promotion activities mobilizing all the Volunteers available within the branch.
3.6 **West New Britain – Kimbe**

The Public Places Awareness campaign was run three days per week and it started the first week of December 2009.

Up to this reporting period 1,948 people have received information on cholera and on the importance of good hygiene practices to minimize the risk of infections from cholera.

Each day 11 volunteers were involved in this activity, and an average of 534 handouts was distributed per day.

The branch at the time ran a new two week plan of action and from 8 March 2010 the hygiene promotion at community level was carried out.

3.7 **Sandaun – East Sepik**

The volunteers of the Sandaun branch received the “Orientation & Health” training package and 22 volunteers were been trained. These volunteers implemented hygiene promotion activities at community level.

The East Sepik Province was badly affected by cholera cases, and the situation there deteriorated. The National Department of Health supported the Provincial Department of Health to contain the spread of cholera.

Unfortunately, PNGRCS does not have a branch in the East Sepik, and for this reason five volunteers trained from the Sandaun Branch were deployed to the Angoram district in East Sepik Province.

The main objective then was to implement two weeks hygiene promotion activities in the most affected villages. The regional coordinator worked on the planning details of the deployment together with the Sandaun branch. In addition PNGRCS’s Regional Coordinator was deployed from Port Moresby to support the volunteers in the field, and was there to guarantee smooth implementation.

3.8 **East New Britain**

When PNGRCS volunteers from the East New Britain branch received the “Orientation & Health” training package 27 volunteers were trained. Following the training a two week plan of action was put together with the facilitator and PNGRCS’s NHQ sent funding to the branch for carrying out hygiene promotion activities. These took place for a period of two weeks.

3.9 **Bougainville**

When the volunteers from the Bougainville branch received the “Orientation & Health” training package 17 volunteers were trained. The volunteers then implemented hygiene promotion activities at community level.

4 **Door to Door**

The “Door to Door” approach was adopted to respond to the cholera, dysentery and influenza outbreaks in the Morobe Province in the affected villages and settlements.

The idea was to identify the most affected areas, and in groups of two volunteers per team started a Door to Door awareness campaign through community volunteers. Visited households were given “face to face” explanations on good hygiene practices.
During this reporting period only two branches adopted this approach, NCD Central and Morobe. This was because these branches were the main branches where cholera cases were confirmed at the community level and “door to door” activities could have more impact.

The “Door to Door” awareness campaign was conducted three days per week and was started on the 15th of October 2009. This resulted in 400 households being visited; and 1,616 people received information on cholera, how to prevent it, and on the importance of good hygiene practices to minimize the risk of infections.

14 volunteers were involved daily in this activity, and an average of five handouts were distributed per household. The Cholera Impact review conducted in September 2010, indicated that this approach had the most impact. The door to door activities conducted in Morobe Province, in conjunction with other Cholera Task Force partners that were targeting latrine construction and safe drinking water, directly contributed to a reduction in cholera cases.

Below is a table that shows the “Door to Door” progress:

<table>
<thead>
<tr>
<th>Activities</th>
<th>Morobe</th>
<th>Eastern Highlands</th>
<th>NCD Central</th>
<th>Oro</th>
<th>Madang</th>
<th>West New Britain</th>
<th>Western Highlands</th>
<th>Manus</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door to Door - HH Visited</td>
<td>320</td>
<td>0</td>
<td>767</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,087</td>
</tr>
<tr>
<td>Door to Door - People Reached</td>
<td>1,065</td>
<td>0</td>
<td>7,183</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6,248</td>
</tr>
<tr>
<td>Door to Door - Volunteers Involved x Day</td>
<td>10</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Door to Door - IEC Material Delivered</td>
<td>2,000</td>
<td>0</td>
<td>3,319</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5,319</td>
</tr>
</tbody>
</table>

5 Use of broadcast media

PNGRCS used broadcast media to implement the Nationwide Hygiene Promotion Campaign to respond to the cholera, dysentery and influenza outbreaks in the Morobe Province and in Papua New Guinea.

