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United Nations
Climate Change Secretariat

Regional workshop on promoting international collaboration to facilitate preparation, submission and implementation of nationally appropriate mitigation actions in Africa

Maseru, Lesotho

16 to 19 April 2013

MRV system for Kenya

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Maseru 18th April 2013

Overview

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2. Introduction / definition
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Objectives of this presentation

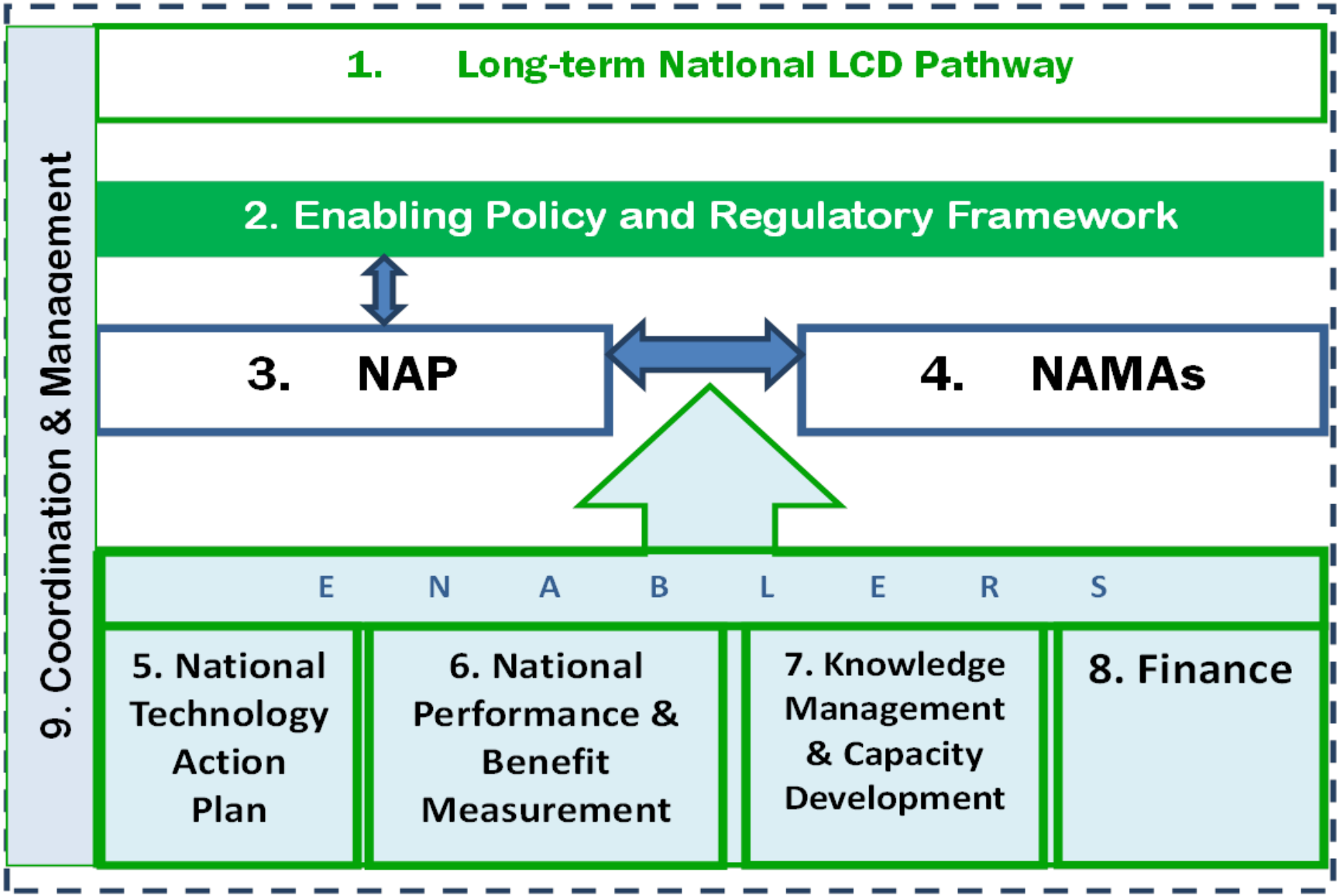
- Share Information with participants on MRV+ proposal for Kenya; its nature & extent
- Explore possibilities of wider application of MRV+
- Present opportunity to parties & UNFCCC to adapt and customize the MRV+
- Respond to request / need of some participants for more info on the subject

Introduction / definition

MRV+ is an integrated framework for measuring, monitoring, evaluating, verifying and reporting results of mitigation actions, adaptation actions and the synergies between them.

