

# FINAL REPORT



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

## DEMOCRATIC REPUBLIC OF CONGO: CHOLERA OUTBREAK IN MBUJI- MAYI

25 August 2003

**Appeal No. 35/02; Launched on: 17 December 2002 for 3 months for CHF 160,000 (USD 111,901 or EUR 108,862) to assist 250,000 beneficiaries. Programme was extended by three months to end of May 2003.**

**Appeal coverage: 65.7%**

**Disaster Relief Emergency Fund (DREF) Allocated: CHF 10,000 (reimbursed)**

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### Summary

Since 19 September 2002, the Democratic Republic of the Congo (DRC) experienced a particularly long epidemic of cholera - more than 6 months – affecting most of the territory in the province of Eastern Kasai. The epidemic involved 5,008 cases and resulted in 263 deaths, a case fatality rate of 7.77%.

Table 1 below summarizes the evolution of the epidemic from its inception on 19 September 2002 up to 31 May 2003. This table emphasizes the fact that this epidemic was particularly long, extending to nine months whereas such epidemics rarely exceed three months. Two reasons for this have been repeatedly advanced:

- i. Insufficient family latrines, due to the high rock composition of the soil making it difficult to dig. Based on a survey performed by the Red Cross of the Democratic Republic of Congo (RCDRC) in January 2003, only 17.37% of the plots visited have toilets or latrines;
- ii. Low rate of access to quality water: 21.3% of the plots visited have access to water from the Regideso (water distribution company), and the rest drink water from unprotected wells or springs and placed downstream from inhabited areas, where the few existing latrines have a depth of less than 1 metre.

In week 21, the epidemic flared up in a further spurt and the number of cases increased exponentially, rising from 45 cases (26 May) to 64 cases (27 May) and then to 84 cases (29 May) in the two mining areas of Luamuella and Bakua Tshimuna. In the last week of May, the total number of cases for the province was 125, with 6 deaths (*source: Meeting of the Crisis Committee on 30 May 2003*).

In terms of geographical distribution, 68.32% of recorded cases came from the town of Mbuji-Mayi and only 31.68% from the interior of the province, in particular the diamond mines where the diggers relieve themselves in the open.

**Table 1: Distribution and localization of cases and deaths by week**

WEEKS OF THE EPIDEMIC	TOTAL NUMBER OF CASES			TOTAL NUMBER OF DEATHS			Case fatality (%)
	Mbujimayi	Interior province	Total cases	Mbujimayi	Interior province	Total deaths	
Week 1	0	3	3	0	2	2	0.00
Week 2	9	10	19	5	4	9	54.17
Week 3	11	48	59	0	9	9	30.51
Week 4	33	81	114	0	9	9	15.79
Week 5	32	97	129	0	17	17	26.36
Week 6	36	119	155	3	3	6	5.70
Week 7	123	72	195	11	2	13	7.77
Week 8	129	56	185	6	6	12	9.42
Week 9	156	29	185	5	3	8	5.79
Week 10	124	77	201	10	8	18	12.32
Week 11	151	77	228	10	5	15	8.40
Week 12	159	73	232	12	6	18	9.84
Week 13	144	55	199	4	9	13	10.84
Week 14	130	46	176	8	7	15	11.96
Week 15	176	51	227	10	2	12	5.91
Week 16	198	64	262	1	7	8	5.70
Week 17	194	35	229	7	4	11	6.36
Week 18	242	21	263	12	3	15	6.55
Week 19	220	32	252	11	1	12	4.94
Week 20	196	35	231	0	2	2	1.73
Week 21	136	42	178	3	5	8	7.18
Week 22	99	65	164	1	4	5	5.45
Week 23	122	39	161	2	0	2	1.23
Week 24	63	38	101	0	3	3	5.94
Week 25	40	33	73	1	0	1	1.35
Week 26	43	45	88	1	1	2	3.37
Week 27	19	41	60	2	1	3	6.45
Week 28	23	39	62	1	0	1	1.59
Week 29	52	31	83	0	1	1	2.41
Week 30	69	38	107	0	3	3	5.61
Week 31	57	24	81	0	1	1	2.47
Week 32	41	17	58	1	1	2	5.08
Week 33	42	12	54	0	0	0	0.00
Week 34	33	15	48	0	1	1	4.17
Week 35	11	12	23	0	0	0	0.00
Week 36	32	91	123	0	6	6	9.76
<b>TOTAL</b>	<b>3,345</b>	<b>1,663</b>	<b>5,008</b>	<b>127</b>	<b>136</b>	<b>263</b>	<b>7.77</b>

