



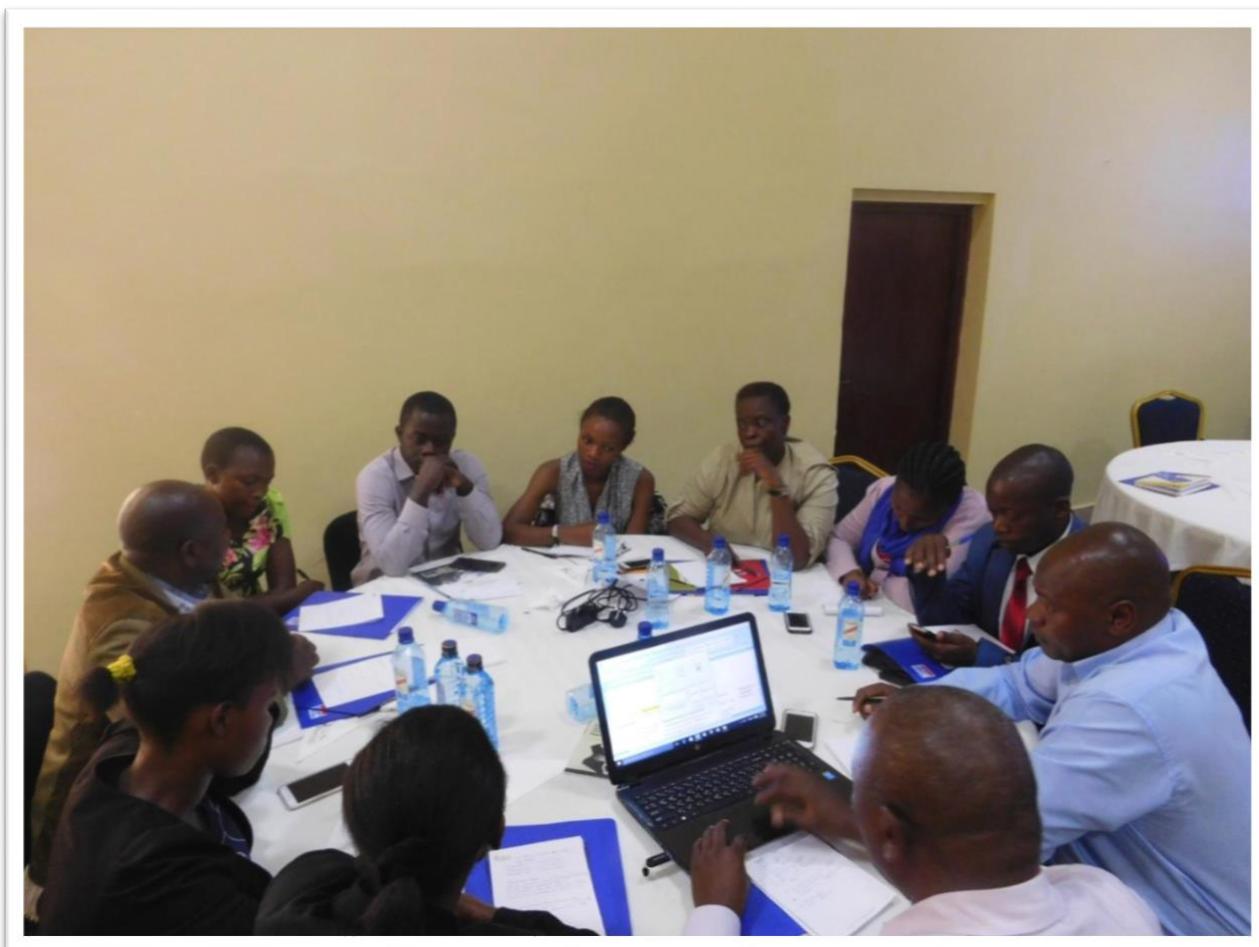
REPUBLIC OF KENYA

MINISTRY OF ENVIRONMENT AND FORESTRY

Climate Change Directorate

Second National Climate Change Action Plan (NCCAP), 2018-2022

**COUNTY CONSULTATIONS MEETING FOR THE LAKE REGION
BLOC HELD AT THE VIC HOTEL, ELDORET ON 19TH APRIL, 2018**



19th April, 2018

Table of Contents

Welcome Remarks and Expectations	1
Introduction	1
Remarks from the Ministry of Environment and Forestry: Dr. Pacifica Ogola	1
Opening Remarks from CEC, Kisumu:	2
Presentations	2
Presentation by the Ministry of Environment and Forestry: Mr. Thomas Larenten	2
Presentation from the Council of Governors: Mr. Arnold Kipchumba	3
Plenary Session	4
Breakout Sessions	5
Way Forward:	6
Closing Remarks:	6
Annex I: Bomet and Kericho Counties	7
Annex II: Bungoma and Busia Counties	9
Annex III: Kisii and Nyamira Counties	12
Annex IV: Kisumu and Siaya Counties	14
Annex V: Migori and Homa Bay Counties	16
Annex VI: Vihiga and Kakamega Counties	19

PROCEEDINGS FOR THE COUNTY CONSULTATIONS FOR THE LAKE REGION ECONOMIC BLOC HELD AT THE VIC HOTEL, KISUMU ON 19TH APRIL 2018

Welcome Remarks and Expectations

The meeting began at 0930Hrs. This was followed by a round of introductions from the participants who stated their expectations of the consultation process that is being done in order to include the county government to ensure ownership of NCCAPP 2018-2022.

