REPUBLIC OF ZAMBIA
MINISTRY OF AGRICULTURE
LUSAKA HEAD OFFICE

MINISTRY OF NATIONAL DEVELOPMENT PLANNING

Interim Climate Change Secretariat

OVERVIEW OF GOVERNMENT'S RESPONSE TO CLIMATE CHANGE

COUNTRY REPORT ZAMBIA.

EICA, 2017.

BY: LAWRENCE N. KABUTU

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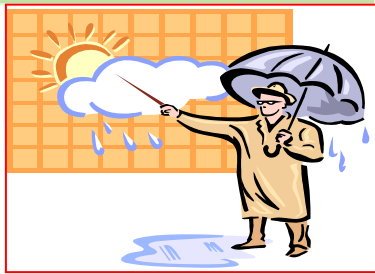
SIFAYA MUFALALI



ONE ZAMBIA ONE NATION

North Atlantic Ocean
South Atlantic Ocean
Indian Ocean
RUSSIA
KAZAKHSTAN
FRANCE
SPAIN
ITALY
TURKEY
IRAN
IRAQ
ALGERIA
LIBYA
EGYPT
SAUDI ARABIA
MAURITANIA
NIGER
MALI
CHAD
SUDAN
ETHIOPIA
SOMALIA
KENYA
DEM. REP. OF THE CONGO
ANGOLA
ZAMBIA
MOZAMBIQUE
MADAGASCAR
BOTSWANA
NAMIBIA
SOUTH AFRICA
Scale 1:51,400,000
Azimuthal Equal-Area Projection

ZAMBIAN PROVINCIAL MAP
MAP BY PETER JONES ©
Zaire
Tanzania
Angola
Malawi
Namibia
Zimbabwe
Mozambique
NORTHERN Province
LUAPULA Province
EASTERN Province
NORTHWESTERN Province
COPPERBELT
CENTRAL Province
LUSAKA
LUSAKA Province
WESTERN Province
SOUTHERN Province
LIVINGSTONE

ZAMBIA

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 green house gases which cause global warning

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.

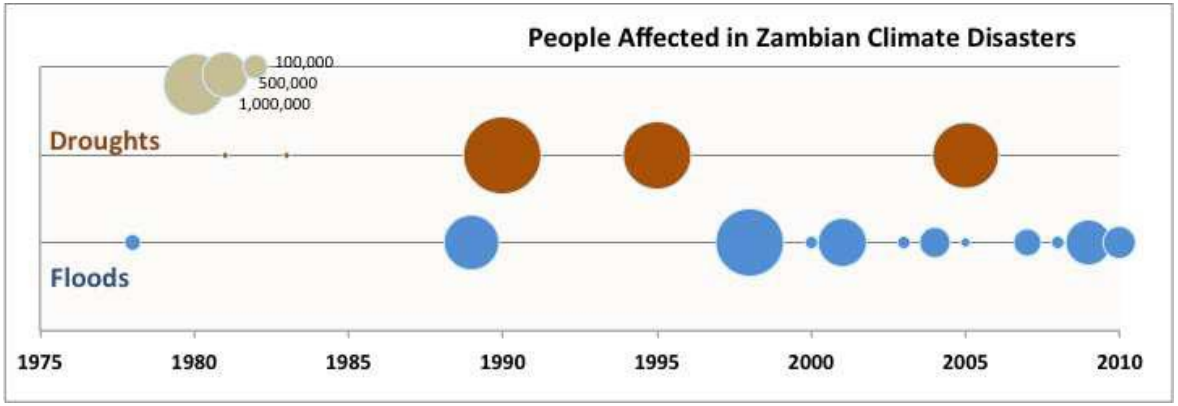
WHAT IS CLIMATE CHANGE?

