



**STRATEGY TO INTEGRATE DISASTER RISK
REDUCTION INTO THE EDUCATION SYSTEM IN
ZIMBABWE**


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Zimbabwe Disaster Risk Profile

Hydro-Meteorological Hazards

Hazard	Vulnerability	Capacity
Drought	<p>Periodic country wide and more extreme in ecological regions 4 and 5</p> 	<p>Early warning:- Met Office and Drought Monitoring Centre Assessments ZIMVAC Crop and livestock assessments Water supplies Mitigation Drought resistant crops Grazing schemes Drought relief programmes Irrigation Water harvesting</p>

Hydro-Meteorological Cont..

Hazard	Vulnerability	Capacity
Floods/ flash floods/ tropical cyclones	<p>Save-Confluences of Save, Odzi and Nyanyadzi.</p> <p>Muzarabani-Confluence of Zambezi and Musengezi.</p> <p>Kamativi-Confluence of Gwayi and Shangani, Malipati-Mwenezi and Bubi.</p> <p>Tuli-Shashe</p> <p>Gokwe, Down stream of major, medium and small dams</p>	<p>Early warning systems and Monitoring.</p> <p>Forecasting. MET and ZINWA</p> <p>Assessments:- CPO</p> <p>Mitigation:-</p> <p>land use planning</p> <p>Dam construction</p> <p>CPO</p>

Hydro-Meteorological Cont..

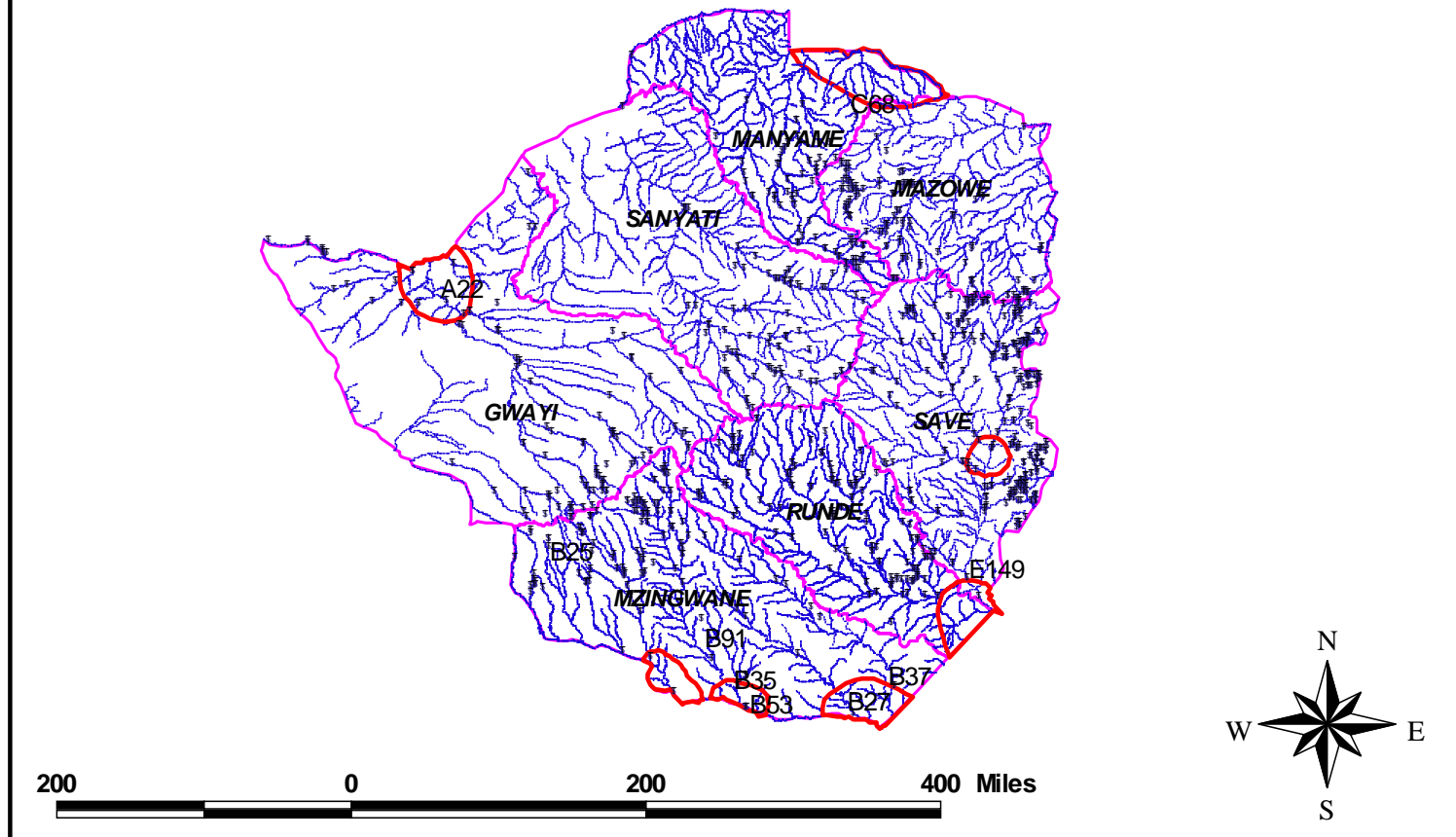
Hazard	Vulnerability	Capacity
Lightning	<p>Of all the districts, Gutu, leads with approximately 10 fatalities per annum</p> <p>Binga, Marondera and Rusape follow a long way behind with 3 to 4 per annum.</p> <p>The rest have 1 to 2 casualties or fatalities per annum</p>	<p>Very difficult to forecast exact areas which are going to be struck</p> <p>Can only give areas which are prone to lightning strikes</p> <p>Can advise on objects favoured by lightning strikes</p> <p>Mitigation</p> <p>ZESA, CPO can educate the communities on importance of installing lightning conductors</p> <p>Assessment: ZRP</p>

