

MAJOR INCIDENTS REPORT
FOR
YEAR 2000

Compiled by Lameck Betera
Department of Civil Protection

Cyclone Elaine Disaster: Manicaland, Midlands, Matebeleland South and Masvingo Provinces

The country was hit by an unusual phenomenon, which came in the form of a devastating cyclone on the 22nd of February 2000. According to the Met Services, the Cyclone Eline originated in Sumatra on 8th February 2000. The cyclone then dragged West-wards passing through Reunion Island. It then weakened whilst over Madagascar but then strengthened again before making landfall over Mozambique on 22nd February 2000. It then progressed into a strong inland cyclone and continued to bring stormy conditions across Southern Africa and Zimbabwe.

The cyclone was characterised by heavy continuous rainfall armed with high- speed winds. The areas which bore the brunt of storms and the subsequent inundation are Chimanimani, Chipinge, Mutasa districts in Manicaland Province; Chirumhanzu, Mberengwa districts in Midlands Province; and all the six districts in the Matebeleland Province namely, Beitbridge, Gwanda, Plumtree, Insiza, Matoboand Bulilimamangwe.

EXTENT OF DEVASITATION AS A RESULT OF CYCLONE ELINE

In general, the whole population in the districts under the declaration was affected in varying degrees. The disruption of the road network and damage to, and sweeping away of bridges cut off the population's life-line of supplies in areas such as food, fuel and services, in general. The felling of trees by the storms severed PTC and ZESA lines resulting in loss of contact with the rest of the country and power for driving economic activities.

Equally, the whole affected population suffered and, indeed, continues to suffer from the effects of the damage to the environment. The massive washing away of top- soil will have far reaching implications on agriculture in these districts. The damage to the flora and fauna will lead to scars on the environmental landscape whose cost to the country is incalculable.

Over and above the general effects on the wider population affected by the aftermath of Cyclone Eline which amounts to some 2.7 million people, over 200 000 is the vulnerable group within these communities. This group represents both genders, the old, the young and the infirm. Their personal and collective losses include loss of life of immediate family members, loss of households, and loss of livestock.

Damage and destruction to clinics, schools, drinking – water sources such as wells and boreholes as well as irrigation schemes has seriously disrupted the lives of this section of the population.

The table below shows a summary of the extent of damage caused by the cyclone in the affected provinces.

	Midlands Province	Manicaland Province	Masvingo Province	Mat South Province	Total
• Deaths	3	45	65	23	136
• Injuries	28	8	46	357	439
• Houses/huts destroyed	4268	1146	29944	23829	59184
• Toilets destroyed	1434	1238	9141	3186	14999
• Schools damaged	43	46	390	59	538
• Clinics damaged	4	3	30	17	54
• Dams damaged	12	2	32	42	88
• Bridges damaged	13	15	179	23	230
• Livestock lost	992	3139	3075	13038	20244

Operations of Civil Protection and other Actors

Early Warning

The 1999-2000 rainfall season was predicted to be largely normal to above normal rains across the Sub-region. Therefore, tropical storms and the possibilities of flooding were unexpected.

The warning by the ten day weather outlook for Zimbabwe [16 to 25 February 2000] that a tropical cyclone Eline was observed to be moving from the east of Madagascar into the Mozambique channel was therefore uncharacteristic of the expected weather conditions.

After considering the direction and the tempo at which the cyclone was moving, the Met Office issued a warning to the Department of Civil Protection on 16th February 2000. The directorate of Civil Protection immediately embarked on sensitising Civil Protection structures at provincial and district level as well as the public.

Public warning intensified on 21st February 2000 when Met Office had warned that Zimbabwe was in the path of the Cyclone Eline, which had caused massive floods in Mozambique killing people and livestock and destroying property.

From 22nd February 2000 until the dissipation of the cyclone, the Central Forecasting Office of Met Department continued to issue updates on cyclone Eline. The warning bulletins were sent to the department of Civil Protection and to other relevant ministries and organisations.

Declaration Of State Of Disaster

As a result of the devastating effects of the cyclone Eline and in view of the limited capacity to deal with the situation at hand in the areas, His Excellency President R.G Mugabe declared state of disaster to the affected districts with effect from 22nd February 2000..