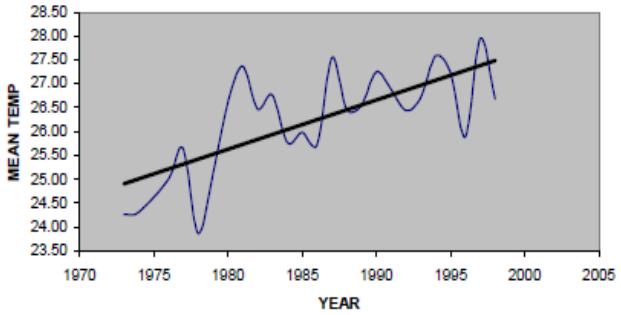
- Climate change impacts are long-term and require long term interventions
- Urgent need for resilience
- Adaptive capacities must be built in communities, institutions and infrastructure:

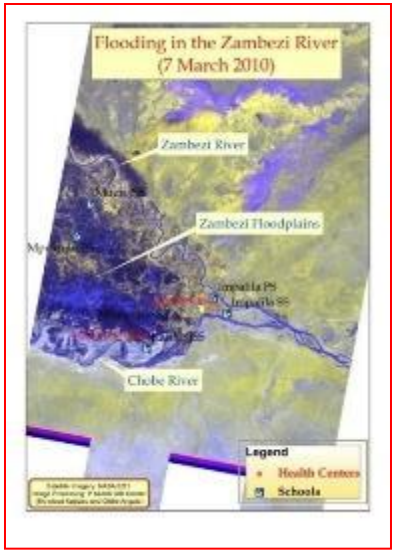
  There is an urgent need for Mitigation and Adaptation measures to be put in place
- Mitigate
- Adaptation

