United Nations/Austria Symposium

South African Policy/Legislative perspective and strategic interventions on Climate Change

MR TLOU RAMARU

Dept Forestry, Fisheries and Environment

13 SEPTEMBER 2023





PRESENTATION OUTLINE

- Impacts of Climate Change
- National Climate Change Policy
- Multi Governance
- Implementation intervention





IMPACTS OF CLIMATE CHANGE

Air Pollution & Increasing Allergens

Asthma, cardiovascular disease, repiratory allergies

Extreme Heat

Heat-related illness and death, cardiovascular failure

Severe Weather

Injuries, fatalities, loss of homes, mental health impacts

Environmental Degradation

Forced migration, civil conflict, mental health impacts, loss of jobs and income

Rising Temperatures



IMPACT OF
CLIMATE CHANGE
ON HUMAN
HEALTH &
EXACERBATION
OF EXISTING
INEQUITIES



Adapted from CDC, J. Patz

More Extreme Weather

Degraded Living Conditions & Social Inequities

Exacerbation of existing social and health inequities and vulnerabilities

Changes In Vector Ecology

Malaria, dengue, encephalitis, hantavirus, Rift Valley fever, Lyme disease, chikungunya, West Nile virus

Water & Food Supply Impacts

Malnutrition, diarrheal disease

Water Quality Impacts

Cholera, cryptosporidiosis, Campylobacter, leptospirosis, harmful algal blooms





IMPACTS OF CLIMATE CHANGE: KWAZULU NATAL CASE STUDY

In April and May 2022 Kwazulu Natal Province experienced severe floods and landslides caused by heavy rainfall

- Over 400 people died;
- Over 40,000 went missing and some displaced;
- Nearly 4,000 houses were destroyed, and more than 8,000 others were damaged.
- Multiple infrastructure was also destroyed.

An estimated R17 billion worth of damage









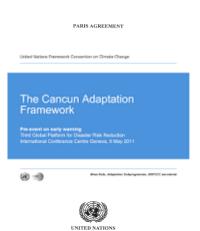








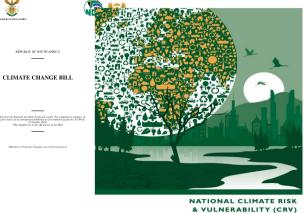
NATIONAL CLIMATE CHANGE RESPONSE POLICY































ASSESSMENT FRAMEWORK







Climate Change Adaptation: Focus areas

CC Policy, Planning and Governance

Sectors

Policy Work
National Adaptation Plan/Strategy
Situational analysis and gaps in Provinces,
Implementation mechanisms, Coordination
Vertical integration (national, provincial and local)
Horizontal (Sectors)- (Agriculture/Food, Water, Health, National, Coastal systems,
Marine systems, urban areas, rural areas, economic sectors & services, DRR
Partners: Provinces and LG esp Cities & Districts, Provinces, Public and Private

International CC Adaptation

IPCC Working Group Report on Impacts, Adaptation and Vulnerability

Sub-region(SADC), Regional & International

Adaptation in the 2015 Agreement

Warsaw international Mechanism for Loss and Damage: Implications for SA

Climate Science for adaptation Vulnerability, Exposure and Risks

Long Term Adaptation Scenarios (LTAS),

SARVA, Vulnerability Assessments and Mapping

Observed changes and responses
Broad range of possible futures
Problem space and solution space

Research priorities

Partners: Research institutes, academia, Public & Private sector

Community of practice

Implementation, Awareness and capacity building

Community/Ecosystem Based Adaptation

Lessons from grassroots projects/programmes (NIE)

Local Projects(Urban and rural focus)

Coastal and marine adaptation

Capacity and resources

NGOs-Awareness and advocacy
Private sector adaptation Community

Perspective (Provinces, NGOs, SALGA, Private sector)

Climate services

(as per the NFCS/GFCS road map)