The areas which were declared state of disaster were as follows : Chipinge and Chimanimani districts in Mutare Province; Chiredzi, Mwenezi and Zaka in Masvingo Province; Mberengwa and Muma in the Midlands Province and all the six districts in Mat South namely : Beitbridge, Gwanda, Filabusi, Esgodini, Plumetree and Kezi.

Following the declaration of state of disaster by the President of Zimbabwe, priorities had to be set to effectively deal with the disaster. The management of the emergency was perceived to have the following identifiable phases :

- ❑ Rescue
- ❑ Provision of basic needs
- ❑ Restoration and rehabilitation of infrastructure and food security
- ❑ Ensuring Economic viability of the mostly affected sectors.

An organizational management structure was formed to effectively deal with the emergency. [See overleaf for the organogram].

Initial Response

The first priority was to rescue the marooned people and to cause an initial damage assessment.

Access to the affected areas by road was highly limited due to damage to roads and bridges caused by the cyclone. As a result, helicopter rescue teams from Air Force of Zimbabwe were dispatched to effect rescue of the marooned people. The ZRP Fixed Wing Section also provided six planes, which were used for uplifting food- stuffs from Harare to the affected areas. The helicopters were also used for aerial surveillance.

Co-ordination and Support

The government co-ordinated the provision of basic needs such as food - stuffs, clothing, blankets and temporary shelter. The efforts by the government

were complemented by NGOs, UN agencies, Red Cross Society, Civic groups and individuals who directed their donations straight away to the affected people.

Needs and Damage Assessment

A team comprised of engineers, physical planners, environmentalists and officials from the department of Civil Protection the areas affected to carry out both needs and damage assessment. The needs and damage assessment teams had the following terms of reference :

- To collect and collate on the extent of devastation and prepare maps on same;
- To conduct assessment on structural damage to homes and other infrastructures;
- To develop strategies to deal with urgent issues on shelter and other areas;
- To identify eras for policy review.

The exercise was carried out on 12-19 March 2000 and the data was collected and synthesised.

Appeal for assistance

Following the needs and damage assessment exercise, the government of Zimbabwe launched the first international appeal document to solicit assistance from local and international donor communities. An additional appeal was also launched by the U.N.D.P for the United Nations agencies. The appeal documents received positive responses.

Second Declaration of State of Disaster

Following the expiry of the declaration of state of disaster which was done on 22nd February 2000,

Compilation of the second appeal document is still underway. The national Crisis Committee is also organising for a donors conference and a body of trustee was formed to manage the donated funds.[Refer to the management structure below]

6.5 Budgetary Requirements For Reconstruction

The sums of money required for reconstruction and rehabilitation of infrastructure damaged was worked to be in the region of US\$30 million. Infrastructures that require repairs include roads, bridges, dams and other water sources, schools and clinics. The government of Zimbabwe appealed to the international community for assistance.

6.7 Funding Sources

The funding sources varied from NGOs, UN agencies, Embassies, Red Cross Society, Government Ministries, Church Organisations and individuals who contributed both in cash and in kind.

7.0 REHABILITATION ACTIVITIES [basing on information from the Nyanga workshop of 26-27 October 2000]

7.1 Manicaland Province

DDF Roads

Rural District Councils and self help initiatives only. Roads are just passable.

State Roads

Roads now passable. Some sections would not be passable as soon as the rains come.

State Roads

Roads now passable. Some sections would not be passable as soon as the rains come.

Telephones

100% rehabilitated – [polishing up] work in progress

Electricity Supply

100% rehabilitated [polishing up] work in progress

River Gauging Equipment

Work not yet started

Housing

District	Name of Organisation	Activities
Chimanimani	BBR	2 houses completed 45houses, work in progress
	German organisation [Organisation Help]	roofing sheets for 320 families were donated.
Chipinge	BBR	5 houses under construction
	Help Age	12 houses under construction
	Christian Care	30 houses under construction
	John Sisk	40 beneficiaries identified

Mutare	BBR	1 house completed 12 houses, work in progress
Mutasa	BBR	assessment stage

Water And Sanitation

- RDC water and sanitation projects are in progress
- UNICEF is engaged in borehole flashing - 40 units and well cleanouts, -20 units in Chipinge.
- Wildlife Society of Zimbabwe-drilling boreholes in Chipinge.
- Plan International-borehole drilling in Chipinge,Mutare and Mutasa

Schools

Ministry of Education and culture and other donors [local and external] are engaged in various rehabilitation activities.