Three announcements were done with the film and production support from Papua New Guinea National Television (EMTV). These were transmitted from 6 November 2009 for 18 days on EMTV from 06.30pm till 10:00pm daily.

The three announcements were transmitted randomly five times per day on EMTV, and the transmission was estimated to have reached 1.5 million people per day; a total of 27 million people over the 18 days.
5.1 Footage & Future documentary

PNGRCS contracted Media Haus Production to edit the video footage filmed during the October 2009 visit to Lae, Morobe Province, and the material is now available.

The footage material was sent to the IFRC Asia Pacific Zone Office in Kuala Lumpur for the production of a documentary on PNGRCS’s response to the cholera, dysentery and influenza outbreak, which can also be used for future training.

6 Monitoring support and visits to Branches

The facilitator’s skills in delivering the Training Package increased. The three facilitators per branch are now confident in providing training sessions to the volunteers. Volunteers at branch levels are also committed and enthusiastic to move forward in implementing hygiene promotion activities at community level.

The below table shows the number of staff who traveled from PNGRCS’s NHQ to branches to provide training and support in programme implementation.

<table>
<thead>
<tr>
<th>Morobe</th>
<th>Eastern Highlands</th>
<th>NCD Central</th>
<th>Oro</th>
<th>Madang</th>
<th>West New Britain</th>
<th>Western Highlands</th>
<th>Manus</th>
<th>East New Britain</th>
<th>Sandaun</th>
<th>Bougainville</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>29</td>
</tr>
</tbody>
</table>

7 Challenges & Lesson Learnt

PNGRCS’s Senior Governance visited the branches to monitor and evaluate how the activities were implemented. At the same time, established systems and procedures were also reinforced. Following points were identified for improvement:

- **Reporting.** Activity and expenditure reports to be compiled and faxed according to an agreed timeframe; and the originals will follow by post.

- **Reporting.** Cash Book and Acquittal Forms be used regularly as a cashbook to record all funds received (starting balance) and expenditure or costs incurred for particular activity/activities. The persons/volunteer(s) responsible for compiling this report needs to understand and adhere to reporting requirements.

- **Reporting.** It is important that the branches understand the reasons for reporting, and they must report according to information on the Financial and Activity Reporting Formats.

- **Methodology.** It is important that only one type of topic is disseminated in one location. Too much information distorts and creates confusion in peoples thinking and important information may be lost.

- **Approach.** A loud speaker is not an effective tool for the dissemination of information. A group of people between ten to 15 people to one volunteer for specific topic and open discussion, allowing questions and answers for that specific topic, and disseminating the relevant IEC material to the topic discussed in that group is more effective. The different groups are made up of men, women, girls, and boys.
Lessons from the operation

The impact assessment of the cholera operation conducted in September 2010 found the following:

**Appropriateness**
The response programme was appropriate for the needs identified. PNGRCS chose to respond to two (communications/hygiene promotion and logistics) of the six areas of the cholera task force (coordination, logistics, case treatment, disease surveillance, communications and water and sanitation). PNGRCS could also have responded with activities in water and sanitation. These elements should not be separated from hygiene promotion activities. The National Society, however, did not feel they had the capacity to undertake these activities.

**Effectiveness**
The most effective method utilized by the National Society was door to door awareness. In future programming, increased targeting of females as the main keeper of hygiene in both the house and the community should be adopted. Household visits to increase knowledge and monitor progress should also be adopted. Other methods for targeting information dissemination such as focus groups or community meetings could also be more effective at ensuring the whole community has access to information.

The training package and IEC materials developed were appropriate (pictures in local languages). In future training sessions and materials should be adapted to encourage more participatory methodologies (i.e. picture card activities, dramas, song, puppets, cartoons, posters). An additional tool book for volunteers could also be useful to provide additional reference information. IFRC’s hygiene promotion box and the ‘Household water treatment and safe storage in emergencies’ should also be considered for future operations.