Source: "Stop Cholera" Crisis Committee

Once the Government officially declared the epidemic on 25 September 2002, the RCDRC Provincial Committee became immediately and actively involved in efforts to combat this epidemic. This committee is a member of the "Stop Cholera" Crisis Committee set up by the Ministry of Health; other members include Médecins Sans Frontières (MSF), Oxfam, Health Net, COOPI and several other organizations. Three main lines of action were pursued:

- Social mobilization;
- Disinfection and burial;
- Water and sanitation.

The operation, originally planned for three months, was extended to allow for the construction of public toilets and family latrines. This operation was coordinated by a team from the Provincial Committee and was supported by a regional resource person, a member of Central Africa Regional Disaster Response Team (ERDAC); it was carried out with financing from the Swedish Red Cross, the Netherlands Red Cross and the Canadian International Development Agency (CIDA).

## Coordination

Operational activities were coordinated at the RCDRC/Federation level by a team composed of:

- a regional resource person from ERDAC;
- the Federation Health Coordinator, placed under the supervision of the Health Delegate based in Mbujimayi;
- a provincial coordinator (RCDRC Provincial Secretary );
- an urban supervisor for Mbujimayi (Head of the Division of Relief and Disaster Preparedness); and,
- three territorial supervisors for Mweneditu, Ngandajika and Tchilengé which were epidemic foci.

In the Crisis Committee, the main lines of intervention for the RCDRC - supported by the Federation - before, during and after the operation, were as follows:

### Social mobilization

To obtain strong social mobilization, it was first necessary to train volunteers. The training curriculum was composed of five modules: recapitulation of knowledge of the International Red Cross and Red Crescent Movement, cholera (definition, mode of transmission, sources of contamination and route of transmission, recognizing a person with cholera, role of volunteers in an epidemic, preventive measures), communication (techniques of communication, how to prepare and give an educational talk), social mobilization, plan of work and progress report.

The team of trainers, composed of trainers from the RCDRC Provincial Committee and persons intervening actively in the field from the Ministry of Health, had the benefit of supervision by ERDAC resource persons. Volunteers were chosen on the basis of the following criteria: active RCDRC volunteers, committed to working voluntarily within their own communities, able to read and write, with training in community-based first aid (CBFA) an asset.

A total of 234 RCDRC volunteers were trained at six sessions: 32 by ICRC/MSF and 202 by the Federation. There were also 52 free listeners (observers) at the various sessions.

**Table 2: Distribution of volunteers trained by branch**

Branches/Number	Volunteers targeted for training	Volunteers trained		TOTAL	
		Federation	ICRC/MSF	Targeted	Trained
Mbujimayi	75	75	32	75	107
Mwéné-Ditu	15	24	0	15	24
Ngandajika	15	42	0	15	42
Bakuamulumba	15	24	0	15	24
Kalambayi	15	22	0	15	22
Lukalaba	15	15	0	15	15
<b>TOTAL</b>	<b>150</b>	<b>202</b>	<b>32</b>	<b>150</b>	<b>234</b>

Social mobilization went on to deal with raising awareness of cholera among the population. Grassroots activities to raise the awareness of the population throughout the province were carried out at three complementary levels:

- In households: 205 of the trained volunteers carried out door-to-door educational sessions in households in areas affected by the epidemic. By 30 May 2003, 159,045 households had been reached and 882,007 persons made aware, amounting to a coverage of 25.47% (see table below).

