

Kenya

Prioritising mitigation and adaptation options as part of the development of a National Climate Change Action Plan

Activity	Development of NCCAP including identifying priority actions through stakeholder consultation, analysis and alignment with broader development goals.
Country	Kenya
Sector(s) involved	All
Time frame	2011–2017

Case summary

Throughout 2011–12 the government of Kenya undertook a prioritisation process to identify actions to deliver its National Climate Change Response Strategy published in 2010. The process resulted in the Kenyan National Climate Change Action Plan (NCCAP) and included specific mitigation and adaptation challenges to be incorporated into the climate related policies, plans and strategies of national institutions in Kenya.

The prioritisation process within the NCCAP was aligned to national development strategies combining a long-term vision with medium-term policy goals and mechanisms. It demonstrates an effective process for incorporating assessments of climate vulnerability and mitigation potential into national development objectives in an inclusive multi-stakeholder decision-making process.

Crucial to the success of the process was the strong commitment and leadership from the Ministry of Environment and Mineral Resources (MEMR), comprehensive stakeholder participation, the involvement of key ministries, together with a local validation process and a transparent approach to analysis.



KenGen geothermal drilling rig, Olkaria, Kenya

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Background

In 2010, the Kenyan Government released the National Climate Change Response Strategy, which enhanced understanding of the global climate change regime and the impacts of climate change in Kenya. In order to operationalise the Response Strategy, a 2013–2017 National Climate Change Action Plan (NCCAP), was developed. This process was led by the Ministry of Environment and Mineral Resources (MEMR), and involved a year-long multi-stakeholder participatory process that involved the public and private sectors, and civil society. The objective of the Action Plan was to identify low carbon climate resilient development pathways that incorporate sustainable development, adaptation and mitigation, and also align with existing national planning documents.

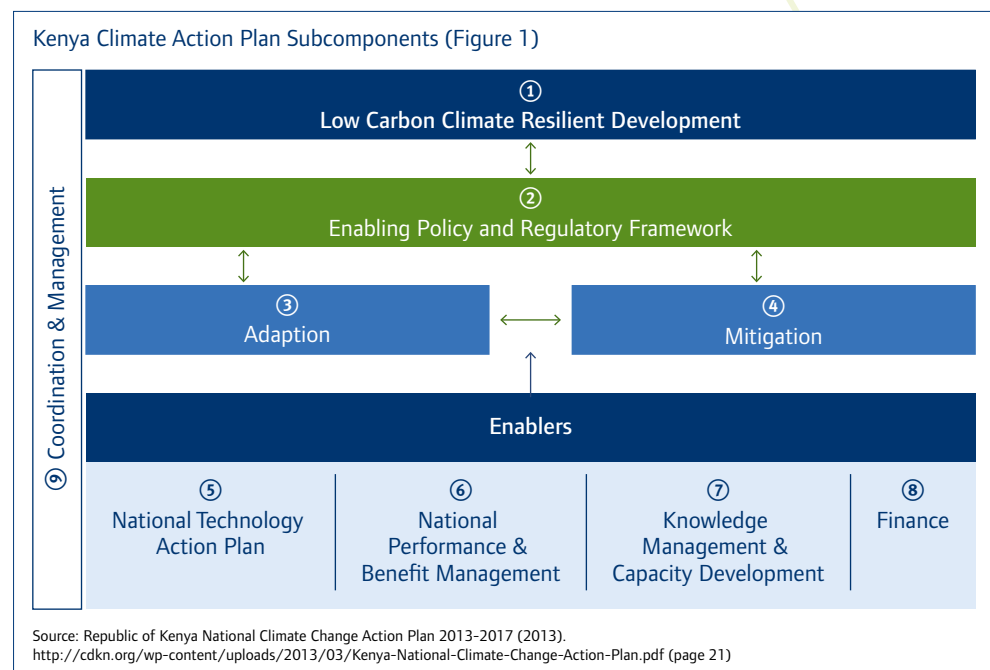
A number of priority actions were identified that combine climate resilience with mitigation benefits within the broad areas of:

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

These priority actions were identified via a lengthy prioritisation process involving multiple stakeholders, which was a crucial process in the development of the Kenya NCCAP.