The dissemination of basic hygiene items (such as soap and toilet paper) are recommended for future programming especially during the high risk period. Information on alternative methods for hand washing could also be promoted through the messages. Bleach (liquid chlorine) was not distributed by PNGRCS and is not recommended for distribution without using trained volunteers. The fact that it is encouraged by the department of health warrants further discussion on the suitable use of chlorine as a household water treatment product in emergencies.

Working with partners in the cholera task force increased the overall impact of joint, coordinated activities on reducing cholera. In the Wasu District of the Morobe Province, the combined efforts of task force partners had a noticeable impact on reducing cholera cases.

**Efficiency**
Existing and new volunteers were recruited at the branch and community level for PNGRCS in order to implement the project. Volunteers are the strength of the branches and despite not having sufficient identification and Red Cross visibility tools, volunteers remain motivated and interested to continue activities.

The plan to spread activities to additional branches as preparedness for an outbreak was a good one, however aside from ensuring volunteers were trained on cholera awareness, the activities could have had greater ‘value for money’ and been easier to manage if the response activities were carried out by only the branches where cases occurred.

The initial timeframe for an emergency operation of three months was appropriate and a lot of activities were conducted for the small budget allocated to the project, although more targeted activities could have had more impact on increasing hygiene knowledge.

**Impact**
PNGRCS’s goal was to ‘conduct hygiene information dissemination and community awareness to minimize or contain the spread of cholera, dysentery and influenza’. Conducting hygiene information dissemination and community awareness activities will not achieve the goal of containing or minimizing the spread of cholera unless awareness results in improved hygiene behaviour. A one hour, once off awareness session is unlikely to result in improved hygiene behaviour. Behaviour change requires repeated messages over a longer time to the right target audience. Most of the schools and community members interviewed expressed a change in behaviour for the period that the awareness session, however, they have now ‘returned to normal’ practices. In specific communities with a higher number of cholera cases there was a direct link between PNGRCS activities and a reduction in cholera cases.
The knowledge of cholera causes, prevention and treatment varied significantly across the target audiences interviewed. Generally people knew that cholera was caused by an ‘unsanitary environment’, although, < 50 per cent were able to say clearly what are the pathways of transmission for cholera.

The task force members interviewed believed that the activities of the task force collectively led to the reduction in cholera cases, however, the assessment team could not conclude that PNGRCS’s activities alone contributed to reducing or containing cholera.

**Strengthening the Papua New Guinea Red Cross Society**
Following the implementation of the nationwide hygiene promotion campaign between October and December 2009, it became apparent to the National Society’s senior governance team that the support provided to the branches by the headquarters could be more effective.

The three main departments, each consisting of three staff members: DRM, health and HIV, and OD were responsible for implementing activities and for supporting PNGRCS. The need to restructure was driven by the fact that the three departments were poorly integrated and they were unable to take ownership of the core programmes. There were also important gaps in communication and information-sharing.

The decision to restructure the National Society was taken by the senior governance team at the end of January 2010. The main change is to have one national coordinator based at headquarters, who is in charge of programme implementation within the National Society; and to have four regional coordinators, still based at headquarters, but in charge of supporting the branches in their respective regions. Each regional coordinator has responsibility for DRM, health and HIV, and OD.

PNGRCS now has a holistic and more integrated approach, which empowers the branches and allows the focus to be on implementation at community level. PNGRCS staff have needed time to digest and fully understand the new structure, so the nationwide hygiene promotion campaign slowed down at the end of January and the beginning of February 2010.

So far, the feedback from the national and regional coordinators is positive in that the National Society is now quicker in supporting the branches to solve issues, and especially in speeding up the systems and procedures that have been established.

To conclude, PNGRCS’s cholera response programme was considered an appropriate way to address a new public health need in Papua New Guinea. Partnerships with the cholera task force, the ability to plan rapidly and the mobilization of Red Cross volunteers have all increased the visibility and credibility of the PNGRCS in their response to emergencies.