**Table 3: Results of door-to-door awareness raising in the province.**

Zone /Number	Households reached	Persons reached	Population of the zone	Coverage (%)
Mbujimayi	143,861	824,144	2,638,000	31.24
Mwéné-Ditu	7,279	39,021	558,375	6.99
Ngandajika	2,037	4,723	46,300	10.20
Bakuamulumba	728	1,956	32,000	6.11
Kalambayi	1,728	5,038	26,000	19.38
Lukalaba	3,412	7,125	161,800	4.40
<b>TOTAL</b>	<b>159,045</b>	<b>882,007</b>	<b>3,462,475</b>	<b>25.47</b>

- In public places (churches, schools, and markets): in Mbujimayi, a team of 12 volunteers led IEC sessions five days a week in public places. By 30 April 2003, they had carried out 41 sessions in churches, 40 in schools and 42 in the main markets in the province, i.e. a total of 123 sessions reaching 139,756 people.

**Table 4: Results of IEC sessions in public places**

Zone	Sessions held				Persons reached			
	Markets	Churches	Schools	Total	Markets	Churches	Schools	Total
Mbuji-Mayi	28	19	18	65	62,720	28,267	13,203	104,190
Mwéné-Ditu	5	12	9	26	21,127	1,807	158	23,092
Ngandajika	5	2	5	12	7,500	250	767	8,517
Bakuamulumba	2	3	4	9	962	675	240	1,877
Kamabayi	1	3	2	6	520	327	583	1,430
Lukalaba	1	2	2	5	437	124	89	650
<b>TOTAL</b>	<b>42</b>	<b>41</b>	<b>40</b>	<b>123</b>	<b>93,266</b>	<b>31,450</b>	<b>15,040</b>	<b>139,756</b>

- In cholera treatment centres (CTC) and in families (of the sick and of the deceased): by 18 April 2003, the four disinfection teams and the burial team had given educational talks among the families of the sick and the deceased at the time of their disinfection and burial activities; this date coincided with the end of ICRC funding support for the programme. A total of 3,217 talks were given since the start of the epidemic, reaching 23,947 people.

### Disinfection and burial

With technical support (training of volunteers), logistical support (provision of equipment and transport) and financial support (per diem for volunteers) first from MSF and then from the ICRC, four teams of five volunteers each posted in the four CTC in Mbujimayi town undertook the disinfection of clothing, objects, places, means of transport, dwellings and latrines used by the patients admitted to the CTC. Another team of five persons took charge of the collection, transport, disinfection and burial of the corpses of persons who died from cholera in the town of Mbujimayi and the surrounding area.

By 18 April 2003, a total of 2,643 houses had been disinfected and 282 bodies buried in Mbujimayi and the surrounding area; the activities of the RCDRC volunteers started on 30 October 2002.

### Case management

Although volunteers were involved in the removal of bodies, the action of the RCDRC was confined to the support given by the programme to the "Stop Cholera" Crisis Committee in the form of medical inputs, cholera kits and other supplies (protective materials and office supplies).

The Government was represented in the structure of the "Stop Cholera" operation by the provincial governor (as Chair), the mayor of the town of Mbujimayi and the provincial medical inspector. This Crisis Committee had several technical commissions, including epidemiological surveillance, social mobilization, patient management, water and sanitation, and logistics. At the decentralized (territorial) level, the committee had the same structure. The mission of the Crisis Committee was to coordinate all action in the field and to centralize inputs. All national

and international humanitarian NGOs present in the province were members of the committee and were the main operational partners of the Government; these included Oxfam-GB, MSF-Belgium and the RCDRC.