Activities

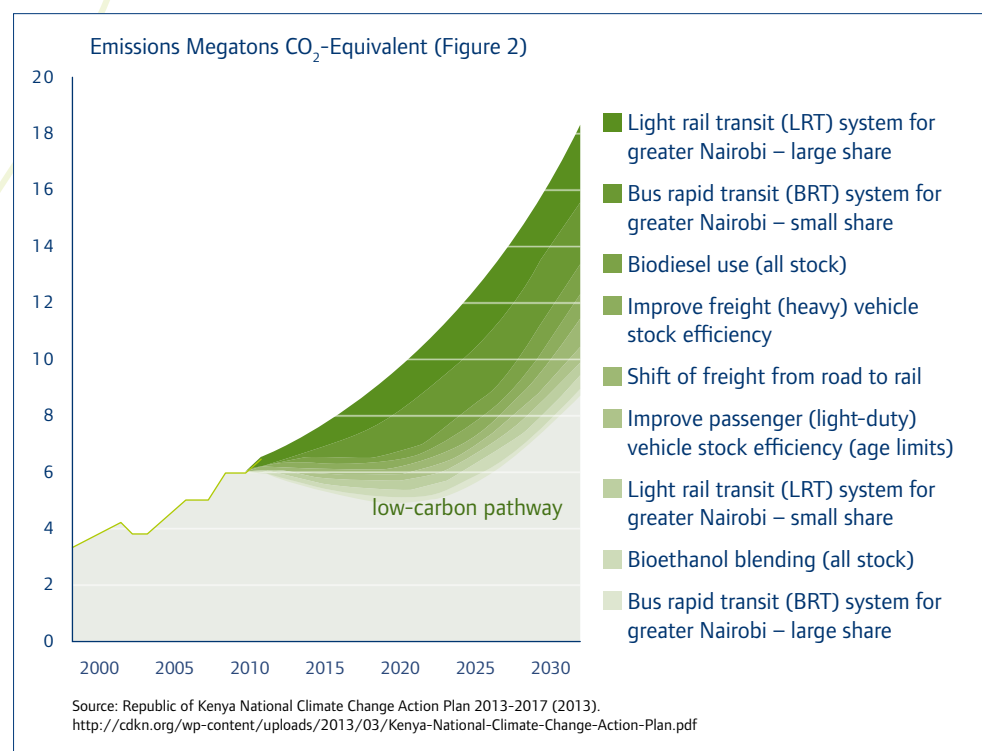
- » **Integrated components:** During the process of developing the Kenya NCCAP the preparatory work was organised into a series of integrated components. The structure of these subcomponents and information flows are represented in Figure 1. The prioritisation of mitigation and adaptation actions was a crucial part of the development process and imperative to the final outcome of the plan.



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- » **Prioritisation of adaptation actions:** As an integral part of the NCCAP, an Adaption Technical Analysis Report (ATAR) was prepared to summarise findings from the climate risk-based adaptation analysis conducted. The objective of the ATAR was to assess the vulnerability of Kenya's socio-economic development goals to climate change, providing evidence for the preparation of a National Adaptation Plan (NAdP). The team developing the ATAR were supported by a Thematic Working Group (TWG) of eighteen stakeholders, including government representatives, civil society groups and academia – identified by the MEMR. The TWG provided input and guidance throughout the process, identifying adaption actions and reviewing adaptation pathways. An initial 'long-list' of planned and on-going adaptation actions was compiled with reference to national plans and communications. Using existing adaptation methodologies, a set of three overarching prioritisation criteria were identified as being particularly relevant by the TWG and stakeholders to the Kenya situation. Each of the criteria were further defined by 5/6 elements, which were tailored to national development interests and goals, with relevance to the timeframe of the Medium-Term Plan 2008–2017 (MTP). The long-list of adaptation actions were screened based on the following criteria: (1) Is the action timely? (2) Does the action enable climate resilient decisions to be made? (3) Does the action build adaptive capacity? The screening process resulted in a top-10 list of adaptation actions for each of the MTP themes. The top-10 list was then incorporated into 'resilience pathways', which provide a standard organisational structure for presenting the priority adaptation pathways for each MTP theme. Each resilience pathway includes: (1) current objectives (MTP theme vision); (2) desired adaptation outcomes at the end of the next five year MTP plan period; and (3) prioritised actions to deliver the adaptation outcome.