These were the expectations that were mentioned by the participants:

- I. What climate resilience means
- II. How to tackle natural calamities
- III. What the government is currently doing with the issue of vehicle emissions in the country
- IV. Does climate change result in the emerging diseases being experienced today e.g cancer
- V. Effects of agriculture on Climate Change
- VI. How NCCAP incorporates the Ministry of Education, Science and Technology in the rolling out of the new curriculum
- VII. How to tackle climate change across all counties
- VIII. How to quantify carbon credits
- IX. Why resilience as opposed to stemming the tide
- X. Women involvement in incentives, policies as well as breaking cultural barriers in order to tackle climate change
- XI. Role of the National Government in tackling climate change as well as transparency in the deliberations
- XII. How various departments work with CCD on climate change matters as well as the role of the youth, women and men
- XIII. To network and build synergies on climate change mitigation and adaptation
- XIV. To identify positive impacts of climate change at the county level as well as county specific actions especially by individuals, community groups etc
- XV. To learn about climate finance
- XVI. Sensitization of all actors and how the action plan will enable the water towers protection and forest cover increase
- XVII. To develop issue-based partnership on climate change mitigation and adaptation

Introduction

Remarks from the Ministry of Environment and Forestry: Dr. Pacifica Ogola

The opening remarks were done by Dr. Pacifica who started off by welcoming all the participants as well commending their commitment to the process. She officially apologised on behalf of the Principal Secretary, Charles Sunkuli who was not able to attend the meeting.

She placed great emphasis that the result of the meeting as well as the quality of the NCCAP 2018-2022 depended solely on the output as well as the interaction of the meeting. She further enlightened the participants to also pay attention to the transboundary issues as well as county specific issues. She emphasised for the county representatives to highlight their vulnerabilities as counties as well as the impacts they experience and the measures they would want to be put in place to address the issues brought forward.

Dr. Pacifica suggested that the actions brought forward should be transformational as well as strategic in order to produce tangible results. She used Makueni and Wajir counties as a benchmark in climate change matters and urged the participants to emulate these two counties.

Opening Remarks from CEC, Kisumu:

Mr. Barssosio, CEC of Water, Environment, Climate Change and Lands started off by welcoming all to The Lake Region Bloc as well as acknowledging the rich representation that were present. He urged the participants to re-evaluate their stance in terms of climate change as it has to begin from the individual level. The realisation of the power held at the individual level would really help fight the ‘monster’, Climate Change.

He appreciated the fact that The North Rift Bloc is well endowed with natural resources and placed emphasis on the need to use the resources at hand sustainably in order for the same resources to be of use to future generations. He touched on the need to also conserve the water towers in order to help cope with the impacts of Climate Change.

Presentations

Presentation by the Ministry of Environment and Forestry: Mr. Thomas Lerenten

Mr. Lerenten from the Ministry of Environment and Forestry gave an interactive presentation structured as follows:

1. Introduction

The introduction highlighted the definition of climate change as well as the response to it at global, regional, national and county levels. It also contained the responsibilities of both the National and County Governments in implementation of the various devolved functions and sectors such as agriculture, forestry, trade, health e.t.c. It mentioned the impacts of climate change as well as the measures being put in place and highlighted the existing plans and policies such as the Climate Change Act, 2016 which address climate change issues in the country.

2. Key definitions

In this section, the presentation clearly defined the key definitions of terms used in climate change that included climate change, adaptation, mitigation, resilience and greenhouse gases.

3. Climate change plans and policies

This section highlighted the current climate change plans and policies that included the National Climate Change Response Strategy 2010, National Climate Change Action Plan 2013-2017, National Adaptation Plan 2015-2030, Climate Change Framework Policy, Climate Change Act 2016, Climate Finance Policy, Green Climate Fund Secretariat and the National Climate Change Fund

4. Institutional framework climate change act

This gave a detailed breakdown of the institutional framework break down from the National Climate Change Council to the Directorate of Climate Change and finally to the respective Climate Change Units as well as their respective functions.

5. Roles and responsibilities of county government

This portion gave a brief breakdown of all the roles and responsibilities of the county government which included mainstreaming climate change actions, set out under the Climate Change Act and the National Climate Change Action Plan, into County Government functions, and more specifically into the County Integrated Development Plans and County Sectoral Plans, taking into account national and county priorities as well as implementing climate change duties of public entities, as maybe prescribed by the Council on county governments-CCU, integrate NCCAP in sectors, annual reports

6. National climate change action plan, 2018-2022

This section highlighted the structure of the NCCAP 2018-2022 which consists of several chapters including Introduction; Enabling Policy and Legal Framework; Priority Actions; Delivery Mechanisms; Enablers; Coordination Oversight and Implementation Matrix.