**Oxfam-GB intervened in three areas:**

- Watsan (water and sanitation) : installation of bladder distribution systems for the supply of water to the cholera treatment centres (CTC) in the communes of Dipumba, Dibué and Luamuéla in Mbujimayi, and the management of water sources in the communes of Kamaleka and Bakuamulumba.
- Raising awareness for changing behaviour: training of 80 mobilizers, 20 for each of the four health areas of Mbujimayi, and a mobile team of 10 persons for follow-up and awareness in public places for a period of 10 days.
- Assistance to Regideso (water-distribution company) with chlorine to improve the quality of the water supplied to the population.

**MSF-Belgium intervened in three areas:**

- Case management: establishment of structures for treatment (construction of four CTC in Mbujimayi and six in the interior), supply of drugs and materials, supervision of CTC personnel.
- Watsan (water and sanitation): supply of chlorine to the different structures and disinfection of families.
- Raising of awareness and education in the CTC and in the families of infected persons.

MSF and Oxfam ceased their activities when the epidemic was on the way out. Most of the CTC have been destroyed.

WHO was involved mainly in epidemiological surveillance and logistics management.

The other international and national organizations present in the province, such as UNICEF and MIBA (the mining company of Bakuanga), mainly provided inputs and sometimes made technical contributions but were not directly involved in activities in the field.

**Planned objectives and activities**

**Emergency phase**

**Objective 1: Strengthen control activities to reduce the rate of transmission of the cholera epidemic, and recruit 150 extra RCDRC volunteers in addition to those trained in CBFA in the 10 territories of the districts of Tshilenge and Kabinda.**

**Activities carried out in relation to the objective**

- In collaboration with the Federation Regional Office for Central Africa in Yaoundé, the capacity of the Federation and the National Society was strengthened with two resource persons specialists in health, one from the Congolese Red Cross, the coordinator of the operation, and the other from the RCDRC, the first for a period of four months and the second for two weeks. The operation was further strengthened with the recruitment of the health delegate based in Mbujimayi.
- Three training sessions were organized for the 150 newly-recruited volunteers on raising awareness in the community, social mobilization and preventive health to strengthen activities in the CTC. These CTC were well managed by the trained volunteers, and patients everywhere wanted to be taken to them to receive proper treatment.
- The 120 previously-trained volunteers, the 150 newly-recruited volunteers at Mbujimayi and 60 other volunteers from other districts in the province received support in the form of the necessary materials and tools, such as bicycles, cell phones, chlorine and oral re-hydration solution (ORS). This enabled them to identify and help people who were infected and were unable to get to a CTC by themselves. All the cases reported in Mbujimayi and the surrounding villages were brought without difficulty to the CTC, having first been treated with ORS.
- Support was given to the activities of the RCDRC Provincial Committee in social mobilization, disposal of bodies, disinfection and preventive health. This support strengthened the visibility of the RCDRC and the capacity for intervention of the first-aid volunteers, wherever they were.

- The RCDRC teams undertook daily and weekly grassroots awareness raising in schools, churches, public places and from door to door. Radio and television channels and the printed press (newspapers) were used to encourage infected persons to contact the nearest CTC. A total of 250,000 people, representing 10% of the beneficiary population in Mbujimayi and surrounding localities, were targeted and reached. The population very quickly realized the seriousness of the epidemic and began to apply hygiene measures as communicated by the volunteers and the media.

**Objective 2: Support the provincial health authorities by supplying the CTC with medical inputs.**

**Activities carried out in relation to the objective**

- At the beginning of the epidemic, a cholera kit from the Federation's regional stock was handed over to the Ministry of Health authorities to be used in the CTC. This kit was essential for the CTC and enabled them to save the lives of thousands of people who were waiting impatiently for treatment.
- The funds received from the Disaster Relief Emergency Fund (DREF), the Swedish Red Cross and the Finnish Red Cross made it possible to buy 50 aprons, 50 blankets, chlorine, 70 pairs of gloves, 50 kg of sugar, 50 kg of salt, 100 1 litre plastic bottles, 30 plastic cups, 30 boxes of 38 bars of soap each, 3 saucepans, 2 mobile telephones, pens, paper, notebooks, 30 body-bags and 10 torch lamps. These inputs enabled the provincial health authorities, through the "Stop Cholera" Crisis Committee, to augment the reception capacity of the CTC. The volunteers assigned to them were able to operate without fear of contamination.