Hydro-Meteorological Cont..

Hazard	Vulnerability	Capacity
Thunderstorm	<p>Data shows that the number of thunderstorm days increases from 30 thunderstorm days in south Zimbabwe (Beit Bridge) to over 120 days in North Zimbabwe (Zambezi Valley).</p> <p>This is quite normal as the Zambezi valley provides the heat and the moisture much needed for the development of thunderstorm clouds.</p>	<p>Early warning: Met</p> <p>Mitigation:</p> <p>-CPO</p>

Areas Prone to Flooding

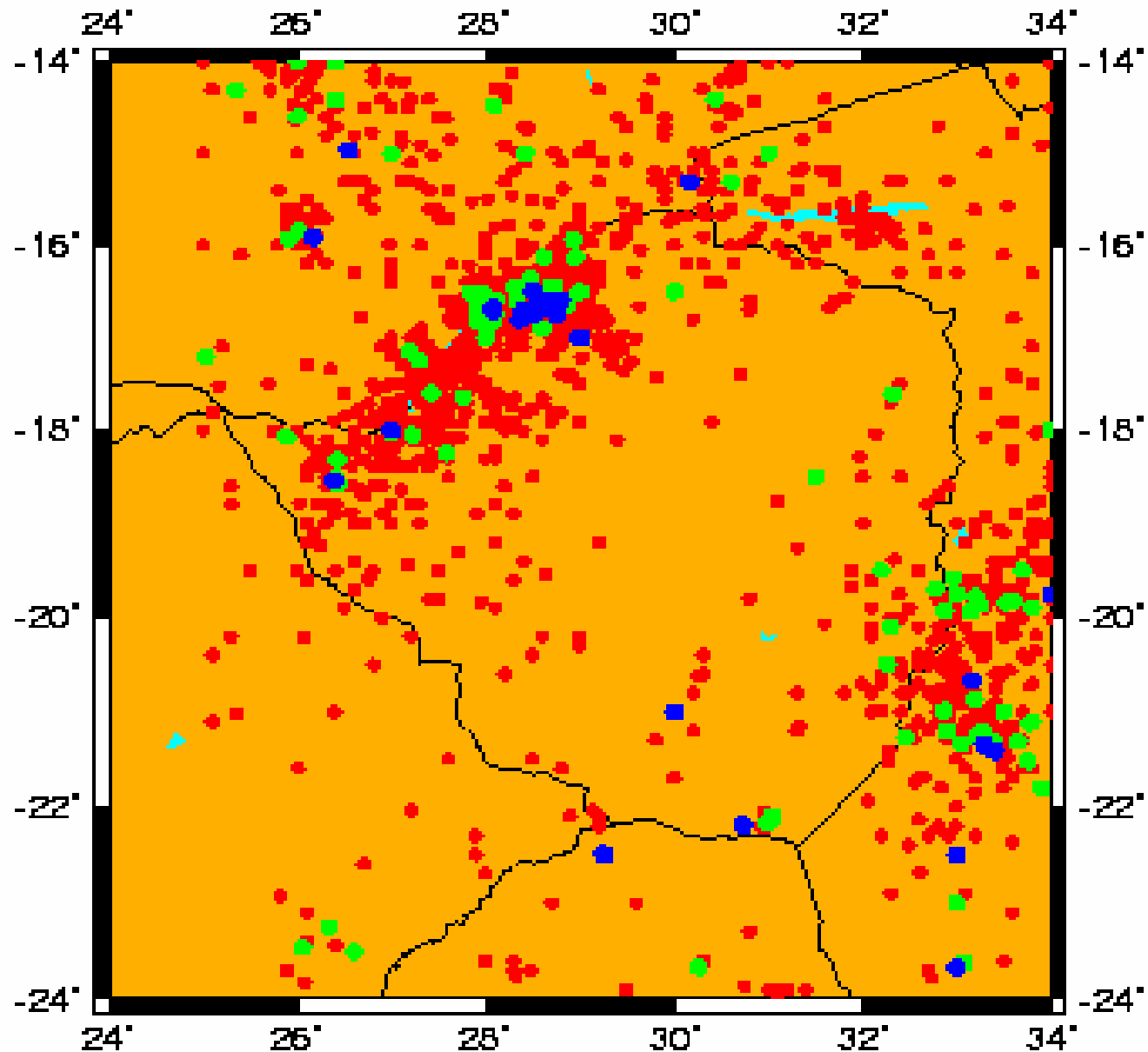
(ZINWA)



Geo-physical Hazards

Hazard	Vulnerability	Capacity
Earthquakes	<p>Lake Kariba</p> <p>Both natural and reservoir induced earthquakes occur. Many events are felt by the locals especially Binga.</p> <p>Zambezi Valley and eastern border</p> <p>Mainly natural events associated with the east Africa rift system.</p> <p>Recently, rock bursts have been reported in the Penalonga area- indicative of mine induced events</p> <p>Nyamandlovu Aquifer</p> <p>Since 1999 four events recorded (mag 4.0 25/6/04)</p>	<p>Monitoring</p> <p>Monitoring of seismic activities in the country- Goetz Observatory</p> <p>Assessments</p> <p>CPO</p> <p>Mitigation</p> <p>Infrastructure development</p> <p>CPO</p> <p>Regional collaboration</p> <p>Data exchange with neighbours</p> <p>International collaboration – JICA</p> <p>Training of scientists.</p>

