OVERVIEW OF GOVERNMENT’S RESPONSE TO CLIMATE CHANGE

COUNTRY REPORT ZAMBIA.
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OUTLINE

- What is Climate Change.
- Major Development Challenges for Zambia.
- The Trends.
- Exposure to Climate.
- Vulnerability Assessment indications.
- Impact on the most vulnerable.
- National Response to Climate Change.
- Strategic support progress- key highlights.
- Participatory adaptation progress- key highlights.
- Climate resilient infrastructure progress- key highlights.
WHAT IS CLIMATE CHANGE?

Climate
Encompasses the statistics of meteorological conditions, that is, temperature, humidity, atmospheric pressure, wind, rainfall, atmospheric particle count and other meteorological elements in a given region over long periods of time (usually 30 years).

What is Climate change?

A change of climate, which is attributed directly or indirectly to human activities that alter the composition of the global atmosphere, and which is additional to natural variability, and observed over comparable periods of time.

What is Climate Resilience

The ability to survive and recover from the effects of climate change.
What is climate change?

What is climate mitigation
The efforts to reduce or prevent emission of greenhouse gases which cause global warming.

What is Climate change adaptation?
The initiatives put in place that reduce the vulnerability of natural environment and people to actual or expected climate hazards.
WHAT IS CLIMATE CHANGE?

- Climate change impacts are long-term and require long term interventions

- Urgent need for resilience

- Adaptive capacities must be built in communities, institutions and infrastructure:
  - There is an urgent need for Mitigation and Adaptation measures to be put in place

- Mitigate

- Adaptation
THE TRENDS (1960-PRESENT)

- Net trend towards more floods and droughts
- Mean temperature increased by 1.3°C since 1960
- Number of hot days and nights has increased
- Mean rainfall has decreased by 2.3% per decade
Temperature projected to rise by 3-5 degrees Celsius by 2100
Average precipitation not projected to change significantly; however
Precipitation variability expected to increase: early rainy season to become drier, peak rainy season with heavier rainfall periods.
Climate extremes to accentuate: more intense floods; more frequent droughts.
The Southern part of Zambia is generally considered to be the most vulnerable.

**AER I**: Southern Province, parts of Central Province and Eastern Province (Low rainfall, drought prone, below average projected rainfall; driest years 2014, 2044, 2065)

**AER II**: Western, Central, Lusaka and parts of Eastern Province (Medium rainfall, projected above average rainfall; driest years 2035 and 2065)

**AER III**: Northwestern, Copper belt and Northern Province (highest rainfall, projected above average; wettest years 2044 and 2055)
MAJOR DEVELOPMENT CHALLENGES FOR ZAMBIA

- Over past 30 years, floods and droughts have cost Zambia US$13.8 billion – equivalent to 0.4 % of annual GDP growth

- In the absence of adaptation, rainfall variability could keep an additional 300,000 more Zambians below the poverty line

- Climate variability could cost Zambia US$4.3 billion in lost GDP over the next decade, reducing annual growth by 0.9%
IMPACT ON THE MOST VULNERABLE

Women-headed Households, the Elderly, Incapacitated, and those taking care of AIDS-orphans are most vulnerable. Single or divorced male-headed HHs are also highly vulnerable (due to malnutrition)

When hit with floods or droughts, vulnerable HHs cope by reducing food or essential expenditures (health, education). They also increase their level of indebtedness and rely further on casual labor – however, this is mostly food-for-works which is similarly impacted by the weather.
National Adaptation Program of Action 2007 (NAPA) identified vulnerable sectors:

- Agriculture and food security
- Wildlife and Forest.
- Human Health
- Water and Energy