7. MoEF request to the counties

This section stated the expectations of the Ministry of Environment and Forestry for the county government which included; support of the NCCAP 2018-2022 process, mainstreaming climate change in their CIDPs and considering establishing a COG/CEC committee on climate change covering key sectors among others.

Presentation from the Council of Governors: Mr. Arnold Kipchumba

Mr. Arnold Kipchumba from the Council of Governors gave a presentation that was structured as follows:

1. COG establishment and mandate

This section mentioned how the CoG is established under section 19 of the Intergovernmental Relations Act 2012 and comprises of the Governors of the forty-seven County Governments. It also clarified that CoG exists as the main avenue through which consultation and cooperation can be pursued among the forty-seven County Governments.

2. Roles of COG

Some of the roles of COG include; providing a forum for consultation among the County Governments, sharing information on the performance of the Counties in the execution of their functions with the objective of learning and promotion of best practice; dispute resolution between counties, facilitating capacity building for governors among others

3. Water, Forestry and Mining committee

In this section, it highlighted the mandate of the Water, Forestry and Mining Committee which is to consider all matters relating to sustainable water management; mining; climate change; environment management and conservation; forestry; natural resources; pollution and waste management. It also mentioned the role of this committee in relation to its mandate as well as the committee members.

4. COG response and involvement

This section mentioned in detail how the COG responds to climate change through legislation, sensitization, coordination and engagement, climate financing, capacity building and knowledge, learning and sharing.

5. County Executive Committee Member In charge of coordination of climate change affairs.

A list of all the nominated county executive committee members from the respective counties was mentioned which included; Baringo, Bomet, Bungoma, Busia, Elgeyo-marakwet, Embu, Garissa, Homabay, Isiolo, Kajiado, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Kwale, Laikipia, Lamu, Machakos, Makueni, Mandera, Marsabit, Meru, Migori, Mombasa, Murang'a, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Samburu, Siaya, Taita-taveta, Tana river, Tharaka nithi, Trans-nzoia, Turkana, Uasin gishu, Vihiga, Wajir, West pokot

6. Programmes and projects

This section highlighted the projects and programmes as well as their functions under the COG which include Water Towers Protection and Climate Change Mitigation and adaptation project; and Climate Change mainstreaming in County Spatial Planning in Kenya

7. Lessons Learnt

Some of the lessons learnt by COG were; Participatory Approaches: Resilience Assessment, Resource Maps and Bench Marking – Exchange Visits Enhanced Community Confidence & Involvement; Bottom Up Approaches - Communities Empowerment And Ownership Project Cycle Management; Improved Cost Benefits Compared; Vibrant Community Institutions; Local Engagement In Natural Resource Governance Enhance Climate Resiliency And Conflict Management among others.

8. Emerging Issues

Some of the emerging issues mentioned were; the need for sensitization of county officials particularly the new officials on the climate change plans and documents as well as the KSG curriculum; creation of a country platform in the knowledge management portal on climate change that shows what each county is doing in regards to climate change as well as exchange information especially for those counties that are way ahead; access to information especially on how to access the Green Climate Funds and capacity building of counties and effective public participation among others.

Plenary Session

It was noted with great concern that the representatives were not aware that a lot of the climate change documents can be accessed online including the NCCAP, Climate Change, Act 2016.

An issue was also raised on having a common national platform that that would allow for all the actors to be able to discuss on climate change related issues to which as a way forward it was agreed that there should be regular meetings as well as conferences that will be used to share information from both the county level as well as the national level. She also noted that there is also a National Climate Change Knowledge Management Portal that is accessible to all and is awaiting official launch by Cabinet Secretary, Ministry of Environment and Forestry.

One of the participants realised that there was no much information on how to access funds from Green Climate Fund as well as the application process being too stringent. Dr. Pacifica responded to this by stating that there was the Green Climate Fund secretariat that was assigned specifically to offer assistance to interested parties in terms of applying for the funds as well as to ensure they are bankable.

The participants also wanted to know whether the NCCAP 2018-2022 would involve both adaptation and mitigation considering the previous NCCAP majorly focused on adaptation. Dr. Pacifica responded that the NCCAP 2018-2022 would encompass both adaptation and mitigation as well as cross cutting issues.

An issue on transboundary resources was raised in light of how to address issues that are as a result of shared resources. Mr. Lerenten noted that at the East African Community level there is a Climate Change Policy as well as a Climate Change Bill that will ensure there is a harmonized approach in handling the arising trans boundary issues.

It was agreed that the county consultations currently underway was just the first round of consultations and that preparations for another round of consultations will be planned to target special interest groups: for example pastoralists in order to reach the common “mwananchi”.

Worry was raised on the issue that the Climate Change Council was taking too long to convene to which Dr. Pacifica responded that there were several reasons that did not allow it to take off in 2017 including 2017 being an election year, some difficulty with CSO’s representation as well as an ongoing court issue.

Concerns about the timelines were observed by the county representatives as some of the counties were in the final stages of the development of their CIDPs. This was addressed by encouraging the county representatives to take this opportunity to integrate the NCCAP 2018-2022 into CIDPs.

Dr. Pacifica further guided the county representatives to borrow a leaf from Makueni and Wajir counties that take a portion of their county revenues goes into mainstreaming climate change activities within their counties.