Seismic prone area (Goetz Observatory)



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Technological Hazards

Hazard	Vulnerability	Capacity
Transportation	Public Commuters of public transport, Major transport routes	<p>Early warning</p> <ul style="list-style-type: none"> •ZRP, Traffic Safety Council, Transport Assessment •CPO <p>Mitigation</p> <p>CPO</p> <ul style="list-style-type: none"> •Education courtesy, <i>abstinence from alcohol and drugs</i>) •Examination and treatment of drivers •Environmental improvement (<i>road condition, lighting, signs & markings</i>) •Ecological modification •Enforcement •Emergency care

Technological hazards cont...

Hazard	Vulnerability	Capacity
Chemical Spills/ Explosions/ toxic waste/Air/ land pollution/ mine collapse	<ul style="list-style-type: none"> •Industrial sites of Harare, Bulawayo, KweKwe, Norton, Gweru, Mutare, Masvingo and mining areas •All major transportation routes and boarder areas 	<p>Early warning</p> <ul style="list-style-type: none"> -Industry, ZRP, Local Authorities, Chief govt. mining engineer <p>Assessments</p> <ul style="list-style-type: none"> - NSSA -CPO -Chief govt. mining engineer <p>Mitigation</p> <p>NSSA</p> <p>CPO</p> <p>Mines</p>

Technological hazards cont...