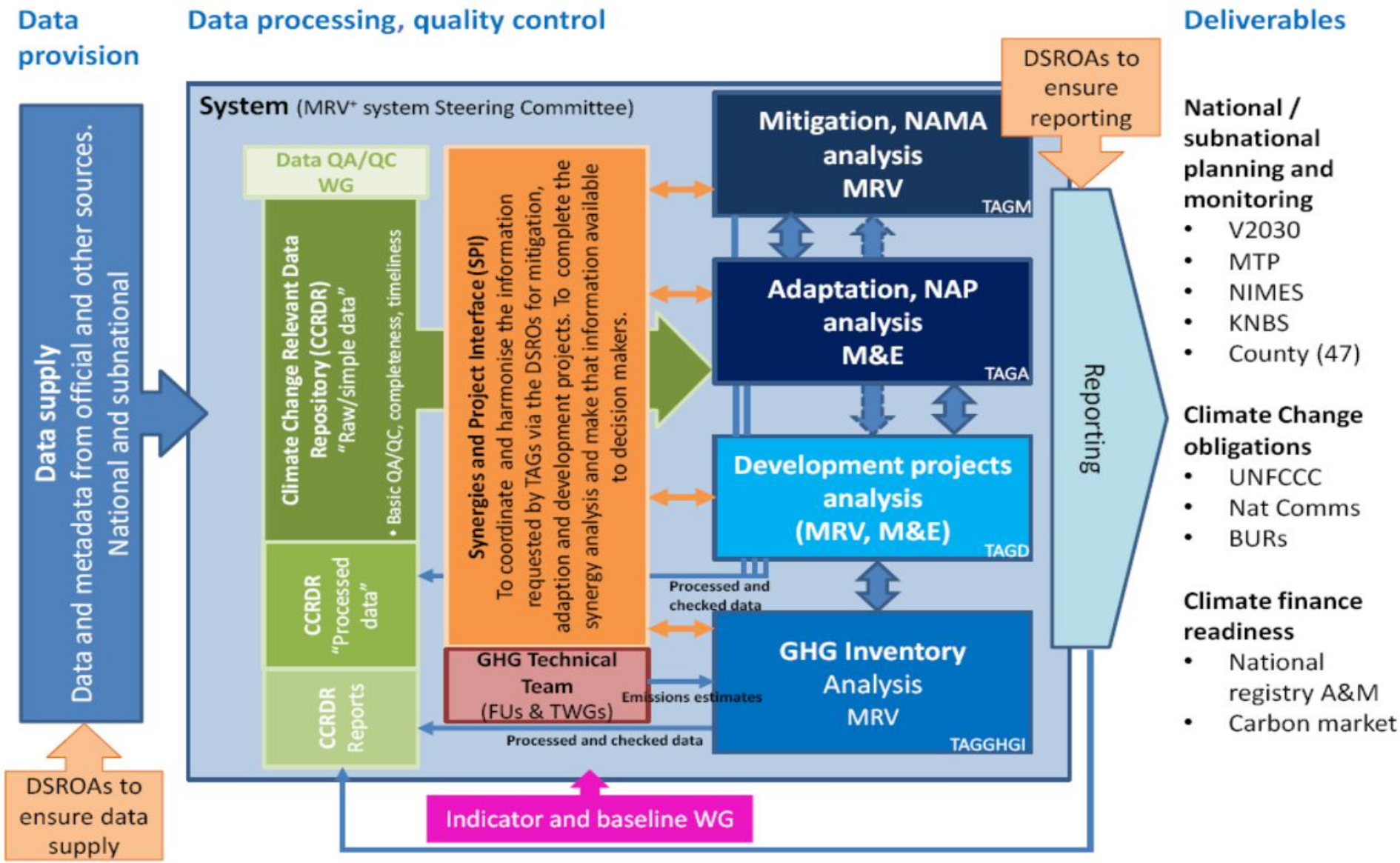
Based on tracking Adaptation and Measuring Development (TAMD). Developed by the International Institute for Environment and Development (IIED)

MRV (6) in the Kenya Climate Change Action Plan



Conceptual framework of MRV for K

Figure 11.1: The proposed MRV⁺ system for Kenya



Proposed Governance structure of MRV+

The governance and reporting structures of the MRV+ system have been kept as simple as possible to avoid complex management structures. The MRV+ system has been designed to minimise the number of extra staff needed, although some new working groups and TAGs will need to be set up, as described in Figure 11.2.