**Objective 3: Support water and sanitation activities with a view to reducing the transmission of cholera and other diarrhoeal diseases in the community.**

**Activities carried out in relation to the objective**

In the context of control of this particularly long-lasting epidemic, a water and sanitation project initiated by the provincial committee with the support of the regional resource person was undertaken, starting in the second month of the programme and with the support of the Canadian International Development Agency (CIDA). It comprised the following:

- **Training of volunteers in Watsan**

Training was held from 8 to 12 April 2003, bringing together volunteers from the five communes. A selection test was organized and resulted in the retention of 46 of the 70 volunteers who came forward. Therefore, a total of 46 volunteers for a possible 50 from the five communes of the town of Mbujimayi were trained in techniques of protection, construction, maintenance and utilization of water points and latrines. As well, the trainees acquired knowledge and skills in the following fields: knowledge of the Movement, communication techniques, preparation and leading of educational talks, cholera (knowledge of the disease), general knowledge about water and sanitation, disposal of excreta, water supply, construction, maintenance and utilization of latrines, disposal of solid wastes, drainage, vector control, and promotion of the rules of hygiene.

- **Construction of public toilets and family latrines**

The following were constructed:

- One modern toilet with eight cubicles with flushing Turkish WCs at the Congo market;
- Two public latrines with four emptiable dry pits and two cubicles each at the markets at Tshibombo and the Comptoir Mukangala;
- 28 non-stone-built pit family latrines with stone slabs and movable cubicles: 20 at Misesa, in the commune of Dibindi and the eight others in the Mukelenge neighbourhood in the commune of Bipemba;
- One emptiable stone-built double-pit family latrine in the commune of Bipemba (equivalent to two ordinary family latrines).

These family latrines and toilets served as a model for several others. Several families constructed their own latrines and are using them normally following the instructions communicated to them by the RCDRC volunteers. People frequenting public places are using the toilets; it is less and less common to find people urinating or depositing excreta in the open.

- **Implantation of quality water distribution points**

An extension of the Regideso network over a distance of 500 metres with the installation of three distribution points was completed in the Misesa neighbourhood of the commune of Dibindi. Two rainwater collection tanks each with a capacity of 20,000 litres have been built beside the public latrines in the two secondary markets which are in areas not served by the Regideso. These water points considerably reduced the expansion of the epidemic in that the population is now using potable water and is now washing their hands after using the public latrines.

- **Establishment of mechanisms for the management of public latrines and water distribution points**

Four management committees were set up on the basis of the terms of reference discussed and adopted by all the parties involved: representative of the RCDRC Provincial Committee and the Federation, mayors of the communes of Diulu, Bipemba and Dibindi, representatives of the community. These committees are responsible for the day-to-day management and maintenance of the latrines and distribution points. They also have the task of promoting the population to duplicate the project in other communes.

- **Raising awareness of the population about the construction, maintenance and utilization of latrines and quality water supply**

A weekly awareness session was carried out by each of the five teams of volunteers trained in Watsan in their respective communities. The 30 beneficiaries of family latrines played a crucial role as each committed to mobilize at least 50 families around them every three months to build clean family latrines, i.e. 1,500 families per quarter. This was an important boost to populations that could count on support and oversight for the acquisition of clean toilets. A total of 152 grassroots awareness sessions were carried out in the month of May, reaching 1,123 people. These people have begun to construct their own latrines with the support of the five teams.