Clinics

Salvation Army Church repaired roofs to 2 clinics

7.2 Masvingo Province

- Christian Care had constructed 2 houses in Chiredzi District and they are also assisting in the rehabilitation of Malipati clinic.
- Red Cross Society is in the process of constructing two roomed houses in Chivi District.
- With the assistance from UNICEF DDF have managed to flush 22 boreholes in Chiredzi and Mwenezi.
- In Mwenezi and Zaka there is no significant progress in terms of rehabilitaion.

7.3 Matebeleland South Province

Rehabilitation of homesteads in Matebeleland South started in March 2000. The rehabilitation Programme mainly focused on the reconstruction of homesteads.

The following NGOs are participating in the reconstruction of homesteads:

- ✓ Christian Care
- ✓ Dabane Trust
- ✓ Lutheran Development Services
- ✓ ORAP
- ✓ World Vision
- ✓ YMCA
- ✓ Baptist Church

They have constructed a total of 593 housing units in the province.

UNICEF was involved in the reconstruction of toilets in schools, Red Cross was dealing with toilet construction in homesteads and UNDP was rehabilitating damaged schools.

The Civil Protection initiatives had resulted in the reconstruction of 267 housing units. A total of 1 472 households were still outstanding with the estimated cost of

\$57 880 000.00.

7.4 Midlands Province

CATEGORY	UNITS	REHABILITATED UNITS	COST \$	OUTSTANDING COSTS
Dams	6	2	1 382 680.00	68 950 000.00
Bridges	9	4	1 321 032.00	10 724 100.00
Roads	Various	nil		
Clinics	2	1	280 000.00	860 000.00
Settlement	4 268 houses	59	1 271 600.00	8 476 000.00
Irrigation Schemes	2 Water pumps and canals	2	145 000.00 100 000.00	- -
Water Points	8 boreholes 1 well Various water pipes	nil	421 520.00	40 000.00 40 000.00
	55 classroom blocks 56 Teachers' Houses 74 Toilets	nil 2 3	4 180 000.00	23 087 665.10
Total			9 101 812.00	112 177 765.10

8.0 LESSONS LEARNT AND RECOMMENDATIONS / SOLUTIONS [based on the Nyanga Workshop of 26 – 27 October 2000]

8.1 Co-Ordination And Resource Mobilisation Challenges In The Management Of The Cyclone Eline

8.1.1 Problems

The following problems were envisaged:

- The command centre was slow to grasp the emergency fully as the Civil Protection officers were not physically located at command centres.
- Casual attitude:- This led to poor integration on responding to issues from disaster areas.

8.1.2 Causes

- Civil Protection is not taken as part of everyday work
- There is no integration of sectors despite training of same
- People were used to droughts, accidents and not floods of the Cyclone Eline magnitude
- Most districts were caught unprepared except Beitbridge.

8.1.3 Possible Solutions

- There is need to totally remove the perception of taking Civil Protection as Local Government entity and there is need to change certain pieces of Civil Protection Legislation and make it mandatory that monthly returns on Civil Protection business be submitted by members. On the same note, all sectors should take Civil Protection as a Key Result Area.
- Legislation should enforce regular mock exercises to be conducted
- There should be a budget for annual training of members
- There is need to improve communication systems by reducing vertical channels in favour of lateral communication. Civil protection Units at all levels should be equipped with Faxes, Email and Radios rather than depending on the telephone alone. There should be an inventory of all communication systems.
- National Press should be informative during such times of national crisis.
- Preparedness plans should be updated regularly.

- Co-ordination should be strengthened at all times and not only during disaster times.
- Command centres should be the only source of information dissemination and therefore should be well equipped with the modern means of communication and stand by sources of power

8.1.4 Inadequate Funding

It was also envisaged that Civil Protection is under funded. The reasons being that, the Government System has always kept CP on the periphery. Civil Protection has been realised for what it did not do and not- why it did not do it. Poor budget allocation was also ascribed to, poor knowledge of the significance of Civil Protection by Legislators.