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

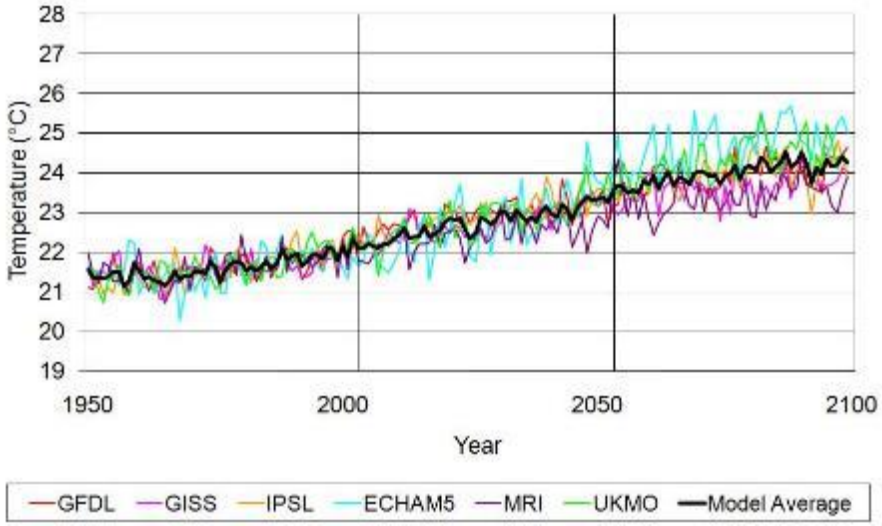




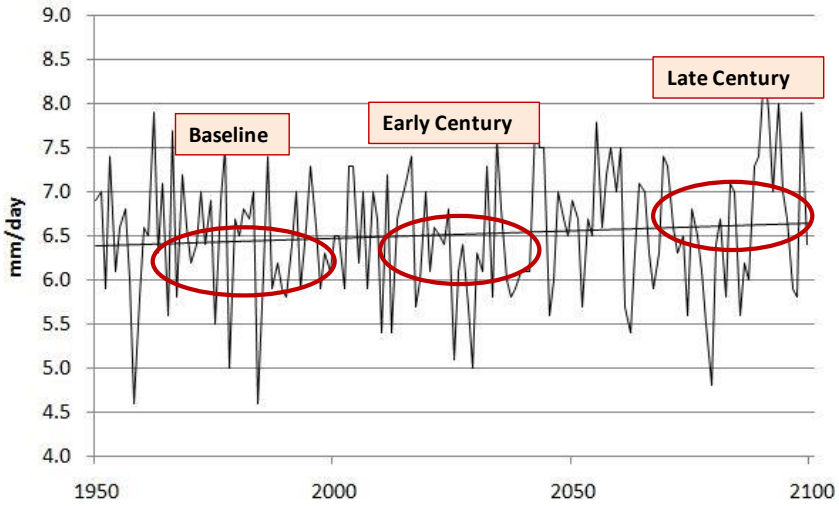


PROJECTED FUTURE TRENDS

Temperature Rise



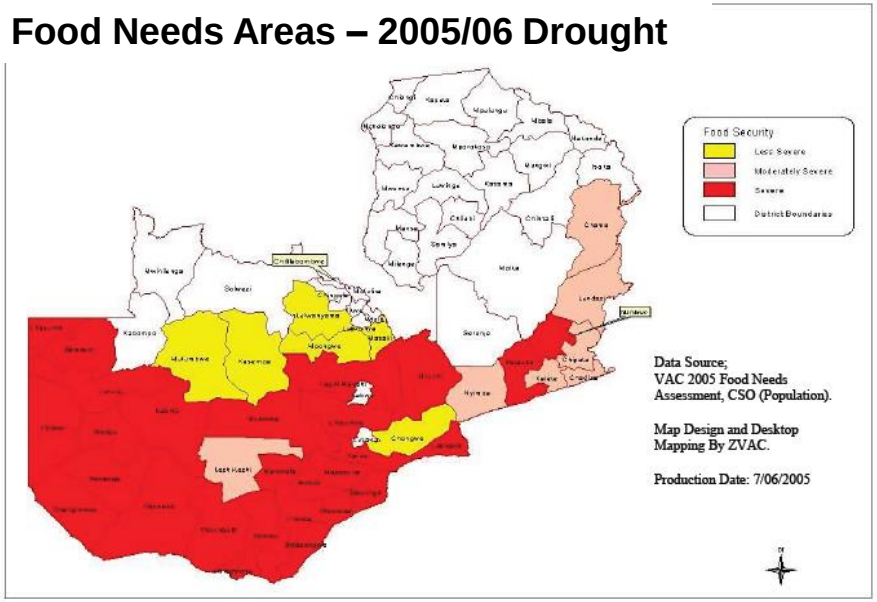
Rainfall Variation



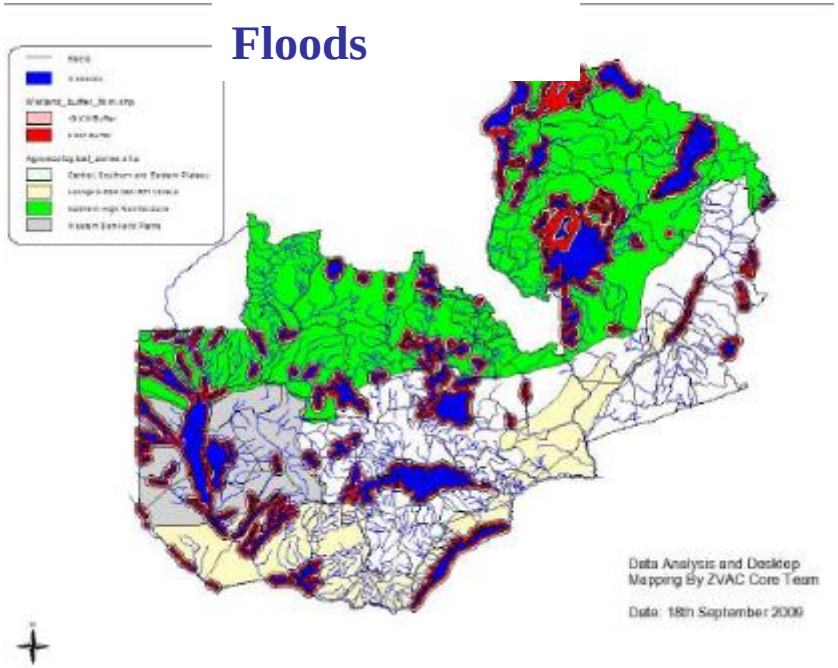
- Temperature projected to rise by 3-5 degrees Celcius by 2100
- Average precipitation not projected to change significantly; **however**
- Precipitation variability expected to increase: early rainy season to become drier, peak rainy season with heavier rainfall periods.
- Climate extremes to accentuate: more intense floods; more frequent droughts.