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- » **Prioritisation of mitigation opportunities:** As a basis for the prioritisation process, a 'pilot' GHG inventory was completed. The term 'pilot' is used as although the inventory followed IPCC guidelines, it is not considered to be applicable for submission as a National Communication. The most recent GHG inventory following the IPCC guidelines had been completed in 1994 for the country's first National Communication to the UNFCCC. The mitigation team calculated the historical emissions from 2000 to 2010 and, combined with sector and economic growth projections, estimated an emissions baseline up to 2030. A validation process drawing upon local experts was used to confirm the baseline as certain sectors were not expected to follow historical trends. A TWG was also established for mitigation options. Similar to the adaptation prioritisation process, a 'long list' of sixty possible abatement opportunities was identified. The opportunities of the long-list were distributed according to sector, and then screened using three broad criteria: (1) Substantial emission reduction potential; (2) Significant sustainable development and climate resilience co-benefits; (3) Alignment with Government of Kenya development priorities. This screening process resulted in a shorter list of 25 mitigation opportunities that would then be subject to a robust bottom-up analysis to assess the abatement potential, associated abatement costs, and valuation against a set of sustainable development and climate resilience indicators. A set of possible low-carbon scenarios were created for various sectors and abatement potentials for each mitigation option in each sector were illustrated as abatement 'wedges' below the baseline reference projection.

Once the analysis had been completed by the project team and the TWG, a local validation process was initiated to provide feedback on the low-carbon scenario assessments. This informed the final selection of priority low-carbon development opportunities.

Climate and Development Benefits of Possible Mitigation Options (Table 1)

	Climate			Development			
	Abatement potential 2030 (MtCO ₂)	Abatement cost 2030 (USD/tCO ₂)	Adaptation impact	Energy security	GDP growth	Employment	Improved waste management
Expanding geothermal power	14.1	-19.9	+++	++	++	-	-
Expanding wind power	1.4	-36.7	+	+	+	-	-
Expanding hydro power	1.1	-13.2	-	+	+	-	-
Distributed solar photovoltaic	1.0	13.3	+	+	+	+	-
Landfill gas generation	0.5	-12.4	+	+	+	-	++
Clean coal (ultra super critical)	1.1	-11.1	+	-	+	-	-

Source: Republic of Kenya National Climate Change Action Plan 2013-2017 (2013).
<http://cdkn.org/wp-content/uploads/2013/03/Kenya-National-Climate-Change-Action-Plan.pdf>

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Institutions involved	Ministry of Environment and Mineral Resources; Ministry of Energy; Ministry of Northern Kenya Development and other Arid Lands; Ministry of Agriculture; Kenya Agricultural Research Institute; Ministry of Livestock Development; Ministry of Water and Irrigation; Ministry of Public Health; Ministry of Housing; Kenya Roads Board; Ministry of Tourism; Ministry of Energy; Ministry of Planning, Threshold 21 (T21) team; Private sector; Kenyatta University (School of Environmental Studies); Nairobi University (Meteorological Department); Catholic Organisation of Relief and Development (CORDAID); The World Conservation Union (IUCN); Norwegian Church Aid (NCA); CARE Kenya; International Livestock Research Institute (ILRI)
Cooperation with	CDKN, COMESA, UNDP, DFID, AFD; DANIDA; IISD, HTSPE, ECN, Ricardo-AEA, Climate Care, Arid Lands Information Network, Vivid Economics, Adam Smith Africa, KIPPRA, LTS International, Baastel, Acclimatise.
Finance	The preparation of the National Climate Change Action Plan was funded by the UK Department of International Development (DFID), the Danish International Development Agency (DANIDA), the Japanese International Cooperation Agency (JICA) and the Climate and Development Knowledge Network (CDKN).
Impact of activities	<ul style="list-style-type: none"> » Developing an evidence base: The prioritisation process of the NCCAP provides the Kenyan government with an evidence base to target policy development for climate resilient development. The outcomes of the prioritisation process not only stem from quantitative top-down and bottom-up analysis, but also inclusive and extensive consultation within government ministries, Kenyan experts, county representatives and the private sector. This provides additional confidence that the identified priorities are most relevant and appropriate for the country. » Developing NAMAs: The priority mitigation actions have helped the Kenyan government in developing Nationally Appropriate Mitigation Actions (NAMAs) in certain sectors. For example, Kenya has recently submitted a NAMA proposal to the UNFCCC on accelerating geothermal energy development, one of the priority mitigation options identified in the NCCAP. Utilising the baseline reference scenarios created within the NCCAP provides an excellent basis to develop further NAMA proposals in other sectors. Kenya has also been selected as a country to receive support for the development of three NAMA proposals through the UNDP Low Emission Capacity Building (LECB) programme. » Engagement of local expertise: It is noted that the extensive engagement of Kenyan experts has played an important role in building the awareness and understanding of low-carbon development and the opportunities available in various sectors. Local experts noted that the process helped to change mindsets by introducing new concepts and creating awareness of new opportunities that could emerge by adopting a low-carbon development path (GOK, 2012).
Why is it good practice	<ul style="list-style-type: none"> » The NCCAP process was fundamentally linked to on-going national development strategies, primarily Kenya's national development programme, Vision 2030, and focused towards the attainment of the Millennium Development Goals. The NCCAP integrated the specific sectoral objectives from Kenya's first Medium Term Plan 2008–2012, into the prioritisation process for adaptation and mitigation. Hereby, a long-term vision could be combined with the clear definition of short and medium-term policy goals and measures. » In practice, this was achieved by translating the MTP objectives into the selection criteria used for prioritisation, and emphasising development goals both in the direct actions, but also through the identified socio-economic co-benefits of mitigation options. Aligning the prioritisation process with the sectoral breakdown of the MTP, allowed the outcomes of the process to be adopted into the MTP for 2013–2017.