8.1.5 Solutions

- Holding awareness meetings with Members of Parliament.
- MPs should also visit disaster areas to appreciate the extent of damage caused.
- Regular updates on Civil Protection issues should be made to Parliament.
- There is need to plan for activities and make a budget for them and then sought for support in Parliament for the budget.
- Having a levy for Civil Protection to generate funds.

8.1.6 Different gathering and dissemination of data on the extent of damage:

Some information on the extent of damage was inflated probably due to different methods, which were used in the gathering of data.

Solution

- Data collection and dissemination was supposed to be well co-ordinated.

8.1.7 Problem:

Poor facilitation of handling of imported goods

Solution

- There is need to bring together all related pieces of legislation.

8.1.8 Problem:

Bureaucracy:- CMED, Transportation

There is too much vertical communication.

Solution:

- A culture of co-ordination should be cultivated in order to ensure faster delivery of goods and services.

8.2 INFRASTRUCTURAL DAMAGE

The group deliberated on the extent of damage caused by cyclone Eline induced flooding Emergency to infrastructures. The main damages which were witnessed included:

8.2.1 Damages to Roads and Bridges

- Overtopping on structures due to large regimes of water
- Debris blocking openings
- Land slides
- Erosion damages
- Saturation of pavements

8.2.2 Lessons Learnt

- Need to be prepared for the worst
- There is need for co-ordination between local and regional road authorities
- Emergency teams should be placed at strategic points
- Disaster fund should cover emergency roads and bridges

8.2.3 Damage to telecommunications and ZESA

- Trees falling upon communication / power lines
- Downing of lines and poles by wind
- Mud slides affecting poles
- Destruction of conductors

8.2.4 Lessons Learnt

- Underground networks survived

- MV insulated conductors to be used
- Reinforce the areas with 132 KV lines and substations
- Raise clearance above the cyclone flood levels
- Relocation of crossings to higher ground
- Change type of construction to strain structures

8.2.5 Hydrological Branch: damages caused

- Gauging stations were mainly damaged

8.2.6 Solutions

- Appropriate structures should be developed.

8.3 WATER AND HEALTH

8.3.1 Observations

The following was ascribed to be the major causes to the destruction of water and health facilities:

- Lack of maintenance of small dams
- Rate of completion of different sections of the dams
- Lack of co-ordination among ministries and NGOs
- Under costing of projects and timing of release of funds
- Quality and quantity of materials used

8.3.2 Lessons Learnt

- Designs of dams should be approved by qualified and experienced Engineers before construction
- Funds should be made available for the maintenance of both large and small dams
- Co-ordination between sector ministries and NGOs should be improved
- Warnings should be given to the vulnerable communities in time.

8.4 STRUCTURAL DESIGN AND SITING CONCERNS

8.4.1 Observations

The following problems were cited in the presentation:

- Physical Planning staff is at the provincial level and not at local level.
- The planners concentrate in preparing plans and siting for Urban areas, schools and Growth Points structures and are not active at household level.
- Homesteads are built closer to water bodies
- Some are built on steep slopes
- Land holding capacity determine the state of the surrounding environment
- The level of technology and cultural diversity also determine the strength and design of structures
- Traditional construction methods did not take into consideration significant environmental variations.

8.4.2 Lessons Learnt After Cyclone Eline Disaster

- There is need for the development of new housing designs.

- ❑ There is need for co-ordinated approach in the resettlement of people. All relevant sectors should be consulted when siting settlements
- ❑ The process of siting homesteads should be disaster sensitive.
- ❑ There is need to build capacity of Local Authorities to plan.
- ❑ Unburned bricks and dagger mortar should not be used and digging of foundations should be taken seriously.
- ❑ Homesteads should not be built on possible path of wind, rock falls, and mud slides.
- ❑ Engage qualified builders and supervision and building bi-laws should be enforced.
- ❑ Civil Protection Committees should be responsive at all times and should be strategic and well co-ordinated
- ❑ NGOs should be involved in housing construction and should be able to work within the existing planning priorities of the Local Authorities