National Policy on Climate Change approved 2016

- Setting up of long term institutional arrangements
- Ratified the Paris agreement
- National Determined Contribution submitted to the UNFCCC
<table>
<thead>
<tr>
<th>S/N</th>
<th>Programme</th>
<th>Area of Focus</th>
<th>Implementing Agency/ Department</th>
<th>Donors</th>
<th>Status</th>
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</thead>
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<tr>
<td>1.</td>
<td>Pilot Programme for Climate Resilience (PPCR) (has government counterpart funding)</td>
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<td></td>
<td>Strengthening Climate Resilience in Kafue Sub-Basin</td>
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<td>Districts (Planning Sub-Committees; Road Development Agency (Infrastructure component)</td>
<td>CIF/ AfDB</td>
<td>under implementation 2013-2018</td>
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<td>Strengthening Climate Resilience in Barotse Sub-Basin</td>
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<td>Districts (Planning Sub-Committees; Maritime Department (Infrastructure component)</td>
<td>CIF/ World Bank</td>
<td>under implementation 2013-2019</td>
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<td></td>
<td>Strengthening Climate Resilience in Barotse and Kafue Sub-Basin – Private Sector</td>
<td>Livelihoods, infrastructure, food security &amp; early warning</td>
<td>Private Sector</td>
<td>IFC</td>
<td>yet to commence</td>
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<td></td>
<td>Developing Climate Resilient Infrastructure Standards and Codes Project</td>
<td></td>
<td>Road Development Agency</td>
<td>NDF</td>
<td>under implementation-at procurement of consulting firm stage</td>
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<td>2</td>
<td>Reducing Emissions from Deforestation and Forest Degradation (REDD+)</td>
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<td></td>
<td>REDD+ Strategy</td>
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<td>Forestry Department</td>
<td>UN-REDD Programme</td>
<td>completed</td>
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<td>REDD+ Readiness</td>
<td></td>
<td>Forestry Department</td>
<td>UN-REDD Programme</td>
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<td></td>
<td>Zambia Integrated Forest Landscape Programme</td>
<td>Forest management &amp; Land use</td>
<td>Forest Department, Wildlife, Agriculture</td>
<td>BCF/ World Bank</td>
<td>under development (project appraisal document preparation) 2017-2030</td>
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<td></td>
<td>Forest Investment Programme</td>
<td></td>
<td>Forest Department, Wildlife, Agriculture</td>
<td>CIF/ World Bank  UN-REDD</td>
<td>under development</td>
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<td>Satellite-Based Monitoring for Forest Management</td>
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<td>Forest Department, Wildlife, Agriculture,</td>
<td>World Bank/European Space Agency</td>
<td>under development</td>
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<td>3</td>
<td>Scaling up of Renewable Energy Program (SREP)</td>
<td>Renewable Energy</td>
<td>Department of Energy</td>
<td>CIF / World Bank</td>
<td>Under development (preparation of investment plan)</td>
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<td>4</td>
<td>Enhancing Capacity on Low Emission Development Strategy (EC-LEDS)</td>
<td>Capacity Building</td>
<td>Crosscutting across all sectors</td>
<td>USAID Technical Assistance</td>
<td>Ongoing</td>
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<td>5</td>
<td>Green Climate Fund (GCF)</td>
<td>Forestry, Agriculture and Energy</td>
<td>Forestry, Agriculture and Energy Departments</td>
<td></td>
<td>Under development (at concept note) --</td>
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<td>6</td>
<td>UN Joint Programme</td>
<td>Forestry, Hydromet, Environment, Agriculture and Energy</td>
<td>Met. Department, ZEMA, Forestry, Agriculture Departments</td>
<td>UN System</td>
<td>Under implementation 2016-2020</td>
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<td>7</td>
<td>GLR Project: Zambia Displaced Persons &amp; Border Communities</td>
<td>Livelihoods, infrastructure, food security &amp; Resettlement</td>
<td>Districts, Department of Resettlement, Commissioner of Refugees</td>
<td>World Bank/ Government</td>
<td>under development (Pre-appraisal stage) 2016-2021</td>
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The Barotse and Kafue Sub-Basins of the Zambezi River Basin are amongst areas identified as being highly vulnerable and therefore were chosen as focal areas for SPCR interventions.

25 districts comprising 52 wards across Central, Lusaka, Southern and Western Provinces are targeted under the Pilot Programme for Climate Resilience (PPCR), targeting an estimated 1 million vulnerable beneficiaries ~ 200,000 households.
Mainstreaming Climate Resilience into development planning

- National level
  - Climate proofing guidelines have been developed.
  - National Adaptation Plans (NAPs) for Agriculture and Health being developed.
  - Updated the of existing Budget Tracking Tool to cover 2013-15
Mainstreaming Climate Resilience into development planning

Provincial & District level

- PPU & DPOs trained in theoretical and procedural processes for mainstreaming climate resilience into development planning
- Roadmaps for mainstreaming of Ward and District Plans developed for 14 Districts in the Barotse Sub-Basin.
Training in climate change and implementation requirements conducted for all 25 districts and Provincial Planning Sub-Committees.

18 (14 Kafue & 4 Barotse) Motor Vehicles and ICT Equipment (Desk top and multi-functional printer) for Districts and Provinces procured

17 Motor vehicles (Barotse) already procured from UNOPs – expected May’16
SUPPORT HIGHLIGHTS
Training of Journalists in climate change reporting

Annual Prize for Best Climate Change Story since 2015

Knowledge sharing

- Parliamentarians
- District Commissioners and Council Secretaries
- Provincial and District Planners
- AfBD, Trade Fair and Lusaka Show
- Production of a documentary
STRATEGIC SUPPORT PROGRESS — KEY HIGHLIGHTS

- Climate Information (being implemented by DMMU)

- Social Marketing Campaign
  - Firm in place and national baseline survey conducted in July - September
  - Process of formulating a national communication strategy

- Strengthening of early warning systems
  - √ Mbeta Island being piloted
PARTICIPATORY ADAPTATION PROGRESS — KEY HIGHLIGHTS

804 Projects had been submitted to the 18 districts (Kafue & Barotse) for appraisal:

- 607 are soft adaptation projects
- 194 are infrastructure (hard) projects
- 177 projects (88 hard & 89 soft) and 2 Champions have been approved by the PPSC and the others are still being processed.
Lizwai Small Dam Construction In Mwandi District ~ K91,712 (119 Households) as part of water harvesting
Solar Powered Borehole In Village Sesheke ~ (70 Households) energy friendly sources
Integrated Fish Farming Project, Mbeta Island, Sioma
CAGE FISH FARMING ON LAKE KARIBA BY YALELO AND OTHER COOPERATIVES
Cattle breeding Centres established to improve the local breeds in various provinces.
CLIMATE RESILIENT INFRASTRUCTURE PROGRESS — KEY HIGHLIGHTS (BAROTSE)

Priority Canals:
- 4 of 7 priority canals (Lubitamei, Musiamo, Namitome and Muoyowamo Canals)

- Procurement for remaining 3 canals (Ngobala, Nebubela, Fisheries and Silting Canals) currently ongoing

- Once rehabilitated canals will enhance fish farming, irrigation and transportation.
Kalonga Canal, Ward Project stretching 20km (400 workers) ~ K232,100 — MONGU DISTRICT
Winter crop grown on reclaimed land after Kabombo Canal rehabilitation — Muoyo Ward, Nalolo District
Smart Climate Agriculture Pot Holing and use of Tractor drawn ripper.
Conservation farming increasing crop productivity and production.
Thank you

Gracias

Shukraan

Merci