Short-term activities to improve hygiene will, however, only ever have a limited sustained impact on reducing cholera unless they are accompanied by improvements to water and sanitation facilities. The continued occurrence of cholera, combined with the chronic water and sanitation needs in rural Papua New Guinea, are an opportunity for the National Society to undertake a community based water, sanitation and hygiene programme.

8 **Looking to the future**

The emergence of cholera in Papua New Guinea is a major public health concern to the government of Papua New Guinea and PNGRCS. The presence of cholera is here to stay because of the weak health infrastructure and poor environment conditions compounded with communication difficulties and other social economic issues in the country.

With the experiences PNGRCS had in the response activities in Morobe and NCD Central the National Society has realized epidemics of cholera and other diseases are important within the bigger pictures of preventing deaths among the vulnerable population in the country. Some areas of the National Society will be focusing in the future from lessons learned. These include:

a) Continuing to strengthen and expand community mobilization in selected provinces
b) Reactivating and establishing health and CBHFA integrated programmes at NHQ and expanding to priority provinces

c) Developing the hardware component of the water and sanitation programme with health

d) Reorienting branch volunteers and training them to be core health volunteers

e) Improve and strengthen the partnership with the national department of health

f) Development and production of cholera and related likely epidemic disease control training materials for volunteers

g) The National Society will seek external support in capacity building at the National level

It is clear from the recent IFRC impact assessment of PNGRCS’s cholera operation that outbreaks of cholera and other water and sanitation related diseases will remain a risk in Papua New Guinea. Since cholera is likely to remain in Papua New Guinea, further planning needs to be conducted by PNGRCS for response to public health outbreaks. Short term activities will only have a limited impact to reduce the risk of cholera in the community and long-term community based water, sanitation and hygiene promotion projects will have a greater and more sustainable impact on reducing cholera.

The assessment team recommended the following to PNGRCS:

- Conducting a contingency planning workshop to address planning for public health outbreaks (specifically cholera) in emergencies
- Planning the development of water and sanitation emergencies capacity in PNGRCS including training (utilizing water treatment equipment)
- Discussing opportunities for planning and funding a pilot water, sanitation and hygiene project in Morobe Province with IFRC and interested participating National societies, building on existing communities where cholera occurred
- Discussing with other donors, plans for rural water supply and sanitation in Papua New Guinea
- Incorporating cholera prevention messages into any existing first aid and other community based health activities
How we work

*All International Federation assistance seeks to adhere to the Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organizations (NGO’s) in Disaster Relief and is committed to the Humanitarian Charter and Minimum Standards in Disaster Response (Sphere) in delivering assistance to the most vulnerable.*

The International Federation's activities are aligned with its Global Agenda, which sets out four broad goals to meet the Federation's mission to "improve the lives of vulnerable people by mobilizing the power of humanity".

<table>
<thead>
<tr>
<th>Global Agenda Goals:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reduce the numbers of deaths, injuries and impact from disasters.</td>
</tr>
<tr>
<td>• Reduce the number of deaths, illnesses and impact from diseases and public health emergencies.</td>
</tr>
<tr>
<td>• Increase local community, civil society and Red Cross Red Crescent capacity to address the most urgent situations of vulnerability.</td>
</tr>
<tr>
<td>• Reduce intolerance, discrimination and social exclusion and promote respect for diversity and human dignity.</td>
</tr>
</tbody>
</table>

Contact information

For further information specifically related to this operation please contact:

In Papua New Guinea Red Cross Society:
• Ms. Esme Sinape (Secretary General), email: hqpngrcs@online.net.pg, phone +675 325 2145.