#### **Preparedness of the Provincial Committee for epidemics**

**Objective 4: Strengthen the local disaster preparedness capacity of the RCDRC Provincial Committee at Mbujimayi to enable it to respond rapidly to the epidemic.**

With financial support from the Federation DREF, and from the Swedish and Finnish Red Cross Societies, an important consignment of materials was made available to the RCDRC Provincial Committee in Mbujimayi, enabling it to prepare for both the epidemic and for possible future disasters. This objective is summed up in the next point.

#### **Strengthening National Society capacities**

The cholera control operation helped to considerably strengthen the capacities of the RCDRC Provincial Committee in Eastern Kasai, both for preparedness and response to disasters, by means of the following:

- The acquisition of local expertise in the fields of epidemic control in general and cholera in particular, volunteer management, and water and sanitation;
- The training of at least 280 volunteers from the committee in communication techniques;
- New members from among the qualified workers involved in the construction of latrines;
- Acquisition of digging implements (5 wheelbarrows, 35 shovels, 10 spades, 25 machetes, 10 picks, 10 hoes, 10 rakes), materials for protection and disinfection (100 pairs of boots, 400 pairs of gloves, 4 sprayers, 60 seals, 15 scrapers, 50 towels, 30 face-masks, 25 brushes), materials for communication (10 megaphones, 10,000 leaflets, 1000 posters, 14 boxes of pictures), educational materials (one flip-chart with paper), and audiovisual equipment (one television, one radio-cassette player, one videocassette player, one camera, one generator);
- Acquisition of one 4-wheel-drive vehicle and 20 bicycles for transport;
- Installation of a solar panel with a complete electric circuit at the provincial headquarters office;
- RCDRC involvement in the management of public toilets built in Mbujimayi.

### **The International Red Cross and Red Crescent Movement – fundamental principles and priorities**

The intervention of the RCDRC Provincial Committee in Eastern Kasai is directly in line with the cardinal mission of the Movement, which is to alleviate human suffering. This action made it possible:

- To bring relief to the sick by using volunteers to transport and give moral support to patients at the CTC, and to supply the CTC with medical inputs;
- To prevent the spread of infection in the community through activities of disinfection, prompt burial (as indicated) and the raising of awareness.

All these actions, carried out by volunteers not expecting any particular recompense, were aimed at the entire population, excluding no one, and thus respecting all the principles of the Movement.

This intervention involved a diverse cross-section of volunteers: young, old, executives, men, women, etc. From the outset of the operation, regional expertise for coordination reflected gender balance. The organization of the volunteer management was in line with ARCHI 2010.

### **Suggestions for the future**

- Given the renewed upsurge of the epidemic in the last few weeks in the province of Eastern Kasai, particularly in the mining areas around the town of Mbujimayi, it is necessary and beneficial for the population to continue with the cholera control programme, essentially in the fields of social mobilization, disinfection, burial and sanitation. The RCDRC remains the only operational humanitarian organization active in the field after the departure of MSF-Belgium (end of April 2003) and Oxfam-Great Britain (end of May 2003). For this, a support programme needs to be drafted.
- The establishment of a definitive provincial committee, to include technicians with expertise in the necessary domains, could strengthen its capacities and make for effective participation in cholera control.

### **Evaluation and lessons learnt**

Evaluation of the activities of the volunteers of the provincial committee has facilitated assessment of their performance as well as the impact of the operation on the population.