One of the participants enquired on how the climate change curriculum will reach the people and how they can participate and benefit from the Kenya School of Government curriculum. Dr. Pacifica notified the participants that there will be additional training and capacity building of county representatives as the Curriculum is there, online and open for everybody. She further placed the responsibility on the county to set aside a budget and send a few key people to undergo the trainings on climate change.

A lot of enquiry was made on the issue of the role of the youth as well as women in mainstreaming climate change. It was noted that that Climate Change Act, 2016 takes into consideration gender and youth issues as well as NCCAP that has taken into account gender issues. One of the members from the Task Force has a representative from Gender Commissions. Additionally, support from UNDP studies has highlighted the importance of gender issues in the national climate policy framework.

Dr. Pacifica urged the counties to take initiative with the resources that are readily available to them as this will catapult to easily get development partners who would be willing to scale up as they don’t come in and help from ground zero. This will also enable them to create green jobs for the youth as they will be on the lookout for green opportunities within the counties.

Breakout Sessions

The different counties went into breakout groups in order to identify county specific climate change priority actions. The Counties present were paired to deliberate on their common action areas.

The presentations can be found in the following annexes:

Annex I: Bomet and Kericho Counties

Annex II: Bungoma and Busia Counties

Annex III: Kisii and Nyamira Counties

Annex IV: Kisumu and Siaya Counties

Annex V: Migori and Homa Bay Counties

Annex VI: Vihiga and Kakamega Counties

Way Forward:

- Counties are encouraged to share their draft CIDPs as they can enrich the NCCAP 2018-2022.
- Counties should also ensure that their priority actions address the Sustainable Development Goals (SDGs).
- If further information or assistance is needed, counties should not hesitate to contact the Climate Change Directorate or the Task Force members.
- Counties should designate a contact person to serve as an intermediary Focal Point between the county and the national governments in all matters regarding climate change.

Closing Remarks:

Dr. Pacifica Ogola, Director Climate Change Programmes Coordination of the Climate Change Directorate within the Ministry of Environment and Forestry, thanked the attendees for their time. She also assured them that the information they shared at the consultation would be incorporated into the National Climate Change Action Plan II 2018-2022. Dr. Ogola shared her office's contact information in addition to its' location in order for participants to easily contact and visit the Directorate offices.

The meeting concluded at 18H30.

Annex I: Bomet and Kericho Counties

1.	Strategic Objectives: Increase tree cover				
	Key issues/Problems; Ecosystem Degradation, Food and Nutrition Insecurity, Drought				
	Opportunities	Actions	Sector	Mitigation/Strategies	SDG
<ul style="list-style-type: none"> ➤ Ideal weather for tree planting ➤ Ongoing campaigns for tree planation to increase tree cover and banning of logging ➤ Provision of subsidized tree seedlings from KFS and other stakeholders 	<ul style="list-style-type: none"> ➤ Increase forestry cover from the current 12.7% to above 20% ➤ Promotion of Afruitation, ongoing by the County Government ➤ Adhere to water Tower acts in protection of water catchment areas 	Forestry, Environment and Natural resources, Energy	Mitigation	SDG No 15	
2.	Strategic Objectives: increase food accessibility				
	Key issues/Problems; Food and Nutrition Insecurity				
	Opportunities	Actions	Sector	Mitigation/Strategies	SDG
<ul style="list-style-type: none"> ➤ Favorable weather conditions ➤ Availability of drought resistant crops ➤ Provision of subsidized farm inputs ➤ Availability of certified planting materials 	<ul style="list-style-type: none"> ➤ Increase food crops diversification ➤ Sensitization of households on food nutrition ➤ Reinforce research an adoption of new technologies 	Agriculture, Health, Education	Mitigation	SDG No 2	
3.	Strategic Objectives: Sustain water availability				
	Key issues/Problems; Drought				
	Opportunities	Actions	Sector	Mitigation/Strategies	SDG
<ul style="list-style-type: none"> ➤ Availability Water resources ➤ Proposed water storage dams like Posta Dam ➤ Existing water pans. ➤ Drilled boreholes 	<ul style="list-style-type: none"> ➤ Irrigation ➤ Construction of dams, water pans, boreholes ➤ Water harvesting from roof tops ➤ Water storage tanks 	Water, Environment, forestry, Meteorology	Mitigation/Adaptation	SDG No. 6	