IFRC: Pacific Regional Office in Suva, Fiji:
• Ms. Aurélie Balpe, Head of Regional Office, email: aurelia.balpe@ifrc.org.
• Mr. Mukesh Singh, Regional Programme Coordinator, email: mukesh.singh@ifrc.org, phone: +679 3311 855, fax: +679 3311 406

IFRC: Asia Pacific Zone Office in Malaysia:
• Mr. Al Panico, Acting Head of Operations, email: al.panico@ifrc.org, phone: +6 03 9207 5700
• Disaster management unit: Mr. Daniel Bolaños González, Regional Disaster Response Delegate, email: daniel.bolanos@ifrc.org; phone: + 60 3 9207 5729, mobile: +60 12 283 7305
• Resource mobilization & PMER unit: Mr. Alan Bradbury, Head of RM & PMER, email: alan.bradbury@ifrc.org; phone: +60 3 9207 5771

For pledges of funding: zonerm.asiapacific@ifrc.org
I. Consolidated Response to Appeal

<table>
<thead>
<tr>
<th></th>
<th>Disaster Management</th>
<th>Health and Social Services</th>
<th>National Society Development</th>
<th>Principles and Values</th>
<th>Coordination</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Budget</td>
<td>359,058</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>359,058</td>
</tr>
<tr>
<td>B. Opening Balance</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

**Income**

<table>
<thead>
<tr>
<th></th>
<th>Disaster Management</th>
<th>Health and Social Services</th>
<th>National Society Development</th>
<th>Principles and Values</th>
<th>Coordination</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary Income</td>
<td>359,058</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>359,058</td>
</tr>
<tr>
<td>C6. Other Income</td>
<td>359,058</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>359,058</td>
</tr>
<tr>
<td>C. Total Income = SUM(C1..C6)</td>
<td>359,058</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>359,058</td>
</tr>
<tr>
<td>D. Total Funding = B +C</td>
<td>359,058</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>359,058</td>
</tr>
</tbody>
</table>

**Appeal Coverage**

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

II. Balance of Funds

<table>
<thead>
<tr>
<th></th>
<th>Disaster Management</th>
<th>Health and Social Services</th>
<th>National Society Development</th>
<th>Principles and Values</th>
<th>Coordination</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Opening Balance</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>C. Income</td>
<td>359,058</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>359,058</td>
</tr>
<tr>
<td>E. Expenditure</td>
<td>-295,251</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-295,251</td>
</tr>
<tr>
<td>F. Closing Balance = (B + C + E)</td>
<td>63,807</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>63,807</td>
</tr>
</tbody>
</table>
### III. Budget Analysis / Breakdown of Expenditure

<table>
<thead>
<tr>
<th>Account Groups</th>
<th>Budget</th>
<th>Expenditure</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disaster Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and Social Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Society Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principles and Values</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BUDGET (C)</strong></td>
<td>359,058</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A</strong></td>
<td>359,058</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>359,058</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A - B</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Supplies

- Shelter - Relief: 2,890 2,848 42
- Clothing & textiles: 11,739
- Water & Sanitation: 16,000
- Teaching Materials: 9,828 3,757 6,071
- Other Supplies & Services: 95,410 22,906 72,503
- Total Supplies: 135,867 29,511 106,355

#### Land, vehicles & equipment

- Computers & Telecom: 2,340
- Total Land, vehicles & equipment: 2,340

#### Transport & Storage

- Distribution & Monitoring: 3,183 115 3,068
- Transport & Vehicle Costs: 19,195 7,110 12,085
- Total Transport & Storage: 22,378 7,225 15,153

#### Personnel

- National Society Staff: 9,381
- Total Personnel: 9,381

#### Workshops & Training

- Workshops & Training: 65,551 56,234 9,317
- Total Workshops & Training: 65,551 56,234 9,317

#### General Expenditure

- Travel: 43,706 52,243 8,537
- Information & Public Relation: 32,569 20,556 12,013
- Office Costs: 8,303 30,098 -21,795
- Communications: 25,406 26,059 -653
- Financial Charges: 12 24 -12
- Total General Expenditure: 109,996 128,980 -18,983

#### Programme Support

- Program Support: 22,926 18,402 4,524
- Total Programme Support: 22,926 18,402 4,524

#### Operational Provisions

- Operational Provisions: 45,519
- Total Operational Provisions: 45,519

#### TOTAL EXPENDITURE (D)

- 359,058 295,251 63,807

#### VARIANCE (C - D)

- 63,807

Prepared on 06/Dec/2010