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- » The final NCCAP report was personally endorsed by the President and Prime Minister of Kenya. The Permanent Secretary of the Ministry of Environment and Mineral Resources (MEMR) was fully committed to the project and assumed leadership which set an example for strong engagement by key ministries relevant for each of the sub-components. Coordination across different key ministries (e.g. finance, energy) was achieved through establishment of an inter-ministerial, cross-sectoral Taskforce, led by the Permanent Secretary of MEMR. A member of the Taskforce was assigned as chairperson to each of the seven sub-components of the NCCAP process.
- » The prioritisation process for the adaptation and mitigation options, involved iterative consultation and validation with stakeholders across sectors, in order to build consensus on the ranking of actions. These consultations took place through numerous workshops, meetings and discussions, with 'sector validation meetings' providing scope for engaging with the private sector.
- » The data, used for the development of a projected baseline of emissions to 2030, and the individual sector/technology reduction potentials, were based on transparent data collection following IPCC 2006 guidelines for national GHG inventories and sector categorisation. The previous GHG inventory for Kenya was outdated (1994), and thus a new inventory was compiled to allow a more accurate baseline projection. Data sources and assumed growth projections were validated by government and non-government stakeholders including the private sector. Where data was unavailable, assumptions used were communicated and discussed.
- » Socio-economic co-benefits played an important part in the prioritisation process. For example, although improved cook stoves offered a modest reduction potential compared to other options such as geothermal energy, they became highly ranked as a mitigation action due to important co-benefits to rural development, such as indoor air quality and related health benefits. Government policy objectives were clearly balanced with mitigation options.
- » Both national and international professionals were engaged in the NCCAP. The lead project consultant, IISD, and project coordinator, HTSPE, had personnel within Kenya throughout the process. Although the international consultants were responsible for delivering the plan, they were engaging sufficiently with national stakeholders who generated support and commitment. Furthermore, national consultants and experts played a key role in drafting the NCCAP, and in particular in providing country-specific data, communicating existing initiatives and engaging with the private sector.

Success factors

- » **Strong commitment and leadership:** From the Permanent Secretary of the Ministry of Environment and Mineral Resources.
- » **Expert team leader:** Stationed nationally within the ministry.
- » **Inclusive and comprehensive consultation:** Including government representatives, national experts, county representatives and the private sector. All counties were involved from the start of the process. Prioritisation of options was guided by ministries who had more insight into development benefits. Local validation process and transparent analysis created buy-in from government and non-government stakeholders.
- » **Sufficient budget:** Channelled through project coordinator to fund meetings and workshops.
- » **Top-down and bottom up analysis:** Combination of top-down emissions baseline modelling and bottom-up technology specific abatement potentials.
- » **Integrating in national planning:** Mainstreaming climate change mitigation and adaptation actions into the MTP 2013–2017.
- » **Raised awareness of climate change issues:** Both at county and national level.

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Overcoming barriers/challenges

Financial

What were the main barriers/challenges to delivery?
How were these barriers/challenges overcome?

Finding the budget to allow/attract the necessary people to participate in consultations.

Consultations were held in cost effective venues and there were fewer participants, which freed up financial resources for travel expenses to facilitate the attendance of key participants.

Information

Sectoral and geographical disparity in the levels of understanding of current climate change impacts and future risks in Kenya.

Local consultations were conducted from the beginning of the prioritisation process, and awareness raising was performed via an extensive consultation process.

Data availability and data quality.