	<ul style="list-style-type: none"> ➤ Adequate rains during rainy seasons ➤ 				
4.	Strategic Objectives: Enhance proper solid waste management				
	Key issues/Problems; Poor solid waste management in major towns and markets				
	Opportunities	Actions	Sector	Mitigation/Strategies	SDG
<ul style="list-style-type: none"> ➤ Ban on the use of non-biodegradable plastic carrier bags ➤ Waste separation to enable for recycling and reuse of released wastes ➤ Existence of efficient technologies for handling wastes ➤ Availability of lands that can be used as landfills 	<ul style="list-style-type: none"> ➤ Reinforce the policies and laws on ban of plastics carrier bags ➤ Education and awareness on the minimizing, reuse and recycling of solid wastes ➤ Acquisition of modern efficient technologies for handling wastes in major towns like Kericho, Bomet, Sotik, Litein and other big towns in the regions ➤ 	Environment, NEMA, Industrialization, Lands, Physical planning, settlement, Health	Mitigation	SDG No 6	
5.	Strategic Objectives: Enhance adequate Environmental Education Information and communication				
	Key issues/Problems; Inadequate Environmental Education Information and communication				
	Opportunities	Actions	Sector	Mitigation/Strategies	SDG
<ul style="list-style-type: none"> ➤ Existence of various local channels for instance Emoo, Kass, Kitwek and Chamkee ➤ Existence of daily newspapers of various channels i.e Daily Nation, Standard, Business Daily and others ➤ Trained and knowledgeable environmental officers and other relevant professionals 	<ul style="list-style-type: none"> ➤ Organizing forums in grassroots in order to enhance environmental awareness ➤ Increase environmental topics on the programs aired on the local channels ➤ Create environmental communication centers in Bomet and Kericho Towns where all environmental issues and concerns are tabled ➤ Newspapers channels should at all bring informative information on environmental 	Environment, NEMA, Media, Education, Agriculture,	Mitigation	SDG No. 4	

		matters rather than focusing on politics only			
--	--	---	--	--	--

Annex II: Bungoma and Busia Counties

SO- 1, Alleviate effects of flooding and prolonged dry spell – County wide –Bungoma and Busia				
Key Issues /Problems: Displacement of population, Erosion, Contamination of water, increase of water borne diseases				
OPPORTUNITIES	ACTION	SECTOR	MITIGATION/A DAPTATION	SDG
Building of dams, Pans, Rice farming, Irrigation, Disaster management initiatives , Resource allocation from the County and National Government	I. Prioritize in the CIDPs and CFSPs II. Early detection and warning systems III. Disaster management Fund IV. Put in place Disaster Response Unit – DRU V. Construction of Dykes VI. Construction of Dams VII. Treatment and Distribution of Mosquito nets	-Office of the Governor -Department of Environment - Public Health	Incorporation of actions in County plans, Compensation and evacuation of victims, Water bowser supplies in flooded areas	3-Good health and well being 6- Clean water and Sanitation 11-Sustainable development 13- Climate Change 15-Sustainable use of terrestrial ecosystems and reverse land degradation
SO -2 Check environmental degradation – County wide				
Key Issues /Problems: Soil erosion, Deforestation, Encroachment, Pollution, Unsustainable Sand harvesting				
OPPORTUNITIES	ACTION	SECTOR	MITIGATION/A DAPTATION	SDG
Soil conservation, Development of tree nurseries, Education and awareness, Tree planting Campaigns, Legislation	Construct gabions, Construct terraces, Planting of trees , Sensitize and train individual farmers , Enforcement of the riverine laws	Department of Environment, Water, Forestry, Agriculture	Sensitization barazas, Terracing of farms	3-Good health and well being 6- Clean water and Sanitation 11-Sustainable development 13- Climate Change

				15-Sustainable use of terrestrial ecosystems
SO- 3 Promote access to clean and safe Water- Bungoma –Busia				
Key Issues /Problems: Waterborne diseases, Long distances to draw water, Resource use conflict, salty ground water				
OPPORTUNITIES	ACTIONS	SECTOR	MITIGATION /ADAPTATION	SDG
Borehole drilling, Water bottling, Treatment works	Spring protection, Pipe extensions,	Dept. Water, Health	Ensuring sustainable water supply	6-Clean water and sanitation 3- Good Health and Wellbeing
SO- 4 Address encroachment into fragile ecosystems -Bungoma –Busia				
Key Issues /Problems: Degraded wetlands, Poor Agricultural practices, Sand harvesting, Fires, Unsustainable utilization of wetland resources				
OPPORTUNITIES	ACTIONS	SECTOR	MITIGATION /ADAPTATION	SDG
Legislation, Education and awareness, Eco-Tourism, Resource use conflict,	Law enforcement, Protection and Conservation	Agric, Lands, Administration, Forestry,	County allocation of finance in the budget	6-Clean water and sanitation 3- Good Health and Wellbeing
SO- 5 Address cross border conflict on wetlands between the two countries – Kenya and Uganda; Busia –Bungoma				
Key Issues /Problems: Smuggling of goods, Management of natural resources,				
OPPORTUNITIES	ACTIONS	SECTOR	MITIGATION /ADAPTATION	SDG
Legislation, Education and awareness, Eco-Tourism, Resource use conflict,	Law enforcement, Protection and Conservation	Agric, Lands, Administration, Forestry,	County allocation of finance in the budget, Cooperation of related parties in management	6-Clean water and sanitation 3- Good Health and Wellbeing