ZAMBIA: MAJOR EXPOSURE TO CLIMATE

Food Needs Areas – 2005/06 Drought

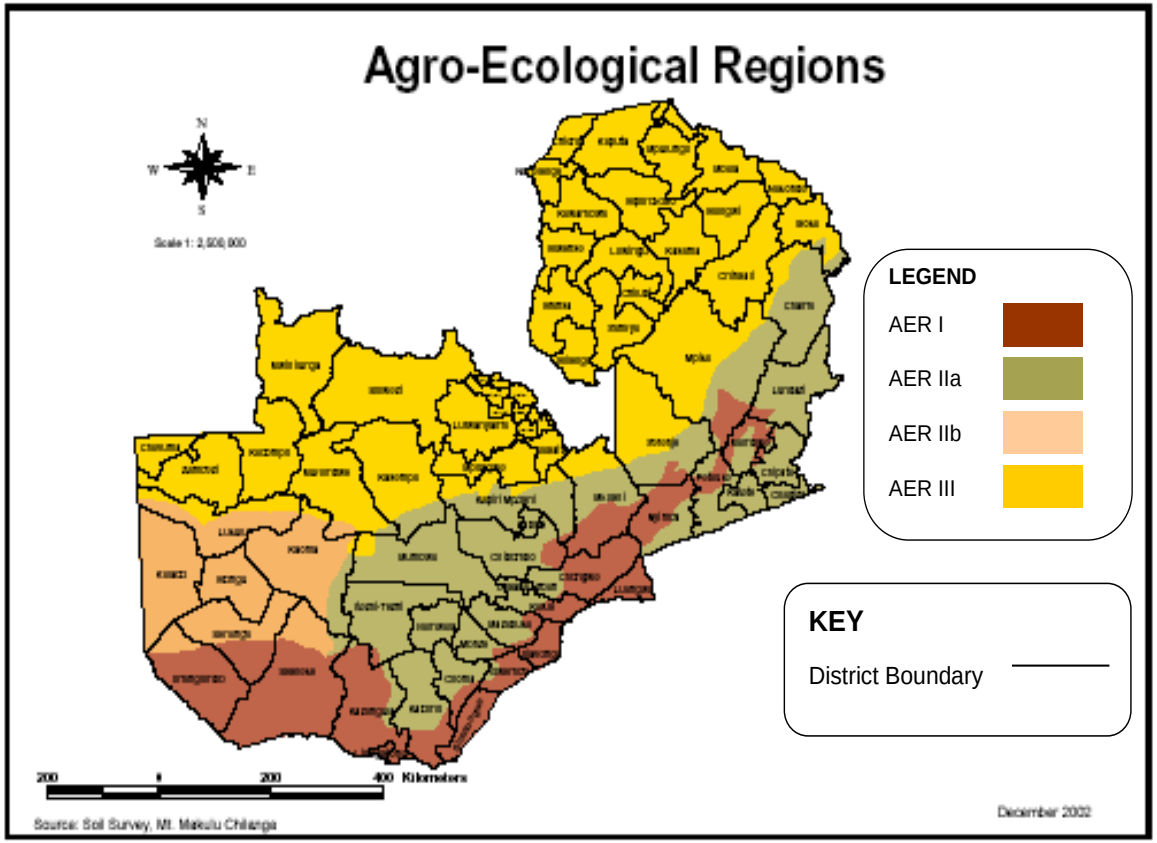


Floods



The Southern part of Zambia is generally considered to be the most vulnerable

VULNERABILITY ASSESSMENT INDICATIONS



30 year baseline assessment (1970 – 2000)

