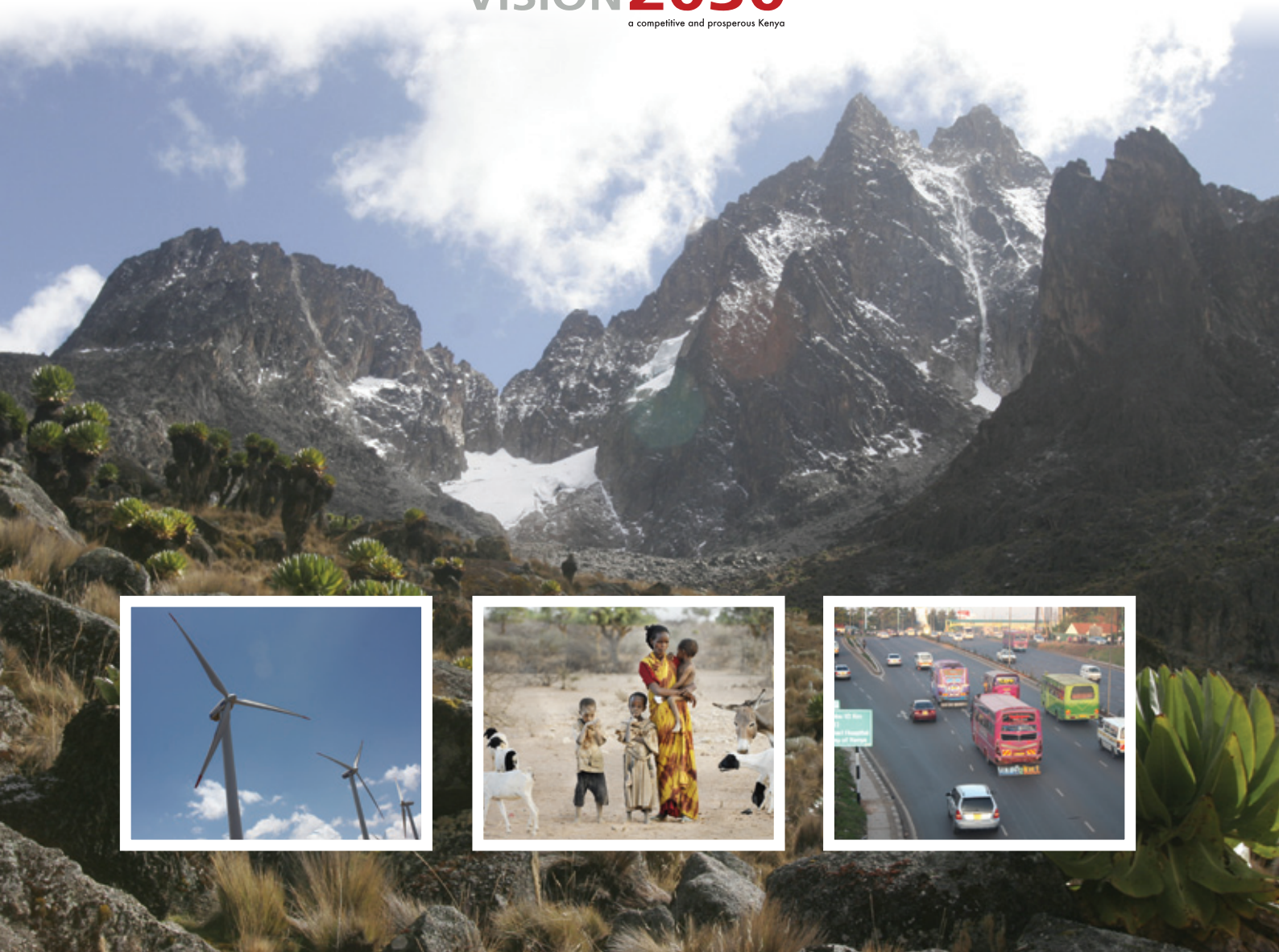
REPUBLIC OF KENYA

National Climate Change Action Plan 2013-2017

Executive Summary

VISION 2030
a competitive and prosperous Kenya



Citation
Government of Kenya (2013) National Climate Change Action Plan 2013 - 2017 Executive Summary, Nairobi Kenya

References: See NCCAP 2013-2017

Photos
Background photo: Nation newspaper
Inset photos: MEMR CCS/HTSPE; Dieter Telemans/Panos; MEMR CCS/HTSPE

Back cover
Frederic Courbet/Panos

To obtain copies of this publication, please contact:
The Permanent Secretary
Ministry of Environment and Mineral Resources
P.O. Box 30126-00100, Nairobi
Tel: +245202730808/9
Fax: +254202734722
Email: psoffice@environment.go.ke
Website: www.environment.go.ke

Karen Robinson/Panos

REPUBLIC OF KENYA

National Climate Change Action Plan 2013-2017

Executive Summary

VISION 2030

a competitive and prosperous Kenya

Preface

H.E. Hon. Mwai Kibaki, C.G.H, MP, President and Commander-in Chief of the Defence Forces of the Republic of Kenya

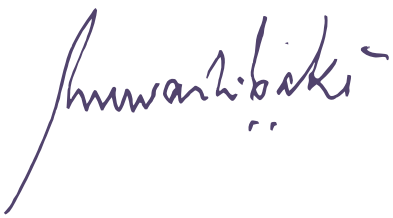
In recognition of the serious threats posed by climate change my Government has taken and continues to take bold measures to secure the country's development against the risks and impacts of climate change. The Constitution of Kenya provides for maintenance of at least ten per cent tree cover of the land area. The Kenya Vision 2030 targets the planting of at least seven billion trees to address food, water and energy security. During the last ten (10) years, Kenya has been able to restore 6% of forest cover. There are clear indications we will be able to attain the 10% tree cover in the next three years.