SO- 6 Enhance the attainment of the recommended {10% } tree cover – All over the 2 Counties				
Key Issues /Problems: Deforestation for, Bricks, Timber for construction, Charcoal burning, Encroachment, Poor management of shamba system				
OPPORTUNITIES	ACTIONS	SECTOR	MITIGATION /ADAPTATION	SDG
Development of nurseries, promotion of non-timber forest products, Tree planting campaigns, Awareness creation, Financing-Presidential green awards Presidential Green Award -PGA , Global climate finance-GCF, Access to Carbon credit	Plant trees, Sensitization campaigns, on-farm afforestation, Organizing National and County tree days	Agric, Lands, Administration, Forestry, KWS	Project implementation by departments geared toward the promotion of non-timber forest products	6-Clean water and sanitation 3- Good Health and Wellbeing

Annex III: Kisii and Nyamira Counties

Key Issues/Problems:				
<ol style="list-style-type: none"> 1) Water Scarcity 2) Ecosystem Degradation (Deforestation, brick mining and quarrying) 3) Pollution 4) Low Productivity 				
Strategic Objectives:				
<ol style="list-style-type: none"> 1) To improve sanitation and increase water availability by 2022. 2) To increase vegetation cover from 7% to 10 % by 2022. 3) To continually conserve the environment for sustainable development. 4) Food Security and poverty alleviation. 				
Opportunities	Actions	Sectors	Mitigation/adaptation	SDGs
<u>1)Water Scarcity</u> <ul style="list-style-type: none"> - On-going water and environmental Policy - On-going water master plan - On-going bill on removal of Eucalyptus trees - Public Private Partnerships 	<ul style="list-style-type: none"> - Uprooting Eucalyptus along River Gucha 30 metres from the river. - Spring Protection; 2 springs per ward for Kisii County, 5 springs per ward Nyamira County annually. - Sinking boreholes; 1 per ward. - Rain water Harvesting; distribution of two 10,000 litre tanks to schools in each ward in Kisii County and two 10,000 litre tanks to schools and health centres in Nyamira County. - Riparian and wetland protection; Gazettement of Sironga as a wetland in Nyamira County and mapping of environmental significant areas e.g. Manga ridge. - Kisii County sensitization and planting environmental friendly tree species in Chirichiro wetland and River Getare. - Capacity Building; sensitization on replacement of Eucalyptus with Bamboo. - Empowering WRUAs. - River clean up – Nyakomisaro Kisii County 	<ul style="list-style-type: none"> -Water Dept -Environment -NEMA -WRA -GWASCO -WRUA'S -Agriculture -Meteorological department -CBOs 	Adaptation	<p>Goal 6: Clean Water and Sanitation</p> <p>Goal 3: Good Health and Well-Being for people</p>
<u>2)Ecosystem Degradation</u> <ul style="list-style-type: none"> - Budgetary Allocation 	<ul style="list-style-type: none"> - Increase tree cover; distribution of seedlings per sub county and establishing tree nurseries. - Rehabilitation of Quarries; closing and rehabilitation of quarries in both counties which are abandoned e.g 	<ul style="list-style-type: none"> -KFS -Water -Environment 	Mitigation	Goal 13: Climate action

<ul style="list-style-type: none"> - Gazette Environmental Committee - Ban on the cutting down of trees - Adoption of EIA on all projects - Gazetting wetlands and forests - TIPS (Transition Implementation Plans) - Public Private Partnerships 	<p>Tabaka Soapstone, Nyakoe, Gesonso, Sironga and Ikonje.</p> <ul style="list-style-type: none"> - Protection of wetlands as water towers; Sironga, Bonyunyu and Chirichiro wetlands. - Protection of forests - Capacity Building 	<p>-Finance and Economic Planning -CBOs</p>		
<p><u>3)Pollution</u></p> <ul style="list-style-type: none"> - Solid and liquid waste management policy - Public Private Partnerships 	<ul style="list-style-type: none"> - Recycling Waste to useful products e.g. proposed electricity generation at Sironga site; Precious plastic energy center at Agricultural Training Center grounds. - Capacity Building 	<p>-Energy -Environment -Trade -NEMA -Youth Group -CBOs</p>	<p>Mitigation</p>	<p>Goal 13: Climate action</p> <p>Goal 1: Poverty Eradication</p> <p>Goal 3: Good Health and Well-Being for people</p>
<p><u>4)Low Productivity</u></p> <ul style="list-style-type: none"> - Conservation Agriculture - Gender mainstreaming - Climate smart Practices (drought resistant crops) - Budgetary allocation - Youth involvement in agriculture - Public Private Partnerships 	<ul style="list-style-type: none"> - Non-rain dependency agricultural practices (green house farming –e.g. ATC green house, Borabu). - Agroforestry - Capacity Building - Agricultural Extension Officers; each ward to at least have one. 	<p>-Agriculture -Water -Energy -Finance and Planning -CBOs</p>	<p>Mitigation</p>	<p>Goal 1: Poverty Eradication</p> <p>Goal 2: Zero Hunger</p> <p>Goal 12: sustainable consumption and production patterns</p>