8.5 SEARCH AND RESCUE/ EVACUATION DURING CYCLONE ELINE

8.5.1 Problems Encountered

- Lack of plans
- Inadequate material resources
- Role conflict/ lack of co-ordination
- Information dissemination (awareness)
- Culture/Traditions
- Bureaucracy-[insensitivity of senior officers, slow decision making]
- Local media insensitivity (inadequate /inaccurate publicity- during and after Cylone ,lack of commitment)
- Weather conditions

8.5.2 Lessons Learnt

- Simple and appropriate plans [locally brewed , local languages]
- Co-ordinate and train regularly
- Enhance AFZ, Met Services, Lake Navigation-Equipment
- Provision of financial and material resources at all levels
- Highten awareness campaigns at local level, dispel myths
- Need for Decentralisation
- Local media must be loyal and supportive of national issues(disasters)

8.6 FOOD SECURITY AND LIVESTOCK

8.6.1 Extent Of Crop Damage

In communal lands where there was less grass and tree cover, the damage was more extensive as compared to commercial areas.

8.6.2 Lessons Learnt

- There is need for systematic communal land decongestion
- There is need to improve on land conservation practises

8.6.3 Livestock Vulnerability

- The floods were more damaging on the infrastructure for animals eg dip tanks than on the actual livestock themselves.
- It is too costly to relocate both animals and sitings of dip tanks during emergencies.

8.6.4 Lesson Learnt

There is need to inform people in time to move to safer grounds together with their livestock before disaster strikes.

8.6.5 Food Security

The following observations were made:

- Existing structures were not used during emergencies such that other relevant members were left out
- Communities did a lot to help each other on their own before arrival of outside support
- There was little political commitment in terms of disaster preparedness and management.

8.6.6 Lesson Learnt

- There is need for clear guidelines/definition of roles and observance of same.
- Need to identify the coping mechanisms used by communities and strengthen them, eg (isiphala senkosi/zhunde ramambo)
- There is need for Government to allocate more resources for civil protection activities.

8.6.7 Food Standard

- There is no strict adherence to regulations governing the importation of donated food- stuffs.
- In some cases there was no proper co-ordination of stakeholders.
- Political involvement in disaster management tended to compromise the effectiveness of relief activities.

8.6.8 Lesson Learnt

- There is need for a comprehensive manual/guidelines on procurement and receipt of food donations.
- There is need to avoid political interference in relief programmes.
- There is need to strengthen the co-ordination aspect through training, awareness mock drills, exchange visits etc.

8.6.9 Extent Of Environmental Degradation [observation]

- There is no systematic tree management programmes in the communal lands, forestry woodlots and the urban areas.

8.7.0 Lesson Learnt

- There is need to plant buffer trees to protect valuable trees.
- The need to replant trees in the urban areas.

9.0 WAY FORWARD

Activity	To be actioned by	Time Frame
Distribution of Report on Lessons learnt Conference	Civil Protection Department	Week Ending 10 – 11 -2000
Institutional / Intersectoral Report back	All participants	By Mid December
Report review at District, Provincial, and National Level	Chair Persons	By Mid December
Preparation of schedule of priorities	Civil Protection	By Mid December

MUDZI RIVER BUS DISASTER: MASHONALAND EAST PROVINCE

A Chawasarira bus carrying more than 70 passengers was swept away on 25th February 2000 when it attempted to cross the flooded Mudzi River Bridge. A total of 36 died and scores were injured.

The incident happened around 4:30 pm when the driver of the bus was forced to cross the flooded narrow bridge by unruly passengers who threatened to beat him if he had failed to comply. The driver had parked the bus allowing for the river to subside, however, the fateful event happened when a bus belonging to Mazarura risked crossing the flooded bridge, which lured the Chawasarira passengers who went on to force the driver to follow suit.

The driver did not comply with the passengers until he was threatened to be beaten. The driver later gave in to the pressure and attempted to cross. The bus missed the narrow bridge and plunged in to the river. About 36 people escaped through the windows and some, were rescued by the local people.

Role Played By Civil Protection And Other Actors

The local people, who were immediately at the scene of accident assisted with rescuing other passengers who survived. The incident was reported to the District Hospital who in turn approached Council and District