In 2010, the Government launched the National Climate Change Response Strategy which enhanced understanding of the global climate change regime and the impacts of climate change in Kenya. The Strategy was Kenya's first climate change agenda guide as it provided a basis for strengthening and focusing nationwide action towards climate change adaptation and mitigation.

The development of this National Climate Change Action Plan marks another landmark stride by the Government towards addressing climate change vulnerability. The Action Plan takes adaptation and mitigation efforts to the next stage of implementation and equips the country to take decisive action in responding to the challenges we face. It encourages people-centred development, ensuring that climate change actions support Kenya's achievement of development goals. It also supports efforts towards the continued attainment of Vision 2030. This Action Plan guides the transition of the country towards a low carbon climate resilient development pathway.

The Government has already established a National Climate Change Secretariat and other institutional arrangements that will provide for the implementation of the actions identified. Through the implementation of this Action Plan, Kenya will be in a much better position to develop in the face of climate change and the uncertainty it presents for the attainment of sustainable development goals.

It is my believe that this Action Plan will lead to collective action and innovation across all stakeholder groups for a prosperous and more climate resilient Kenya.



MWAI KIBAKI
PRESIDENT

Foreword

The Rt. Hon. Raila Amolo Odinga, EGH, MP, Prime Minister

Kenya and indeed the horn of Africa region at large has in the last few years come face to face with the unprecedented challenge of climate change impacts and the corresponding socio-economic losses to our communities. Our high dependence on climate sensitive natural resources for our livelihoods and economic sustenance will inherently increase our vulnerability to this phenomenon.

Climate Change is not only a threat to the achievement of sustainable development and poverty reduction but has the potential to reverse the modest gains that we have achieved towards attaining the Millennium Development Goals (MDGs). Responding to climate change will require the sustained participation of all stakeholders, including government and the private sector.

I firmly believe that we are up to the task. Addressing climate change is now a top priority of the government. The Ministry of Environment and Mineral Resources in partnership with stakeholders prepared and launched the National Climate Change Response Strategy (NCCRS) in 2010 so as to ensure a climate resilient Kenya that will stay on track towards attainment of Kenya's Vision 2030 and the MDGs. I am pleased to say that the Strategy can now be operationalized through this comprehensive National Climate Change Action Plan.

It will now take a similar level of commitment to realize the vision that brought about this plan. It will be critical to generate and maintain the political will to not only act together but to generate the enabling legislation, relevant regulations as well as to address barriers to investment in this action plan.

Finally, it must be clear that private sector will play a significant role in tackling climate change and supporting green economic growth. With this Action Plan we hope to work together to enhance our understanding of the risks and opportunities and find innovative and effective ways to address the climate change challenge in a manner that will result in a climate resilient and a secured future for Kenya.

The RT.Hon. Raila Amolo Odinga, EGH, MP
PRIME MINISTER

Acknowledgements

The Hon. Minister for Environment and Mineral Resources

The National Climate Change Action Plan 2013-2017 is Kenya's first Action Plan on climate change. It has been developed with the aim of implementing the National Climate Change Response Strategy (NCCRS) that was launched in 2010.

A wide range of individuals and institutions have participated in the development of this National Climate Change Action Plan and I would like to recognise their efforts. The development of the Action Plan was guided by the technical input of a cross-sectoral Climate Change Taskforce. This comprised of representatives from relevant government agencies, civil society, the academia and the private sector.

The Ministry of Environment and Mineral Resources, is grateful to the Permanent Secretary, Ali D. Mohamed CBS for chairing the Climate Change Taskforce. The staff of the National Climate Change Secretariat who, with support from subcomponent 9, diligently coordinated other government representatives and stakeholders in the development of the Action Plan, are also appreciated.

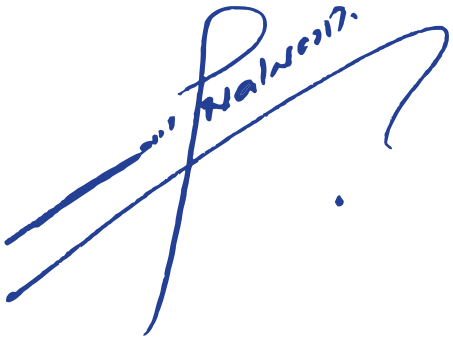
Several Thematic Working Groups provided oversight to the subcomponents of the Action Plan. These included:

- Subcomponent 1: Long-term National Low Carbon Climate Resilient Development Pathway
- Subcomponent 2: Enabling Policy and Regulatory Framework
- Subcomponent 3: Adaptation Analysis and Prioritisation
- Subcomponent 4: Mitigation and nationally appropriate mitigation action
- Subcomponent 6: National Performance and Benefit Measurement
- Subcomponent 7: Knowledge Management and Capacity Development
- Subcomponent 8: Finance

Many individuals participated in a large number of consultations including at the county level. This reflects the dedication invested by the people of Kenya in the process of making our country more climate-resilient and means the Action Plan responds to the most pressing climate change issues affecting our country.