Annex IV: Kisumu and Siaya Counties

Strategic Objective: Enhancing Resilience to climate change effects				
Key Issues/Problems: Food insecurity, Flooding, Drought and famine, Poor waste management, Low forest cover, water scarcity.				
OPPORTUNITIES	ACTIONS	SECTOR	MITIGATIONS /ADAPTATION	SDGS
<p>Tree planting initiative by the two governors.</p> <p>Existence of laws and policies requiring at least 10% of all farms to be covered by trees</p> <p>The Kenya water tower project would help increase tree cover</p>	<p>Planting of trees to increase cover (Kisumu Forest cover from 0.44 to 5%)</p> <p>(Siaya from 0.42 to 5%)</p> <p>This could be done in Public institutions, riparian areas, farms and homesteads-fruit trees</p>	forestry	Mitigation and adaptation	<p>No. 13</p> <p>No. 6</p> <p>No.15</p> <p>No. 11</p>
<p>Goodwill shown by the counties in dealing with solid waste menace.</p> <p>Willing investors and partners such as Kisumu Urban Programme funded by French Development Bank.</p> <p>Existing solid waste management Act in Kisumu County</p>	<p>Policy enforcement (KISUMU SOLID WASTE ACT 2016)</p> <p>Increase of budget to address the issue</p> <p>Filling of mining pits with inert solid waste e.g. in Barding, Uranga etc. in Siaya and Kajulu, Migosi ,Nyawita in Kisumu.</p> <p>Awareness creation on solid waste management on both large and small scale</p>	Solid waste management/ Environment conservation	Mitigation and Adaptation	<p>No. 13</p> <p>No.15</p> <p>No.3</p> <p>No. 6</p> <p>No. 7</p> <p>No. 11</p>
National Govt allocated 20billion towards	<p>Construction of dykes and pans</p> <p>Protection of wetlands</p>	Lands Water Environment	Mitigation and Adaptation	<p>No. 13</p> <p>No.15</p>

<p>construction of Koru Dam F/Y 2017-2018</p> <p>Management of Flood water to be used in irrigation in dry seasons</p>	<p>Protection of riparian areas</p>			<p>No. 3</p> <p>No. 11</p>
<p>Encouraging 'dryland farming'</p> <p>Encouraging solar energy systems to reduce pressure on other sources of energy</p>	<p>Planting of trees to curb desertification</p> <p>Encourage irrigation farming throughout Kisumu and Siaya Counties.</p> <p>Digging of water pans to supply water during dry periods in Usonga in Siaya and Lower Nyando in Kisumu</p>	<p>Forestry</p> <p>Agriculture</p> <p>Irrigation</p> <p>Water</p>	<p>Mitigation and Adaptation</p>	<p>No. 13</p> <p>No.15</p> <p>No. 11</p>
<p>Water resources are available e.g. Lake Victoria</p> <p>Goodwill from international banks</p> <p>Community-owned water projects</p>	<p>Establishment of water pipelines</p> <p>Establishment of other water projects Such as boreholes, shallow wells etc.</p> <p>Strengthening WRUAs in the counties</p>	<p>Water</p> <p>Environment</p>	<p>Mitigation and Adaptation</p>	<p>No.15</p> <p>No. 13</p> <p>No. 11</p>

Annex V: Migori and Homa Bay Counties

strategic objectives; mainstreaming climate change in the county development agenda for enhanced resilience and improved livelihood.			
issues: food insecurity, maternal and neonatal deaths, floods, drought, destruction and reduction of habitats, poor health, environmental degradation, water scarcity, increased pests and diseases, land use change poor waste management, invasive species, deforestation, silting in water bodies, poverty, very low awareness levels, lack of climate change policy and institutional frameworks, low access to clean energy			
Opportunities	Actions	sector	mitigation/adaptation
Availability on national legislations to deal with climate change issues. (national climate Act, NCCAP, NCCSP),	domesticate national legislations in the counties, set institutional framework on climate change, creation of awareness, creation climate change policy and action plan	Dpt. of Environment	awareness creation on climate change legislations implementation of the legislations
Availability of national and international funding mechanisms. (the Green climate fund, adaptation fund and climate change fund)	capacity building on how to access the funds, county climate change fund regulation,	Dpt. of Environment and finance	transparency and accountability
availability of alternative livelihood Climate change related investment (reduces poverty level)	Renewable energy promotion conversion of waste to energy briquette industry. (training program on briquette making) sony sugar in Migori county Ndhiwa Sub- County in Homa-bay County incentive for investors, creation of awareness on clean energy sensitize on green jobs and businesses create market linkages, encourage green entrepreneurship value addition of products to increase prizes (potatoes in Migori)	Dpt. environment, energy, trade,	education on renewable energy incentives capacity building encouraging innovations,