Although it is difficult to attribute these effects to the RCDRC programme alone, verification of the indicators of impact carried out by means of a survey done in the areas in which the RCDRC teams intervened has shown the following:

- 90% of the people surveyed among the health and municipal authorities, local community leaders and members of the community acknowledge the correctness of the action of the RCDRC. Proof of this is the fact that the RCDRC is a member of 3 out of the 5 commissions of the « Stop Cholera » Crisis Committee. All this makes the National Society more visible and credible in the province of Eastern Kasai.
- 80% of the people surveyed in the most affected areas of the town of Mbujimayi say that they received information from RCDRC volunteers, which means that our action reached a large part of the population. This also strengthens the visibility and credibility of the RCDRC.
- 83% of the population surveyed say that they have sufficient knowledge about cholera; this means the population is well informed.
- 38% of the people surveyed report a certain number of changes observed in the community in regard to the prevention of cholera, including:
  - Systematic recourse to RCDRC teams in cases of death following diarrhoea, for disinfection and eventual burial;
  - Almost systematic recourse to cholera treatment centres by families in cases of diarrhoea;
  - Several restaurants and outlets selling drinks now using hot water and soap to clean utensils;
  - In the markets, bread is systematically sold wrapped in a bag and fritters are covered;
  - Decrease in the number of people taking water from unprotected wells and springs;
  - Increased demand by populations for water treatment products.

Follow-up of activities in the field was carried out at different levels and through supervision with the help of a pre-established grid and analysis of reports received. Supervision was carried out daily by the team leaders, weekly by intermediate coaches, and monthly by the provincial coordinators. This follow-up increased the capacity of the RCDRC and the community to respond to the epidemic. The results of these different supervisions were as follows:

**Strong points:**

- There is good collaboration by the RCDRC teams with the local health authorities;
- Almost all of the trained volunteers are involved in activities;
- The transmitted messages take account of all aspects of cholera control;
- The transmitted messages are in 80% of cases adapted to the context and reflect the practices and customs of the target populations;
- The transmitted messages were harmonized with the provincial health services and partners;
- The organization of teams in the field is in conformity with the ARCHI 2010 strategy;
- Most of the operational teams (80%) had drawn up realistic plans of action fitting appropriately with the local health services;
- 75% of the team leaders and intermediate coaches had mastered their role in planning, the organization of daily work and the supervision of activities in the field.

**Weak points:**

- Lack of expertise in the provincial committee in the management of epidemics is the main weakness;
- Team leaders and intermediate coaches have not yet mastered the technique for verifying indicators of impact in the field;
- Subordination of the participation of volunteers (including leaders) in all activities to the payment of per diems appears to be a major risk;
- It was difficult for the community to change its behaviour vis-à-vis the epidemic, notwithstanding the far-reaching work of awareness raising and social mobilization undertaken by the RCDRC volunteers. This resulted in the resurgence of the epidemic after it had been neutralized.

**Corrective measures taken:**

- Briefing on the verification of performance and impact indicators and increased frequency of supervision during the emergency phase (daily for the operational teams, weekly for team leaders, fortnightly for intermediate coaches and monthly for the provincial coordination).
- Continued intervention by the RCDRC Provincial Committee along the three agreed lines: social mobilization, disinfection and burial in the community, and promotion of the use of clean toilets.

**Constraints**

The main difficulties encountered in the field were essentially of a logistical and budgetary nature:

- The lack of information aids (leaflets and posters, boxes of pictures) and transport (bicycles and motor cycles) were limiting factors in the field, especially in the interior of the province. These information aids were not printed until consensus could be reached by the Crisis Committee on the type of messages, after which financing depended on the disbursement of funds by the Canadian Embassy.
- Delays in motivating volunteers in the field due to a lack of funds or food-for-work progressively discouraged the volunteers involved in activities. This also explains the slow start to activities of awareness raising about water and sanitation. Failure by most of the members of the Committee, including its leaders, to take on board the concept of volunteering, made this situation worse.
- The suspension of the officers of the Provincial Committee and their replacement by provisional officers with no experience was a major constraint and hampered the implementation of activities.