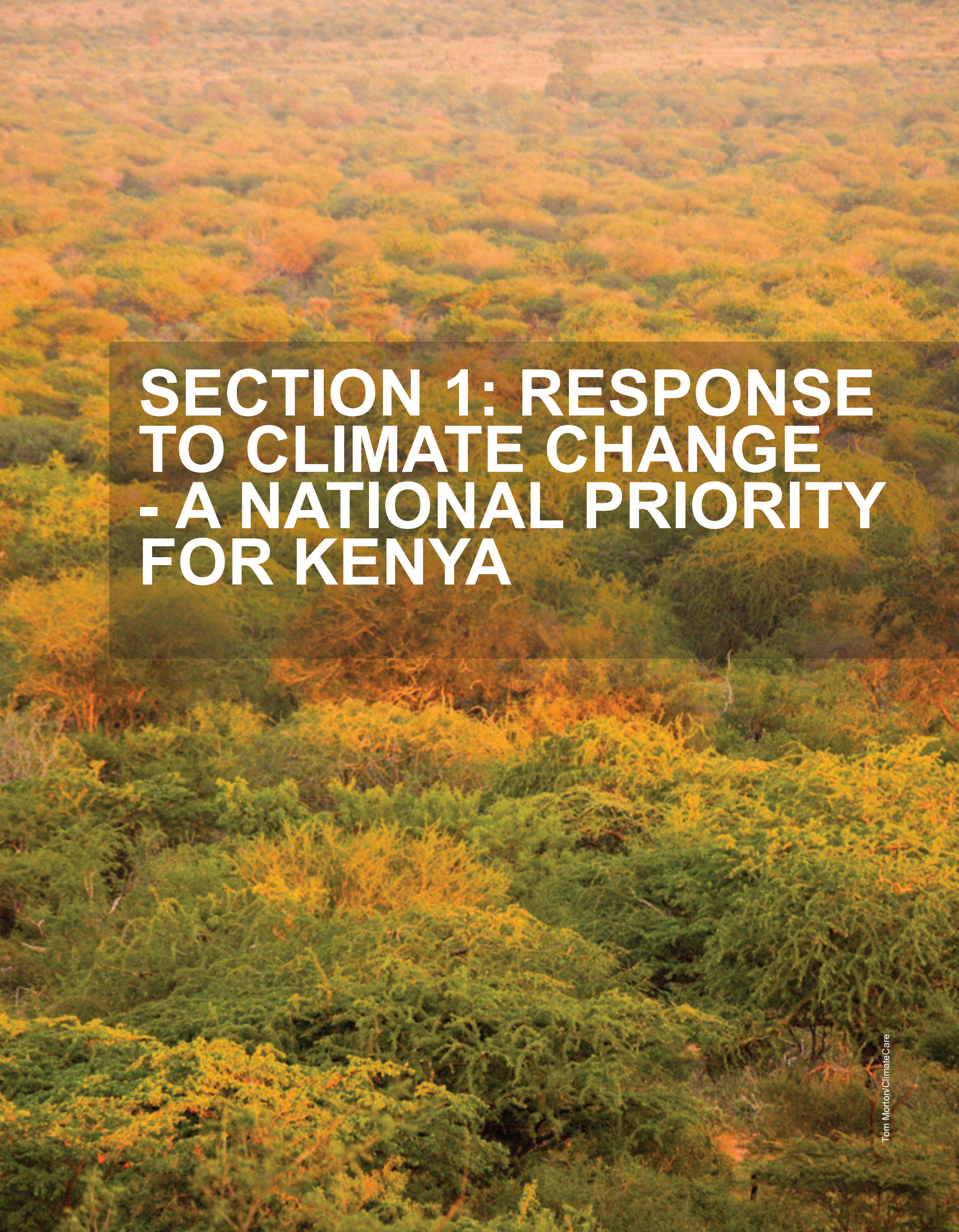
Reaching this significant milestone in Kenya's response to climate change would not have been possible without the generous support provided by UK aid through the Department for International Development (DFID) of the UK Government. Other financial support was received from the Danish International Development Agency (DANIDA), the Japanese International Cooperation Agency (JICA) and the Climate and Development Knowledge Network (CDKN). Finally, the consortia of national and international experts who provided management support and technical input are acknowledged.

The Government is committed to the implementation of the Action Plan and invites all partners and stakeholders to join in delivering the prioritised actions for the benefit of our country. I look forward to seeing the fruits of all of our efforts in a more climate resilient and low carbon Kenya.



Hon. Chirau A. Mwakwere; E.G.H.; M.P.;
Minister for Environment & Mineral Resources

SECTION 1: RESPONSE TO CLIMATE CHANGE - A NATIONAL PRIORITY FOR KENYA



Tom Morton/ClimateCare

1.1 What is Kenya's National Climate Change Action Plan?

Climate change is the most serious global challenge of our time. The 2010 National Climate Change Response Strategy (NCCRS) recognised the importance of climate change impacts for Kenya's development. This National Climate Change Action Plan developed in 2012 is the logical next step to enable Kenya to reduce vulnerability to climate change and to improve our country's ability to take advantage of the opportunities that climate change offers.

The NCCRS has been guiding policy decisions since its launch in 2010 through documented evidence of climate impacts on different economic sectors and proposed adaptation and mitigation strategies to enhance the country's climate change response. The NCCRS has already led to action in responding to climate change in Kenya. The country's cumulative spending and commitments between 2005-2015 is KSh232 billion (US$2.728 billion equivalent) for projects classified as having a significant climate change component. Since these initiatives represent part-development and part-climate focus, the figure does not reflect an estimate of "pure climate finance" in Kenya.

The National Climate Change Action Plan (NCCAP) now takes action to the next stage of implementation, providing the analysis and enabling mechanisms to make a step change in progress. It supports efforts towards the implementation of the Kenya Constitution 2010 and the attainment of Vision 2030; and encourages people-centred development, ensuring that climate change actions help the country move toward its long-term development goals.

The NCCAP sets out a vision for a low carbon climate resilient development pathway; summarises analysis of mitigation and adaptation options and recommended actions; recommends an enabling policy and regulatory framework; and sets out next steps for knowledge management and capacity development, technology requirements, a financial mechanism, and a national performance and benefit measurement system (NPBM). Figure 1 shows how the components fit together.