Ongoing irrigation scheme and water harvesting opportunities (Oluch Kimira in Homabay and Nyatike in Migori) Priority area in Migori and Homabay Ongoing Drilling of boreholes in drought prevalent areas like Natike and Kanyamkago	Expand the irrigation schemes to other areas sensitize on the use of the scheme promote water storage through tanks, water pans and dams increase clean water supply	Dpt. of water and Environment	public participation for sustainability reforestation early warning systems for flood preparation
National policy on Gender/ youth/ PWD mainstreaming	implementing the 30% rule of the procurement act engaging these groups in climate change policy making, implementation and monitoring	Dpt. of water and environment	empowering these groups giving incentives
ongoing conservation acuties and rehabilitation of degraded natural resources (springs in Homabay County and Migori County, greening program in Migori, riverbank protection)	conservation of 7 springs in Homabay and Migori reforestation protection of fish breeding sites afforestation sustainable waste management	Environment and water	environmental sensitization spring protection enforcement of relevant legislation alternative sources of livelihood
Donor funding on climate smart agriculture (RTI) Area of Priority for Migori and Homabay	value addition, horticulture development, promotion of climate resilient crops and cattle, introduction of climate change resistant crops ant animals. also, early maturing crops	Dpt. environment and agric	
Availability of drought management mechanisms Priority area for Nyatike in Migori and Karachuonyo area in Homabay	carrying out a vulnerability survey Distribution of drought resistant crops and animal breeds, expansion of irrigation schemes, increase number of boreholes and solar powered pumps to run them. (Migori and Homabay has begun doing this)	Dpt. Agric Met. Dpt.	increase water storage capacity updated and shared accurate metrological info

Ongoing regional programs to improve health in Migori and Homabay Counties	Sustainable health care. (Improved health facilities, preventive measures, control of climate related diseases through sensitization. (TB, Malaria, Bilharzia)	Dpt. Health	strengthen community health systems focus on preventive measures
availability of partners willing to work with the national and county governments in climate change issues availability of research institutions (universities)	holding multi-sectoral forums to coordinate climate change programs creating an enabling environment for partners facilitate research on emerging environmental issues (army worms)	both levels of govt, dpt of environment and water	create a partnership structure to avoid duplication

Annex VI: Vihiga and Kakamega Counties

Opportunities	Actions	Time Frame	Sector	Mitigation/ Adaptation	SDG
STRATEGIC OBJECTIVE: Sustainable wetland conservation					
KEY ISSUE/PROBLEM: Wetland degradation					
County government should do mapping and inventory which is ongoing Survey the wetlands that have been encroached County government funding	Reclaim and restore through a legal framework Conserve using the right species of plants e.g bamboo Mobilization and Sensitization of communities on the importance of wetlands	2018-2022	Water Agriculture Environment	Planting appropriate indigenous tree species to act as carbon sink Protection of riparian land Delineation through fencing of wetland areas	Goal6, Goal13, Goal 14 & Goal15
STRATEGIC OBJECTIVE: Forest conservation					
KEY ISSUE/PROBLEM: Forest degradation					
OPPORTUNITIES	ACTIONS	TIME FRAME	SECTOR	MITIGATION/ADAPTATION	SDG
Tourism Bee keeping Cultural rites Herbal medicine Research Rain	Afforestation Community sensitization Legal framework Public participation Encourage agro-forestry	2018-2022	Forestry Environment	Afforestation Sensitization Agro –forestry Enforcement Community empowerment Genetic resource sharing	Goal6 Goal 13 Goal 15
STRATEGIC OBJECTIVE:					
KEY ISSUE/PROBLEM: Uncontrolled mining activities					
OPPORTUNITIES	ACTIONS		SECTOR	MITIGATION/ADAPTATION	
Income generation Economic growth	Enforcement of legal framework Mapping mineral sites	CONTINUOS 2018-2022	Mining	Community sensitization Training of miners Development of legislative framework	
STRATEGIC OBJECTIVE: Effective water harvesting management					
KEY ISSUE/PROBLEM: Declining water sources					
OPPORTUNITIES	ACTIONS		SECTOR	MITIGATION/ADAPTATION	
Construction of water harvesting reservoirs	Sensitization		Water Irrigation	Policy on rain water harvesting	

De-silting dams Availability of rain water	Support rain water harvesting Construction of water harvesting reservoirs			Support Afforestation	
STRTEGIC OBJECTIVE: Flood control strategies					
KEY ISSUE/PROBLEM: Flooding					
OPPORTUNITIES	ACTIONS		SECTOR	MITIGATION/ADAPTATION	
Water harvesting	Afforestation Terracing Construction of dams and water pans De-silting of existing dams		Forestry Environment and Natural resources Agriculture	Afforestation Early warning systems Metrological alerts	
STRTEGIC OBJECTIVE					
KEY ISSUE/PROBLEM: Poor farming practices					
OPPORTUNITIES	ACTIONS		SECTOR	MITIGATION/ADAPTATION	
Increase soil productivity Food security	Climate smart agriculture		Agriculture Water	Increase Farm forestry/agro- forestry to 10% Practice climate smart agriculture	
STRTEGIC OBJECTIVE					
KEY ISSUE/PROBLEM: POOR SPATIAL PLANNING					
OPPORTUNITIES	ACTIONS		SECTOR	MITIGATION/ADAPTATION	
Reduction in emission of methane reductions air quality improvement creation of green jobs renewable energy	Creation of waste management centers to support circular economy. capacity building		Environment health water	GHG reduction	
STRTEGIC OBJECTIVE					
KEY ISSUE/PROBLEM: CLIMATE VARIATIONS CAUSING INVASIVE SPECIES					
OPPORTUNITIES	ACTIONS		SECTOR	MITIGATION/ ADAPTATION	
Food Security	Research Multi Stakeholder Approach Early Warning		Agriculture	Research Multi Stakeholder Approach Conservation agriculture Early Warning	