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 RESPONSE TO CLIMATE CHANGE

- 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

PROGRAMMES COORDINATED BY ICCS

S/N	Programme	Area of Focus	Implementing Agency/ Department	Donors	Status
1.	**Pilot Programme for Climate Resilience (PPCR) (has government counterpart funding)**				
	Strengthening Climate Resilience in Kafue Sub-Basin	Livelihoods, infrastructure, food security & early warning	**Districts** (Planning Sub-Committees; **Road Development Agency** (Infrastructure component)	**CIF/ AfDB**	under implementation 2013-2018
	Strengthening Climate Resilience in Barotse Sub-Basin		**Districts** (Planning Sub-Committees; **Maritime Department** (Infrastructure component)	**CIF/ World Bank**	under implementation 2013-2019
	Strengthening Climate Resilience in Barotse and Kafue Sub-Basin – Private Sector		**Private Sector**	**IFC**	yet to commence
	Developing Climate Resilient Infrastructure Standards and Codes Project		**Road Development Agency**	**NDF**	under implementation- at procurement of consulting firm stage

PROGRAMMES COORDINATED BY ICCS

S/N	Programme	Area of Focus	Implementing Agency/ Department	Donors	Status
2	Reducing Emissions from Deforestation and Forest Degradation (REDD+)				
	REDD+ Strategy	Forest management & Land use	**Forestry Department**	**UN-REDD Programme**	completed
	REDD+ Readiness		**Forestry Department**	**UN-REDD Programme**	
	Zambia Integrated Forest Landscape Programme		**Forestry Department, Wildlife, Agriculture**	**BCF/ World Bank**	under development (project appraisal document preparation) 2017-2030
	Forest Investment Programme		**Forestry Department, Wildlife, Agriculture**	**CIF/ World Bank UN-REDD**	under development
	Satellite-Based Monitoring for Forest Management		**Forestry Department, Wildlife, Agriculture, National Remote Sensing Center, Surveys Department**	**World Bank/European Space Agency**	under development