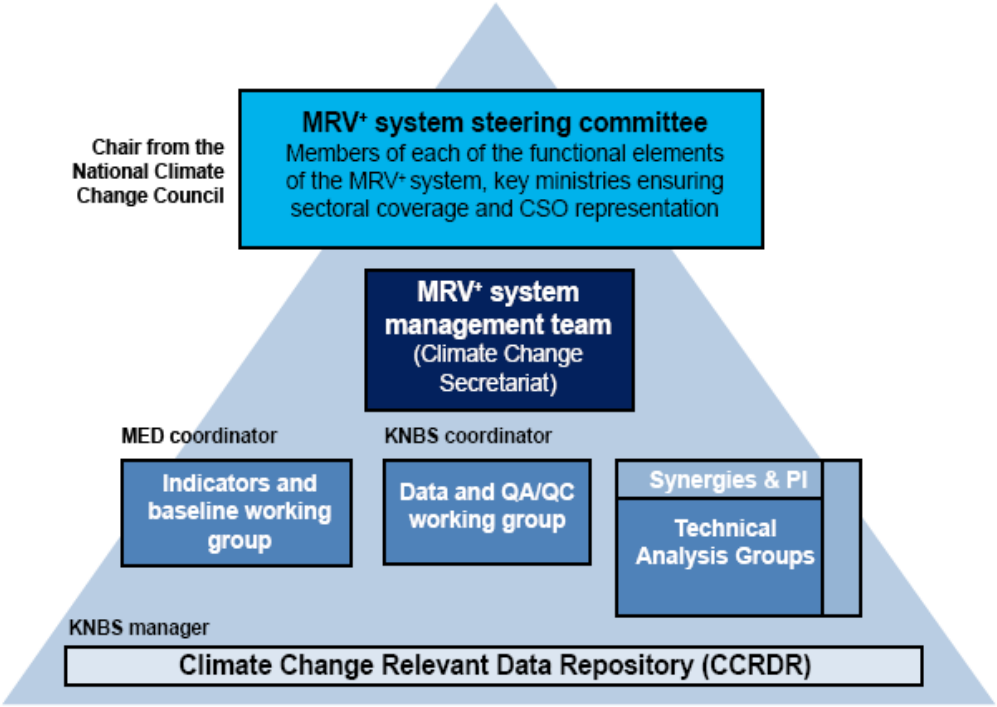


Figure 11.2: Diagram showing the governance hierarchy for the MRV+ system

Top-down county-level institutional **adaptive capacity** indicators

- % of county roads that are "climate resilient" or that are **not considered** to be **vulnerable**
- % of new hydroelectric projects in the county that have been **designed to cope** with climate change risk
- % of population by gender in areas subject to flooding and/ or drought in the county who have **access to meteorological information** on rainfall forecasts
- % of people by gender in the county **permanently displaced** from their homes as a result of flood, drought or sea-level rise
- % of poor farmers & fishermen in the county with **access to credit** facilities or grants

… adaptive capacity indicators cont.

- % of total livestock numbers **killed by drought** in the county
- % of area of natural terrestrial ecosystems in the county that have been **disturbed or damaged**
- % water demand that is supplied in the county
- % of poor people by gender in drought prone areas in the county with **access to reliable and safe water** supplies
- Number of ministries that have **received training** for staff operating at county level on the costs & benefits of adaptation, including valuation of ecosystem services.

Bottom-up vulnerability indicators

- No. of people by gender **permanently displaced** from their homes due to drought, flood or sea level rise
- No. of hectares of productive **land lost** to soil erosion/deg
- % of rural households with **access to water** from a protected source
- % urban households with **access to piped water**
- Cubic meters per capita of **water storage**
- % of land area covered by **forest**
- % of classified **roads** maintained and rehabilitated
- No. of urban slums with **physical & social infrastructure** installed annually
- No. households in need of **food aid**
- No. of County **Stakeholder Fora** held on climate change

Synergies with the greatest potential

- Increased fuel security from reduced reliance on external imports
- Increased productivity & quality of life from climate resilient electricity generation
- Improved water storage potential of soils from reduced occurrence of grassfires
- Improved human health from improved vehicle efficiencies & reduced air pollution

Synergies .....

- Reduced vulnerability to floods & storm surges from increased climate change **resilience of sanitation**
- Improved water storage potential in soils, reduced run off & floods from **forestry investments**
- Increased **carbon sequestration** from reforestation, agroforestry & conservation tillage.
- Improved human health from replacement of kerosene lamps with renewable lamps in the home

Trade offs

- Food shortages & price rises for cereals caused by increased growth of **biofuels**
- Water shortages for local communities caused by unsustainable **geothermal** energy expansion
- Higher priced goods due to heavy duty vehicle fuel **efficiency**
- Improvements in passenger vehicle emissions resulting in lower mobility for the poor if **cost** passed onto consumer.

Indicators of synergy or trade-offs

- % imported fuel for each MW of energy produced from renewable sources
- No. of power cuts in areas targeted for climate resilient investment in the electricity grid
- Water storage in areas targeted for enforcement of the Grassfires Act
- Air pollution in urban areas following measures to improve vehicle emissions
- Incidences of respiratory disease in households using kerosene lamps
- Incidences of respiratory disease in households using renewable lamps

… synergy or trade-offs

- Cases of water-borne diseases following flood events or storm surges
- No. of water trucks delivering water to downstream areas during periods of drought following investment in forests
- Tonnes of soil carbon per hectare in agricultural land targeted for conservation tillage practice
- Cereal crops index
- Hectares of biofuel grown
- Additional un-recycled water demand from geothermal power generation
- Cost of road freight per km
- Average cost of public transport per journey.

Concluding Remarks

- Informed decision making based on feedback in response to Climate Change is imperative
- Stakeholders need to ascertain harmony in response approaches, efficient & effective use of resources & to up scale success;
- MRV has a crucial role in documenting progressive performance that would influence future mode of operation

THANK YOU