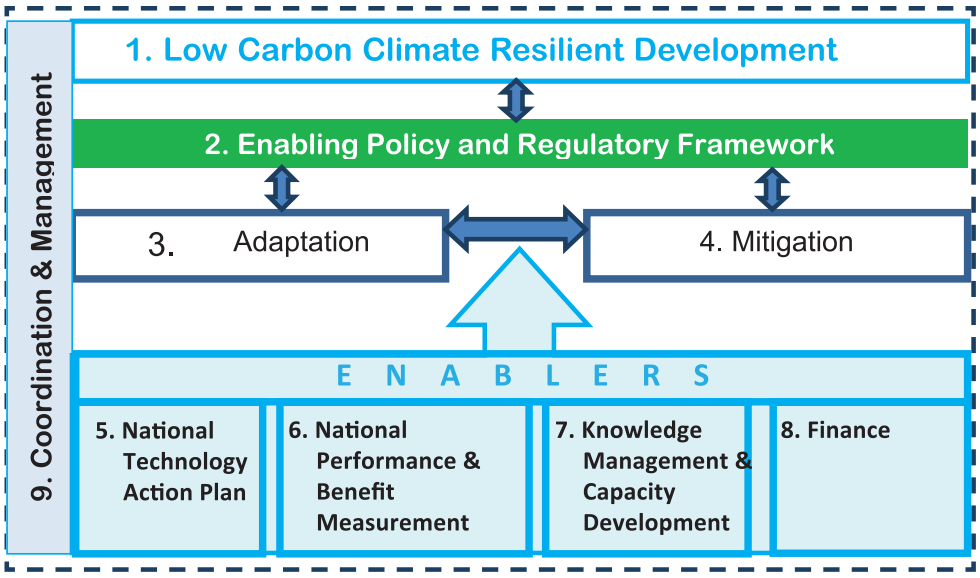


Figure 1: Components of Kenya's National Climate Change Action Plan

The Action plan is the result of a year-long, participatory process involving the public sector, the private sector, academia and civil society, under the leadership of the Ministry of Environment and Mineral Resources guided by a multi-stakeholder, multidisciplinary taskforce with financial support from development partners.

This Summary provides an overview of findings of the NCCAP and next steps. The full NCCAP will be distributed widely to all Government Ministries, Departments and Agencies, the private sector, civil society, and development partners to guide decision making. Implementation will be by actors in the public and private sectors. As climate change planning is an iterative process, it is anticipated that the priorities will be evaluated annually and that the NCCAP will be reviewed and updated on a five yearly cycle to inform the medium term planning (MTP) process.

Findings from the NCCAP process are presented in the following sections of this Summary; details of the findings are available in the full report.

1.2 Why is action on climate change a national priority for Kenya?

Although Kenya has little historical or current responsibility for global climate change, and emissions are insignificant relative to the global emissions, the country is highly vulnerable to the impacts of climate change. Most of the population's livelihoods and economic activities are reliant on climate-sensitive natural resources. Therefore, the uncertainty posed by climate change is affecting development and livelihood options. At the same time emissions are likely to increase in the future due to population and economic growth.

Therefore action to respond to climate change will ensure that development opportunities are realised through people-centred growth, while encouraging green growth and resource efficiency for the long-term sustainable development of the country.

The NCCAP can help ensure that Kenya takes steps to reduce vulnerability to climate change and adopts a low carbon development pathway with many potential benefits such as:

- Promoting wider sustainable development benefits, which help to address pressures related to economic growth, population growth, urbanisation and resource use;
- Improving the lives of the poor and vulnerable, who often experience climate change impacts most acutely; the urban poor living in slums that are flood-prone and the rural poor who rely on ground water for water supply and rainfall for food production.
- Improving climate resilience to further Kenya's people-centred development strategy.
- Enhancing adaptive capacity of communities through improved access to information and services.
- Reducing vulnerability to disasters by using climate risk information in development planning and policy making; taking into consideration that more than 70 per cent of natural disasters in Kenya are related to extreme climate events.

Implementing the NCCAP will also demonstrate Kenya's commitment and leadership in the effort to combat climate change. It will enable Kenya to meet international obligations under the United Nations Framework Convention on Climate Change (UNFCCC).

Further action on climate change will also attract international partnerships and investment in innovative sustainability programmes, technology development and transfer. It will also leverage investment in low carbon climate resilient technologies and industries, such as water resource management, renewable energy, and agroforestry. Policy and institutional reforms supported through climate finance would also stimulate further investment in targeted actions for a low carbon climate resilient pathway.

SECTION 2: LOW CARBON CLIMATE RESILIENT DEVELOPMENT PATHWAY

Sven Torfinn Panos

2.1 What does a low carbon climate resilient development pathway mean for Kenya?

Transitioning to a low carbon climate resilient development pathway means the country fully acknowledges the implications of climate change for sustainable development objectives and is committed to adopting the necessary corrective actions. The pathway would take into consideration future risks, and thus improve Kenya's ability to prosper under a changing climate while reducing the emissions intensity of a growing economy. An integrated low carbon climate resilient pathway emphasises:

- **Sustainable Development** – Achieving sustainable development and poverty alleviation should be at the forefront of all climate actions. The plan recognises that climate change and development are intricately linked.
- **Adaptation** – Reducing vulnerability to avoid or cushion the impacts of climate change, and enable people to respond to climate risks by moving toward a climate-resilient society.
- **Mitigation** – Taking actions, where possible, to encourage GHG emissions that are lower than business-as-usual practice; and to reduce the human causes of emissions by moving towards a resource efficient economy that is as low carbon as possible.