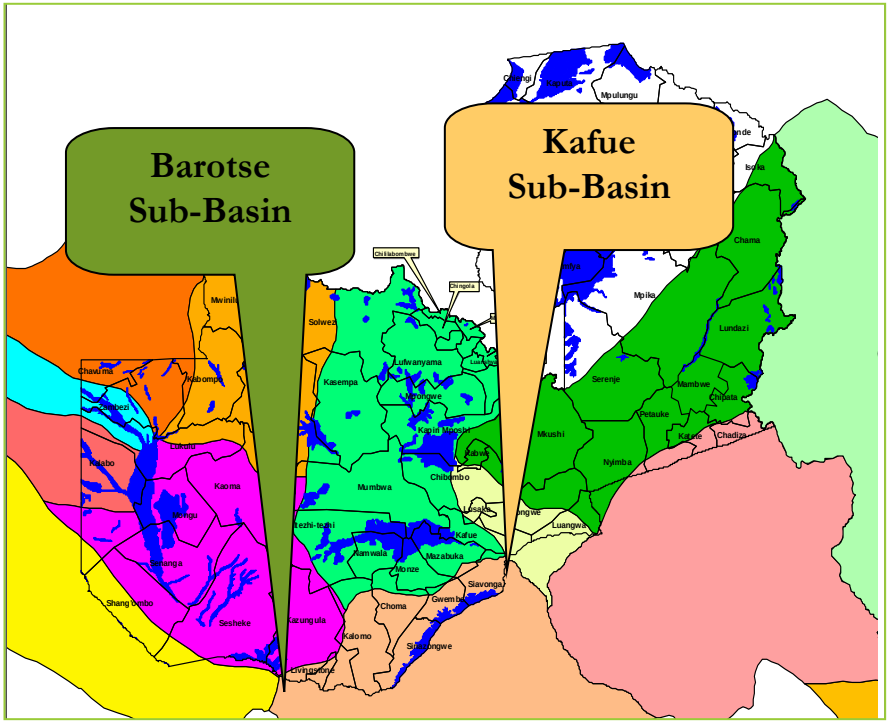
PROGRAMMES COORDINATED BY ICCS

S/N	Programme	Area of Focus	Implementing Agency/ Department	Donors	Status
3	Scaling up of Renewable Energy Program (SREP)	Renewable Energy	**Department of Energy**	**CIF / World Bank**	Under development (preparation of investment plan
4	Enhancing Capacity on Low Emission Development Strategy (EC-LEDS)	Capacity Building	**Crosscutting across all sectors**	**USAID** Technical Assistance	Ongoing
5	Green Climate Fund (GCF)	Forestry, Agriculture and Energy	**Forestry, Agriculture and Energy Departments**		Under development (at concept note) –
6	UN Joint Programme	Forestry, Hydromet, Environment, Agriculture and Energy	**Met. Department, ZEMA, Forestry, Agriculture Departments**	**UN System**	Under implementation 2016-2020
7	GLR Project: Zambia Displaced Persons & Border Communities	Livelihoods, infrastructure, food security & Resettlement	**Districts, Department of Resettlement, Commissioner of Refugees**	**World Bank/ Government**	under development (Pre-appraisal stage) 2016-2021

Zambia: SPCR Focal Area

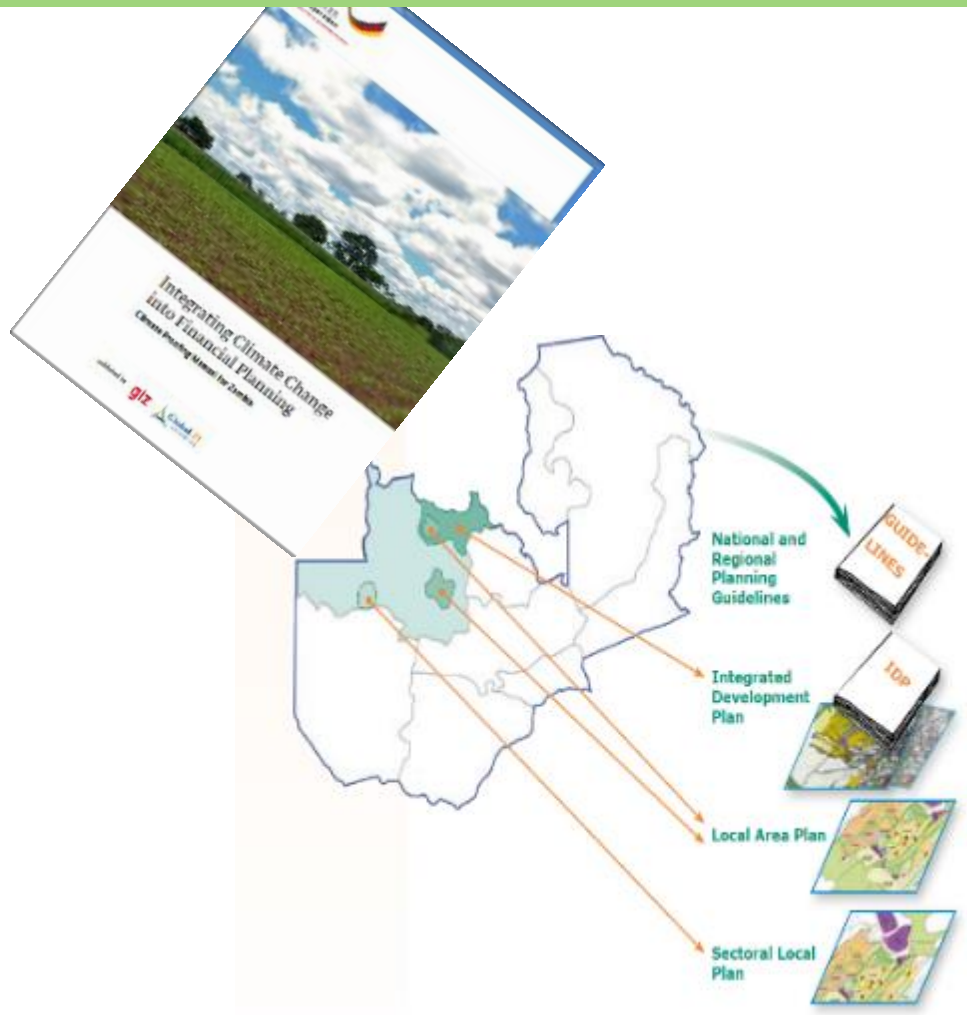
The Barotse and Kafue Sub-Basins of the Zambezi River Basin are amongst areas identified as being highly vulnerable and therefore were chosen as focal areas for SPCR interventions.