Relevant ministries validated data as much as possible and default data values were used frequently where data was not available.

Little knowledge about risks and vulnerabilities in certain sectors.

Stakeholders were engaged at a bottom-up level to gather as much information and data as possible about risks and vulnerabilities, and to inform actions based upon real experiences on the ground.

Lack of awareness at different levels where many people who were required to make decisions were not necessarily well informed about climate change issues.

Various stakeholder consultation sessions were held to engage the right ministries and inform actions from the bottom-up.

Institutional

Bringing together a diverse group of people to commit valuable time to the process. For example, the Kenyan Private Sector Alliance, academic institutions, and high level Ministry personnel.

Up to eight Thematic Working Groups (TWGs) were set up containing high level personnel. They met frequently, some once every fortnight.

The completion of the action plan coincided with the preparations for the Kenyan general election. Possible government changes therefore played a role in delaying certain parts of the project.

The project team was very conscious of the political situation, and adjusted the ambitions and speed of the project accordingly.

Lessons learned

- » **A bottom-up, participatory municipal level approach can inform national adaptation and mitigation planning:** The inception meeting involved all major relevant stakeholders from the beginning of the process. This provided a solid base for data collection, validation and on-going support for the prioritisation process.
- » **A more synchronised, coordinated approach to adaptation and mitigation planning is necessary to prevent delays and duplication of work:** One interviewee expressed that although each of the subcomponents within the NCCAP operated well individually, the coordination and particularly the interaction between the components could have been improved. The various subcomponents were funded by different parties at different stages of the process therefore were completed depending upon when funds were allocated to them. Most of the subcomponents conducted work in isolation, and few meetings were organised to allow the different subcomponents to share ideas, which had been anticipated at the outset of the project. Delays and duplication of work could have been avoided if the coordination had been improved. More regular meetings between the various subcomponents were required. This needed to be formalised into the ToR and planned into the overall process.

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- » **Prioritising adaptation options is challenging:** Identifying adaptation options is possible; however prioritising them is a very challenging process. For some sectors, for example agriculture, quantitative future insights can be drawn from risk and vulnerability models, however other sectors such as transport and urban environments are more difficult. An inability to compare vulnerabilities across sectors compromised decision making.
- » **Strong commitment and leadership at the highest government level:** The Permanent Secretary of the Ministry of Environment and Mineral Resources was personally committed to the process which enhanced its credibility and stimulated the engagement other government ministries.
- » **International consultants based nationally:** Having international consultants based in Kenya was paramount. Some of the enabling components were completed by consultants who spent relatively little time in Kenya, and hadn't built working relationships with national stakeholders. The value of the outputs of some of these components was detrimentally affected by this.
- » **Ministry guidance:** The prioritisation process was guided by the various Ministries which was advantageous because they had further insight into the development benefits of each option.
- » **Dedicate enough resources:** Sufficient resources were required (financial and time) to communicate effectively with local stakeholders in order to gather as much data and information as possible and necessary.
- » **Stakeholder engagement is key:** There was a realisation that the understanding about climate change issues was not as extensive in Kenya as first thought. Stakeholder feedback needs to be analysed to check its relevancy and validity, but much was learned from stakeholder consultations.

How to replicate this practice

- » **Leverage existing capacity:** The development of a climate change action plan, including the prioritisation of mitigation and adaptation options, is a highly useful exercise for any country, if the funding and political will are present. The preparedness of the country in terms of national technical capacity, emissions data and information climate risk and vulnerability will aid the process. The approach used for generating 'mitigation' wedges, is suitable for application in other countries that do not have sophisticated model applications or extensive emission data collection systems.
- » **Combine bottom-up stakeholder engagement and top-down planning and recognition:** A bottom-up approach means that actions are taken with real experiences in mind and responses are not just generically implemented across sectors and regions. However, a bottom-up approach needs to be combined with appropriate actions at the top, such as effective strategic planning and sufficient resource allocation. A community-based approach alone is not enough if it doesn't receive the support required from the national level in terms of funding and other resources.

Contact for enquiries

- » The Climate Change Secretariat, Ministry of Environment and Natural Resources, NHIF House, 12th Floor, Nairobi, www.kccap.info

Further key resources

- » Kenya Vision 2030: www.vision2030.go.ke/
- » Kenya's National Climate Change Response Strategy: http://cdkn.org/wp-content/uploads/2012/04/National-Climate-Change-Response-Strategy_April-2010.pdf

Website(s)

- » www.kccap.info/

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