The actions in the NCCAP prioritise climate-proofed development that seeks to sustain the natural capital base and enhance adaptive capacity of the communities. Low carbon actions recognised in the plan have been prioritised on the basis of impacts on poverty alleviation and significant sustainable development benefits.

Possible challenges in the implemention of the low carbon climate resilient interventions have to be addressed through systematic identification and removal of barriers which would include collaborative actions and support from international climate mechanisms. Finance, technology and capacity building support can help fill information and capacity gaps and overcome financial, regulatory and policy barriers (see section 3).

2.2 What does the climate resilience analysis indicate?

Climate change is generally understood as a significant change of the average temperatures over longer periods of time, causing changes in weather patterns and a (slow) rise in sea level, among other impacts. Climate change is no longer contested – within the scientific community, and it is happening now, with severe impacts predicted over the short, medium and long-term. The 2010-2011 Horn of Africa crisis demonstrated Kenya's vulnerability to climate change and variability, and also presented an opportunity for Kenya to find sustainable solutions to climate-related crises by scaling-up and joining-up social protection to cushion the poor.

The NCCAP's adaptation analysis explains that the key climate change impacts for Kenya are drought and water scarcity, flooding and sea-level rise. Research suggests that temperatures will continue to increase, and the frequency of hot days and nights will rise. Precipitation is expected to increase in some areas, with the largest rise in rainfall occurring in the highland and coastal regions. However, the greater part of the country comprising the arid and semi-arid regions is expected to become significantly drier.

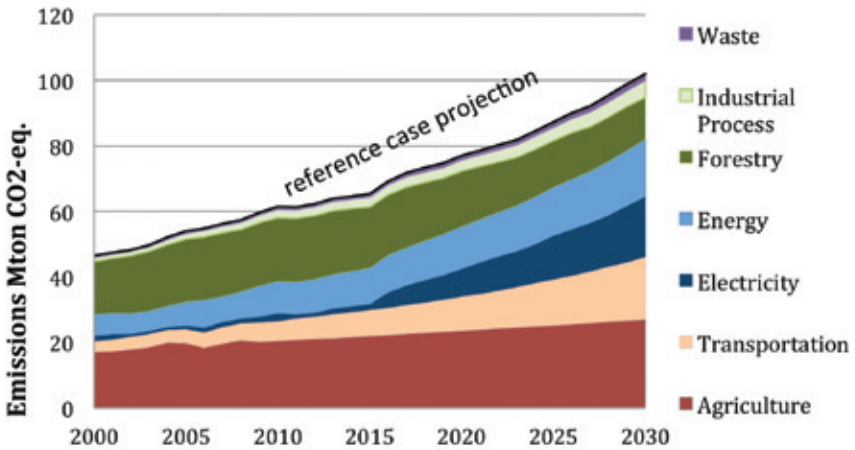
These climate changes have many adverse impacts on hydro-energy generation, agricultural production and food security, forestry, wildlife and tourism, among other climate-sensitive sectors. There are also increased risks of widespread disease epidemics and conflict over land and water resources. Climate change and climate variability therefore pose major threats to the environment, to economic growth and to sustainable development in Kenya. Some estimates place the cost to Kenya related to droughts and flooding alone at about 2.4 per cent of GDP per year.

Kenya has learnt that well-functioning ecosystems provide natural solutions for building resilience to environmental and social challenges. They help society adapt to the impacts of climate change and support poverty alleviation. The assets provided by natural capital provide populations with vital resources to enhance the security of livelihoods when needed. The security of the natural resource base, is therefore, of critical importance to the survival of the most vulnerable in the face of climate change. Responding to the vulnerability of our human and natural systems to climate change requires concrete action by government (at all levels), by the private sector and civil society to ensure the protection and restoration of ecosystem services for the benefit of our country.

Climate change will affect all sectors of the economy. In the face of new uncertainties, economic diversification from national to local level will be needed to reduce reliance on single sources of income. Agriculture, which accounts for about 20 per cent of the GDP, is very sensitive to climate change, meaning that agricultural systems will need to adapt to ensure provision of adequate food for a growing population and to improve production of export crops. Trade and industry rely on infrastructure and services, such as water, energy and transport, and are vulnerable to disruptions caused by droughts and heavy rains. Tourism, an important source of foreign exchange earnings, depends on a wide range of environmental resources, such as the abundance and diversity of wildlife, which will be adversely impacted by climate change.

2.3 What does the low carbon analysis say?

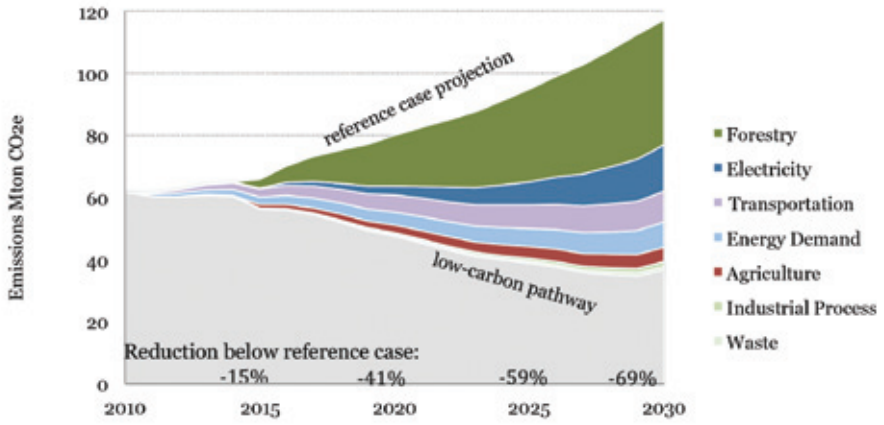
The NCCAP's low carbon analysis demonstrated that mitigation actions can contribute to low-carbon pathways in the six sectors set out in the UNFCCC: energy, transport, industry, agriculture, forestry and waste. The first step in the assessment was the development of a comprehensive greenhouse gas inventory for 2000 to 2010. Emissions were then projected out to 2030 to form the reference case, with emissions increasing from 59 million tonnes of carbon dioxide equivalent ($MtCO_2e$) in 2010 to 102 $MtCO_2e$ in 2030 (illustrated in Figure 2). This reference case formed the baseline against which abatement potential was estimated for the potential mitigation sectors. In the reference case, emissions increase up to 2030 in all sectors but forestry. Electricity emissions grow the most, and emissions increase significantly in the transport, waste and energy demand sectors. Forestry emissions decline after 2020 due to reduced clearing of forests and an increase in the size and number of trees, a result of tree-planting programmes and reduced wood harvesting.