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.



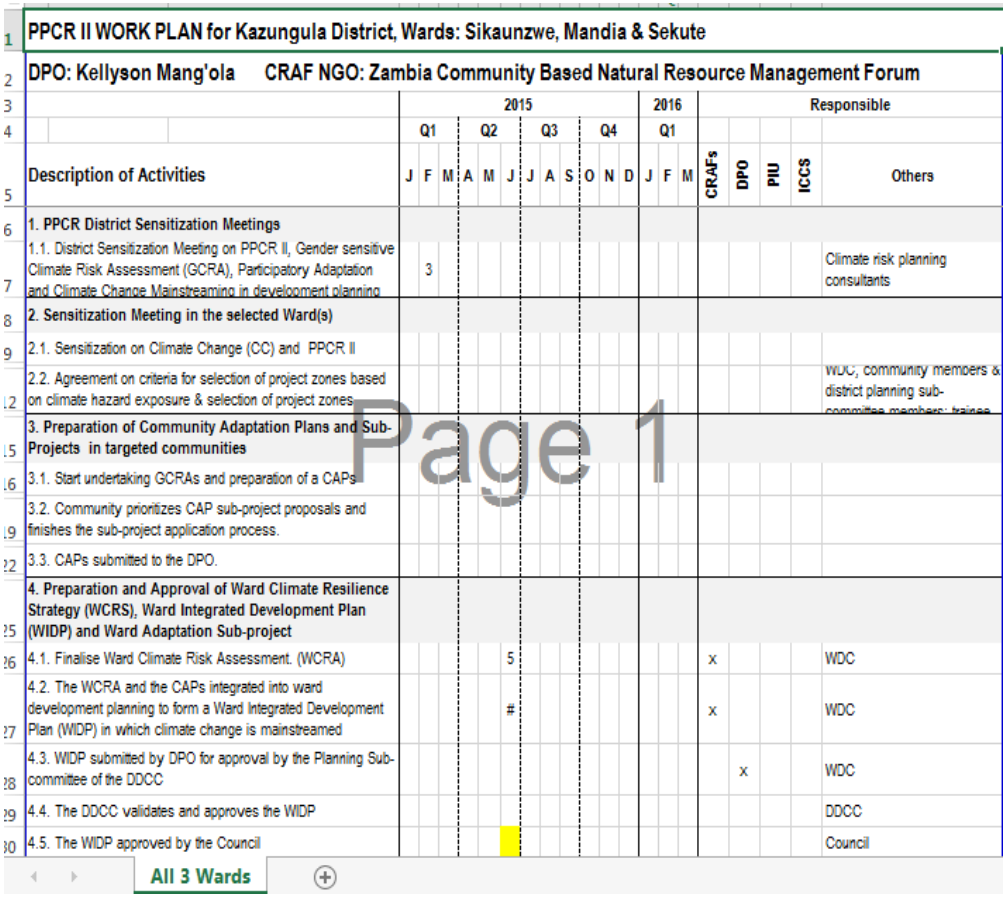
STRATEGIC SUPPORT PROGRESS – KEY HIGHLIGHTS

- Mainstreaming Climate Resilience in to 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



STRATEGIC SUPPORT PROGRESS – KEY HIGHLIGHTS

- Mainstreaming Climate Resilience in to 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.