Hazards	Vulnerability	Capacity
Environmental Degradation	Communal areas, and areas with sandy and alluvial soils such as Gokwe, Muzarabani. Gold or former gold rich areas.	Early warning -Environment Assessments -Environment Mitigation LAS/AREX/ Social Welfare
Crowd Control problems / stampedes	Sporting Events	Early warning -ZRP Assessments -Emergency Services Mitigation - CPO
Fires	Forest Areas in the Eastern Highlands, road sides, along pathways, National Parks, Domestic and Industry	Early Warning -MET, general public Assessments Emergency services Mitigation CPO

MINEFIELDS IN ZIMBABWE

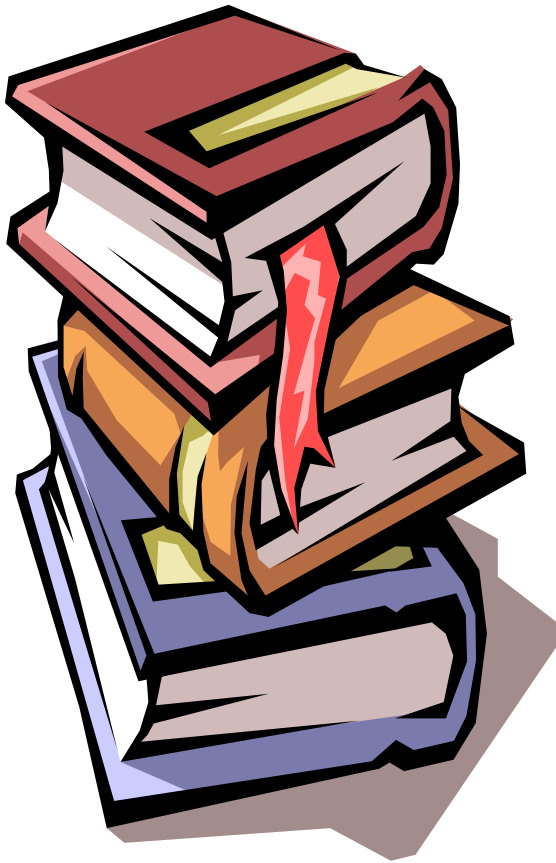


Biological Hazards

Hazard	Vulnerability	Capacity
Epidemics HIV and AIDS Malaria Cholera Animal Epidemics Foot and mouth Avian epidemics New Castle disease Zoonotics Anthrax and rabies	As per vector / disease zone	Early warning- Health and veterinary Assessments- Health and Veterinary Mitigation-Health and Veterinary, CPO
Crop Pests -Army worm and quellia birds	Cereal crops	Early Warning -Arex Assessments- AREX Mitigation AREX

Disaster Management Policy Statement in Zimbabwe

Broad Policy Statement



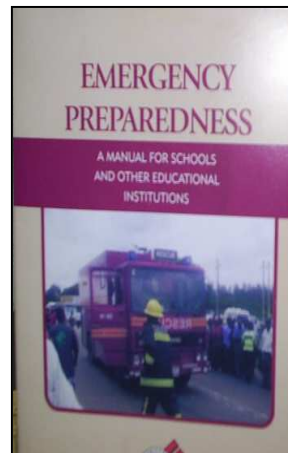
- **National Policy for Civil Protection** states that “ Every Citizen of Zimbabwe should assist where possible to avert or limit the effects of a disaster”.
- **Central Government** initiates disaster preparedness programmes through the relevant sector ministries with local administration taking the responsibilities for implementing and maintaining its effectiveness.
- **Sector Specific Policies**

Strategy to Integrate DRR into Education System

- seeks to raise awareness and knowledge on disaster risks in the country through the education system;
- focuses on improving standards on education infrastructure (rural and peri-urban settings); and
- strengthens emergency preparedness, and inclusion of disaster risk reduction in the education curriculum.

Implementation Process

- Setting up of a planning team
- Consultative Meetings
- Production of Emergency Preparedness Manual (EPR)



Process cont...

- Production of a resource book on disaster risk reduction
- Inclusion of DRR into the curriculum

Challenges

- The planning team is turning its attention to risk reduction in educational infrastructure. It is a more complex area as it involves various legislation and considerable costs.



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