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

*the most vulnerable. The procurement for this operation was carried out in full compliance and conformity with the Federation's standard for international and local procurement.*

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

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

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

Interim report	
Annual report	
Final report	x

**Appeal No & title: 35/2002 - DR Congo, cholera**  
**Period: 2002 and 2003 up to Aug. (provis.)**  
**Project(s): PZR516**  
**Currency: CHF**

**I - CONSOLIDATED RESPONSE TO APPEAL**

FUNDING	CASH		KIND & SERVICES		TOTAL INCOME
	Contributions	Pledge	Goods/Services	Personnel	
Appeal budget less Cash brought forward	160,000				
<b>TOTAL ASSISTANCE SOUGHT</b>	<b>160,000</b>				
<b><u>Contributions from Donors</u></b>					
Finnish Red Cross (DNFI)	29,345				29,345
Swedish Red Cross (DNSE)	31,900				31,900
<b><u>Outstanding pledge:</u></b>					
Canadian Govt		43,808			43,808
<b>TOTAL</b>	<b>61,245</b>	<b>43,808</b>			<b>105,053</b>

**II - Balance of funds**

<b>OPENING</b>	
<b>CASH INCOME Rcv'd</b>	105,053
<b>CASH EXPENDITURE</b>	-103,350
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<b>CASH BALANCE (1)</b>	<b>1,703</b>

(1) including canadian pledge

**Appeal No & title: 35/2002 - DR Congo, cholera**

**Period: 2002 and 2003 up to Aug. (provis.)**

**Project(s): PZR516**

**Currency: CHF**

**III - Budget analysis / Breakdown of expenditures**

Description	APPEAL Budget	CASH Expenditures	KIND & SERVICES		TOTAL Expenditures	Variance
			Goods/services	Personnel		
<u>SUPPLIES</u>						
Shelter & Construction	21,000	18,435			18,435	2,565
Clothing & Textiles	13,000	1,687			1,687	11,313
Food & Seeds	1,000					1,000
Water & sanitation		20,292			20,292	-20,292
Medical & First Aid						
Teaching materials		1,021			1,021	-1,021
Utensils & Tools	7,000	852			852	6,148
Other relief supplies						
<b>Sub-Total</b>	<b>42,000</b>	<b>42,288</b>			<b>42,288</b>	<b>-288</b>
<u>CAPITAL EXPENSES</u>						
Land & Buildings						
Vehicles	20,000	1,166			1,166	18,834
Computers & Telecom equip.	5,000					5,000
Medical equipment						
Other capital expenditures	6,000	1,569			1,569	4,431
<b>Sub-Total</b>	<b>31,000</b>	<b>2,736</b>			<b>2,736</b>	<b>28,264</b>
<u>TRANSPORT &amp; STORAGE</u>						
	12,000	11,360			11,360	640
<b>Sub-Total</b>	<b>12,000</b>	<b>11,360</b>			<b>11,360</b>	<b>640</b>
<u>PERSONNEL</u>						
Personnel (delegates)	17,000	20,661			20,661	-3,661
Personnel (national staff)	24,000	9,629			9,629	14,371
<b>Sub-Total</b>	<b>41,000</b>	<b>30,291</b>			<b>30,291</b>	<b>10,709</b>
<u>GENERAL &amp; ADMINISTRATION</u>						
Assessment/Monitoring/experts		999			999	-999
Travel & related expenses	3,000	3,837			3,837	-837
Information expenses	9,000	1,810			1,810	7,190
Admin./general expenses	4,000	3,307			3,307	693
External workshops & Seminars						
<b>Sub-Total</b>	<b>16,000</b>	<b>9,953</b>			<b>9,953</b>	<b>6,047</b>
<u>PROGRAMME SUPPORT</u>						
Programme management	11,000	6,718			6,718	4,282
Technical services	3,000	2			2	2,998
Professional services	4,000	2			2	3,998
<b>Sub-Total</b>	<b>18,000</b>	<b>6,722</b>			<b>6,722</b>	<b>11,278</b>
Operational provisions						
Transfers to National Societies						
<b>TOTAL BUDGET</b>	<b>160,000</b>	<b>103,350</b>			<b>103,350</b>	<b>56,650</b>