Source: GoK CCAP Mitigation Analysis 2012

Figure 2: GHG emissions reference case, 2010 to 2030

The next step in the low-carbon scenario analysis was a review of potential mitigation actions to identify those options that offered the greatest opportunity for emissions reductions, aligned with Government of Kenya priorities, and offered sustainable development benefits. The mitigation options were analysed in detail in each sector to create a wedge analysis (illustrated in Figure 3), which demonstrated how these low-carbon options could help to bend down emissions from the BAU reference case. Mitigation potential is ranked in the wedge diagram, with forestry having the largest potential, and waste the smallest. Setting aside costs, the low-carbon analysis indicates a maximum reduction potential of about 15 per cent below the 2010 reference level by 2015, and this reduction potential could grow to almost 70 per cent in 2030.



Source: GoK CCAP Mitigation Analysis 2012

Figure 3: Composite abatement potential for all sectors (technical potential)

2.4 What are priority actions to move toward a low carbon climate resilient development pathway in Kenya?

The NCCAP provides full details of a range of adaptation and mitigation actions in the context of a low carbon climate resilient development pathway. The big wins identified will make a significant impact on sustainable socio-economic development, adaptation and mitigation in Kenya. They include:

1. Geothermal power generation
2. Distributed clean energy solutions
3. Improved water resource management
4. Restoration of forests on degraded lands
5. Climate smart agriculture and agroforestry
6. Infrastructure

All these 'big win' opportunities combine climate resilience and mitigation benefits and capture over two-thirds of the mitigation potential identified in the NCCAP low carbon assessment. More specific actions proposed for each national planning sector are presented below.

a) *Agriculture*

Many climate smart agricultural practices that reduce climate vulnerability also abate emissions and improve agricultural production potential. Climate change actions include:

- Agroforestry: This has the potential to abate 4.2 Mt CO_2e by 2030, while offering climate resilience benefits of improved food security, soil quality, improved soil water retention, reduced erosion, and perennials that are better able to withstand climatic changes.
- Conservation tillage and limiting the use of fire in cropland and rangeland management has the potential to abate 1.1 and 1.2 Mt CO_2e by 2030, respectively.

- Actions to support climate change adaptation in the highly vulnerable yet naturally resilient Arid and Semi-Arid Lands (ASALs) include improved management of grazing systems, livestock diversification, and breeding techniques as well as the provision of accessible climate information to farmers and pastoralists.
- Other climate change actions include promotion of drought tolerant crops, water harvesting, integrated soil fertility management, insurance schemes, price stabilisation schemes for livestock, strategic food reserves, and mainstreaming climate change into agricultural extension services.


ACCI-MoA/GIZ

b) Environment, Water and Sanitation

Actions to improve climate resilience in the environment sector will uphold Kenya's goals to preserve the country's rich ecosystems. Forest-based actions are recognised to hold the highest potential for acting on climate change because of the combined adaptation, mitigation and sustainable development co-benefits. Actions include:

- Increasing tree cover to 10 per cent of total land area: helping toslow the rapid loss of rainwater runoff thereby helping to prevent flooding and landslides, reduced erosion and sediment discharge into rivers and improved water availability.
- Reforesting and rehabilitating the main water towers and water catchment areas: A priority for Kenya due to the livelihood and biodiversity improvements.
- Restoration of forests on degraded lands has a mitigation potential of over 30 $MtCO_2e$ a year in 2030, the largest potential identified in the low carbon analysis.
- Other climate change actions include reforestation and reducing emissions from deforestation and forest degradation (REDD), with mitigation potentials of 6.1 and 1.6 $MtCO_2e$.
- Improving coastal zone management to rehabilitate and conserve vital coastal ecosystems through the implementation of the Integrated Coastal Zone Management Plan, the National Disaster Risk Management Response Plan and National Environment Action Plan. Actions to improve water management include increased domestic water supply and improved sewage systems, enhanced irrigation and drainage to increase agricultural and livestock production, effective trans-boundary water resources management, and flood mitigation schemes. These actions reduce the impact of droughts and floods on crop yields and livelihoods, and more irrigation-based agriculture reduces the reliance of crop production on rainfall.
- Improved waste management systems: with proper design can contribute to mitigation and adaptation. By capturing methane and landfill gas, there are opportunities to enhance energy security at the local level.

c) Tourism

Tourism is a highly climate-sensitive industry for Kenya due to the dependence of the sector on wildlife and biodiversity. Priority climate resilience actions include:

- Enhanced conservation and protection of the natural habitats and ensure ecosystems functions are maintained.
- Completion of the National Wildlife Adaptation Strategy, and undertaking research to determine the vulnerabilities of wildlife populations and habitats.
- Application of low carbon options to tourism infrastructure development including use of renewable energy sources and local products for construction.

d) Infrastructure for Transport and Energy

A low carbon climate resilient pathway in the infrastructure sector provides benefits including:

1) GHG emissions are as low as possible in the sector – recognising that emissions will rise as Kenya develops; and
2) Infrastructure is "climate proofed" – that is, designed, constructed and operated in a way that accounts for anticipated risks and opportunities that result from climate change, ensuring that infrastructure investments are not compromised in the future. For the ASALs, this means a road network that can stand up to a changing climate, the establishment of strategic multipurpose dams and expanding renewable energy capabilities (wind, solar and biogas), both decentralised and connected to the national grid.