Extreme events and near term focus

DRR and adaptation responses

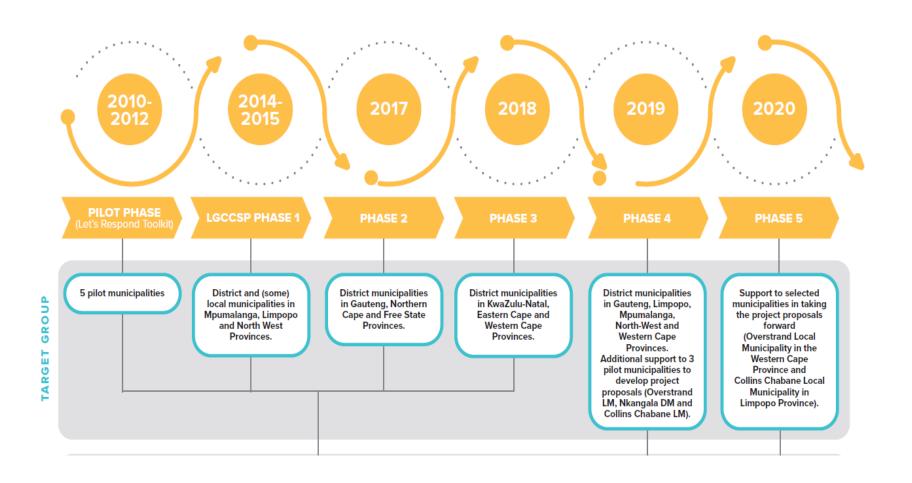
Insurance

Climate information, Observation, monitoring, early warning systems

User provider interface

(SAWS, COGTA, SALGA, Observation Institutions, climate information generators and providers)

MAINSTREAMING CLIMATE CHANGE IN LOCAL GOVERNMENT







ELEMENTS OF THE CLIMATE MITIGATION SYSTEM?

Mitigation Goal

National GHG
Emissions
Trajectory Range,
against which
outcome of all
mitigation actions
will be measured

Monitoring of GHG emissions

Data collection,
GHG inventory and
M&E system

Sectoral Targets

Defining Desired Emission
Reduction Outcomes
(DEROs), now Sectoral
Emissions Targets
(SETs), for each
significant sector or subsector of the economy

Industry emissions limits

Adopting a carbon budget approach to provide for flexibility and least cost mitigation in sectors and/or sub-sectors

<u>Industry</u>

implementation
Mitigation plans to
demonstrate how
mitigation by companies
is to be achieved

Sector polies to drive mitigation

Policies and Measures (PAMS), economic measures to drive mitigation (e.g. IRP 2019 – REIPPP)





Low Emission Development Strategy



- Paris agreement invitation to Parties to submit LEDS
- There are many guideline documents on the how – no internationally agreed definition - Different interpretations
- The LEDS are generally described as forward-looking national economic development plans or strategies that encompass low-emission and/or climate-resilient economic growth (IEA, 2010)
- LEDS can serve multiple purposes but are primarily intended to help advance national climate change and development policy in a more coordinated, coherent and strategic manner



Multi-governance response to Climate Change

Local government
IDPs, SDF, Climate
change strategies and
action plans
PGDS, Provincial

climate change strategies and implementation plans

Sectoral and crosssectoral policies, regulations, strategies, plans and programmes

NDP, JT Vision, NCCRP, National Climate Change Adaptation Response Bill/Act, SETs, CB and PPPs

Paris
Agreement,
NDC, LEDS

Research and Analysis

Policy and Regulation

Implementation

Monitoring, reporting and verification

International, National,

Provincial, Local





FURTHER IMPLEMENTATION

- National Climate Change Information Systems;
- Subnational Climate Change Information Systems;
- Research on Loss and damage
- Indigenous Knowledge Systems;
- National Climate Change Research Agenda;
- Cities Resilient Forum;
- Collaboration accredited entities with Multilateral Finance Mechanism – GCF, AF etc;





SPACE APPLICATIONS

- SANSA Earth Observation technology makes it possible to monitor freshwater bodies in near-real time. From this information SANSA produces an annual water layer and provides country-wide coverage of seasonal water body base layers for the Department of Water and Sanitation and other water authorities.
- SANSA uses satellite imagery to map settlements' growth patterns, study informal settlements and conduct disaster risk analysis
- SANSA Earth Observation's Image Production team can provide clients with the history of specific fire scars, according to a client's individual request.
- The above-mentioned data and information is use for climate change adaptation planning process and disaster response.





THANK YOU!

Climate change Adaptation

Department of Forestry, Fisheries and the Environment

Tel: +2712 399 9173 | +2783 321 6231

Website: http://www.environment.gov.za

Address: The Environment House, 473 Steve Biko Road, Arcadia, Pretoria, 0083





hank You