PPCR II WORK PLAN for Kazungula District, Wards: Sikaunzwe, Mandia & Sekute

DPO: Kellyson Mang'ola CRAF NGO: Zambia Community Based Natural Resource Management Forum

Description of Activities	2015 Q1 J	F	M	Q2 A	M	J	Q3 J	A	S	Q4 O	N	D	2016 Q1 J	F	M	Responsible: CRAFs	DPO	PIU	ICCS	Others
1. PPCR District Sensitization Meetings																				
1.1. District Sensitization Meeting on PPCR II, Gender sensitive Climate Risk Assessment (GCRA), Participatory Adaptation and Climate Change Mainstreaming in development planning	3																			Climate risk planning consultants
2. Sensitization Meeting in the selected Ward(s)																				
2.1. Sensitization on Climate Change (CC) and PPCR II																				
2.2. Agreement on criteria for selection of project zones based on climate hazard exposure & selection of project zones																				WDC, community members & district planning sub-committee members; trainee
3. Preparation of Community Adaptation Plans and Sub-Projects in targeted communities																				
3.1. Start undertaking GCRAs and preparation of a CAPs																				
3.2. Community prioritizes CAP sub-project proposals and finishes the sub-project application process.																				
3.3. CAPs submitted to the DPO.																				
4. Preparation and Approval of Ward Climate Resilience Strategy (WCRS), Ward Integrated Development Plan (WIDP) and Ward Adaptation Sub-project																				
4.1. Finalise Ward Climate Risk Assessment. (WCRA)						5										x				WDC
4.2. The WCRA and the CAPs integrated into ward development planning to form a Ward Integrated Development Plan (WIDP) in which climate change is mainstreamed						#										x				WDC
4.3. WIDP submitted by DPO for approval by the Planning Sub-committee of the DDCC																	x			WDC
4.4. The DDCC validates and approves the WIDP																				DDCC
4.5. The WIDP approved by the Council																				Council

All 3 Wards

Page 1

STRATEGIC SUPPORT PROGRESS – KEY HIGHLIGHTS

- 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

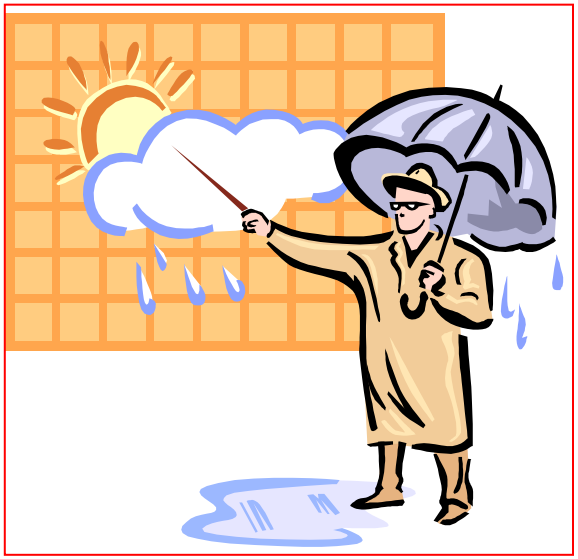
STRATEGIC SUPPORT PROGRESS – KEY HIGHLIGHTS

- Training of Journalists in climate change reporting
- Annual Prize for Best Climate Change Story since 2015

- Knowledge sharing
- - Parliamentarians
  - District Commissioners and Council Secretaries
  - Povincial 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 FARMNG 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

Shukraan

Gracias

Merci