Climate change actions by sub-sector include:

Transport infrastructure:

- Mainstreaming climate change into development of port facilities, roads, railways and bridges to account for rising sea levels and the increased occurrence of extreme weather events and flooding.
- Extensive mass transit system for the Greater Nairobi in the form of bus rapid transit corridors complemented by light rail transit and non-motorised transport infrastructure such as bicycle lanes and sidewalks, which could abate about 2.8 Mt Co_2e in 2030.
- Other low carbon transport options include a shift of freight from road to rail, improved passenger and freight vehicle efficiency, and bioethanol blending and biodiesel use – with a combined mitigation potential of 4.1 $MtCO_2e$ a year in 2030.

Infrastructure for electricity generation:

- Electricity generating systems and a national grid that can withstand the extreme weather events expected as a result of climate change and actions to address the impacts on hydropower which is vulnerable to climatic fluctuations.
- Development of Kenya's geothermal energy potential has the largest abatement potential in the electricity generation sector at approximately 14 $MtCO_2e$ a year in 2030.
- Expansion of wind and hydropower-based electricity generation has an abatement potential of 2.5 MtCO2e by 2030. Off-grid electricity generation systems are also important for communities where it is not economically viable or physically feasible to connect them to the national grid.

e) Manufacturing

- Improvements in the industrial processes and energy efficiency can enhance competiveness and potentially create cost reductions.
- The introduction of more efficient kilns for charcoal production, offer an abatement potential of 1.6 $MtCO_2e$ a year in 2030.
- Cement manufacturing and improved energy efficiency in the manufacturing sector could abate 1.3 $MtCO_2e$ a year in 2030.
- Industrial-scale cogeneration using biogas produced from agricultural residues could abate 1.6 $MtCO_2e$ a year in 2030.

f) Population, Urbanisation and Housing

Kenya is expected to become a predominately urbanised country by 2030 mainly due to rural-urban migration. Priority adaptation actions include expanded flood management in high-risk areas such as informal settlements which need upgrading to increase the resilience of the poor. Also important climate change actions include:

- Upgrading of building codes to include climate resilience and green building concepts including undertaking of climate risk assessments for essential public buildings and emergency services.
- Research to assess migration as a coping mechanism for dealing with climate variability and change.
- Distributed clean energy solutions to households and institutions (such as solar lanterns, improved cook stoves and LPG cook stoves, and energy efficient lighting and appliances), which can have significant social and economic benefits.
- Actions targeting the particular vulnerability of women and children: Access to modern energy solutions enables income generating activities and improved access to health care, communication modes and education for women and children. The mitigation potential of stepping up distributed clean energy technologies is over 10 $MtCO_2e$ per year in 2030.

g) Health

Priority adaptation actions to increase climate resilience in the health sector include:

- Improved disease surveillance, including strengthening existing early warning, monitoring and evaluation systems for malaria epidemics. Improved community-level health care and dissemination of information on changing health risks.
- Increased access to water and sanitation to improve disease vector control.
- Use of water filters that provide access to clean water while reducing demand for firewood used to boil water and therefore slowing deforestation.

h) Disaster Preparedness

Actions to improve climate resilience in disaster preparedness include:

- Modernisation of meteorological systems, and an early and appropriate response to emerging drought that includes a well-maintained early warning system.
- Early warning systems should be backed by a reliable and effective social safety net program carried out with all gender groups.
- Training county-level disaster management officers can also help to ensure a timely and effective response.
- Implementing the Water Sector Investment Plan for 2008 to 2030 and the Water Catchment Management Initiative. Climate-proofed infrastructure development in the ASALs, investment in sustainable livelihoods that are adaptive to climate change (such as crop farming with drought resistant seeds, dry-land forestry and community-based livestock systems), and education programs.

SECTION 3: ENABLING CONDITIONS

MEMR CCS/HTSPE

3.1 What else is needed to move forward?

A range of policies including an improved institutional, policy and regulatory framework, a national climate finance mechanism, a national performance and benefit measurement system, and a knowledge management and capacity development system are required to create the enabling conditions to respond to climate change. Above all. As outlined in Section 1, there is a need to mainstream climate change response actions in the key national and sub-national development planning processes.

a) Mainstreaming

Kenya takes climate change and its impact on development seriously, considering it as a cross-cutting issue that will be mainstreamed in the planning process both at the national and county levels and in all the sectors of the economy. The Medium-Term Plan (2013-17) provides a singular opportunity to incorporate climate change concerns into the national development plans. The Medium-Term Plan, which sets out the five-year national priorities toward the goals of Vision 2030, will build on both the *National Climate Change Response Strategy* and its Action Plan to incorporate climate change programmes and projects in the next planning cycle.

b) Institutional, Policy and Regulatory Framework

The NCCAP has facilitated consideration of an appropriate institutional framework for climate governance in the country. At the highest level, the National Climate Change Council has been provided for, to give oversight and guidance on the integration of climate into the national development and policy-making processes. The National Climate Change Council will ensure that climate change is treated as a cross-cutting developmental and environmental issue. A National Climate Change Secretariat within the coordinating Ministry will offer the day to day technical coordination for all matters on climate change and will be responsible for the national reporting obligations.

The preparation of a comprehensive climate change policy commenced in September 2012 as a result of the analysis emerging from the Action Plan process. The policy will provide the basis for future legislative frameworks and outline the broad vision and governance for addressing the growing implications of climate change.

In order to actualise the recommendations of the Action Plan, the Government recognises the need to anchor the plan in an appropriate legislative framework.

c) Finance

The Action Plan is an ambitious programme which will require substantial investment. The total estimated investment costs required to adapt to climate change impacts and to implement the low carbon development options presented in the NCCAP is estimated to be one trillion Kenyan Shillings (US$ 12.76 Billion) from 2013 to 2017). The costs are summarised in Table 1 below and are explained in more detail in the full NCCAP:

Table 1: Total costs for next five years (2013 -2017) associated with Kenya's NCCAP

Total Costs of Kenya's NCCAP	Ksh	USD
Projected investment costs for mitigation actions for next five (years (Table 12.4 in NCCAP	Billion 494 – 391	Billion 5.8 – 4.6
Projected adaptation costs for next **five ye**ars in key sector (Table (12.5 in NCCAP	Billion 638	Billion 7.5
Costs associated with administration and process actions for next **(five years (**Table 12.6 in NCCAP	Billion -5.3 5.0	Million 59-62.3
Estimated Investment Range	1137.3 – 1034	Billion 13.4 – 12.2
Total Estimated Investment Required 2013-2017 average of above range)	**Billion 1085**	**Billion 12.76**

To mobilise the required resources, the Government proposes to put in place the necessary enabling environment to attract climate friendly investments in the key sectors of the economy; set up a dedicated climate fund to receive contributions from all sources including public, private and international; and facilitate carbon trading opportunities.

d) Tracking, Measuring and Reporting

The Action Plan presents an integrated framework for measuring, monitoring, evaluating, verifying and reporting results of mitigation and adaptation actions, and the synergies (known as the MRV+ system). It is now a priority to secure the funds for the MRV+ system and for the various supporting organisations to be put in place.

A tracking tool is being developed to enable the National Climate Change Secretariat to track the implementation of the NCCAP. The database which will be hosted by the coordinating Ministry and which will be accessible through the internet and will contain up-to-date information on the status of each of the actions in the NCCAP. The tool will support communications with the implementers of the NCCAP including with government, the private sector and civil society actors.

In addition to the MRV+ system, it is expected that reviews and evaluations of the Action Plan will take place on a five-year cycle to provide the basis for updating the plan. The MRV+ system will also be used to inform each of the Medium Term Plan (MTP) cycles under Vision 2030. These reviews should be participatory in nature and will be facilitated by the National Climate Change Secretariat with the assistance of the required expertise. Hence, it is anticipated that the next Action Plan update will be completed to inform the preparation of the 2018-2022 MTP in 2017.

e) Knowledge Management and Capacity Development

In addition to the tracking tool described above, the NCCAP recommends the development of a climate change knowledge management system which will serve as a one-stop electronic space for climate change-related information and knowledge for Kenya.

the big win actions for the sectors described in Section 2 and to develop capacity development plans that are integrated into the relevant sectors and actions.

SECTION 4: CONCLUSIONS AND RECOMMENDATIONS

Crispin Hughes/Panos

Conclusions & Recommendations

Climate change is a cross-cutting development issue that requires high level political goodwill and support to effectively address the risks and maximise opportunities it presents. For Kenya, adaptation to climate change remains the top priority to reduce vulnerability and enhance resilience of the social and bio-physical systems, especially the vulnerable communities and groups. Similarly, mitigation actions that deliver sustainable development benefits are of importance as the country strives to remain a low emitter in the context of the national

economic development as set out in Vision 2030. Therefore, this comprehensive Action Plan sets out the path towards a low carbon, climate resilient development for the country.

This Action Plan also provides for the establishment of an enabling climate change policy and law, governance structure, funding mechanism and investment framework, capacity development and management framework and national measurement reporting and verification (MRV+) system to support effective implementation of the adaptation and mitigation actions.

It is important to integrate climate change into Kenya's development planning process. The first step towards this was the mainstreaming of climate change in the Medium Term Plan 2013-17. Implementation of the NCCAP will require all the stakeholders within and outside Government at the national and county levels to play their role, building on the partnerships forged through the NCCAP process.

Considering the ambitious nature of the Action Plan, support, partnerships, investments and partnerships, investment and technology innovations are required for the implementation of the actions and the achievement of the goal of a low carbon climate resilient pathway. The Government may need to intervene to encourage investment in adaptation actions, ensuring that climate resilience is the priority climate change response action. Domestic, bilateral and multilateral funding, as well as international climate finance mechanisms – such as the Green

Climate Fund, Adaptation Fund and emerging funding for NAMAs and REDD+ mechanisms – are required to implement the Action Plan. The evidence base provided through Kenya's National Climate Change Action Plan will help international partners to align their funding and investments with Kenya's climate change priorities – and ensure that these investments are nested within Vision 2030 and the national planning process.

The findings of the analysis and recommendations within this action plan will guide Kenya to create the enabling environment required to attract international support and private sector investment to support the transition to a low carbon climate resilient development pathway.

Kenya welcomes support from the international community to move forward with the implementation of the National Climate Change Action Plan 2013-2017.

Frederic Courbet/Panos


HARAMBEE
REPUBLIC OF KENYA