



COUNTY STAKEHOLDERS CONSULTATIVE WORKSHOP ON THE
DEVELOPMENT OF THE NATIONAL CLIMATE CHANGE RESPONSE
STRATEGY'S ACTION PLAN

19th- 20th April, 2012

Reef Hotel,
Mombasa,
Coast Province,
Kenya

REPORT OF THE WORKSHOP

Mombasa, Kenya
April, 2012

SUMMARY

The workshop was convened as part of the work plan for the development of the National Climate Change Response Strategy's Action Plan. The overall objective of the consultations is to provide an opportunity for stakeholders from each of the counties to prioritise climate change concerns and required actions to inform the Action Plan.

The following are some of the socio-economic and geographic characteristics of the six counties (Kilifi, Kwale, Lamu, Mombasa, Taita-Taveta and Tana River) represented in the workshop: Geographically, all the six counties are in south-eastern Kenya, and all border the western Indian Ocean coastline except Taita-Taveta County. The agro-ecological zones (AEZs) in which the counties are located vary from semi-arid to semi-humid. Current total population stands at 3,325,307 according to the 2009 Kenya Population and Housing Census. Nature-based tourism, fishing and agriculture are the main economic activities in the province. The port of Mombasa plays a crucial role in the economy of not only Kenya, but of other eastern African countries such as Uganda, Burundi, Rwanda, Southern Sudan and others.

A summary of the results of the two day event has been prepared based on the eight thematic areas/Sub-Components of the Action Plan.

Low Carbon, Resilient Development Pathway (SC 1)

This particular subcomponent of the NCCRS Action Plan deals with both adaptation and mitigation, bringing the two in an overall plan. Mitigation issues as captured for SC 4 and adaptation issues for SC 3 (see the sections below) apply to SC 1.

Mitigation (SC 4)

Mitigation actions that are currently being implemented in the six counties (Kilifi, Kwale, Lamu, Mombasa, Taita-Taveta and Tana River) of Coast Province include:

1. Afforestation and re-afforestation projects. These were highlighted by all the six counties, although some provided specific information regarding where the projects were being implemented and who were implementing them. These include Kwale County, which highlighted the role of participatory and integrated natural/forest resource conservation initiatives through the Water Resources Users Associations (WRUAs) and Community Forest Associations (CFAs), and in Taita-Taveta where carbon credit opportunities are being sought for forestry related projects. Kwale County is also implementing a mangrove restoration carbon project called Mikoko Pamoja, a REDD+ project.
2. Renewable energy and energy efficiency projects. These include solar and wind in Kwale through a project called Jimbo Community Environmental Project. Kwale also reported on the making of "brickets" by large institutional consumers such as hotels. In Lamu County, wind feasibility studies are being conducted, according to the county delegates.
3. Waste re-use and recycling. Mombasa County reported on a non-governmental organisation (NGO) that is working with youths and other groups to make products such as baskets from plastic wastes. Such initiatives have the potential to reduce and/or eliminate emissions that would result from the making of similar products (i.e., baskets in this case) through conventional approaches, and provided, that it can be proven that the resultant emissions are less than those that would have occurred under the business as

usual (BAU) scenario. Establishment of landfills from where waste can be [segregated] and recycled was also mentioned. Waste segregation should ideally happen at the source.

In terms of new mitigation strategies, the strategies proposed were more or less similar to the current strategies, but with the following noted:

1. Despite the fact that Mombasa is the second largest city in Kenya and more likely to be grappling with transport sector challenges as is the case in most cities, transport related mitigation strategies were conspicuously missing from among those proposed by the county.
2. In addition to solar, wind, eco or sustainable charcoal and biogas, which are some of the current and common renewable energy options used particularly at the household/community level, there was a recommendation from Taita Taveta on the promotion of biofuels. The key issue to consider with biofuels in general is that their emission reduction potentials in relation to conventional fuels ought to be assessed in light of the results of several studies indicating that they could be having greater GHG impact than the conventional fuels depending on a system [studies undertaken through life cycle assessments (LCA) approach].
3. The importance of a system's approach in deciding what recommendations from the consultations to take on board is further accentuated by a proposal that a way to reduce emissions from the forestry and land-use sectors would be to substitute for timber in products such as furniture. One substitute material that was mentioned was steel. A purely scientific guesswork suggests that mass by mass, steel is likely to have higher carbon footprint than wood from any tree species.
4. There was the mention of County Development Strategy incorporating climate change adaptation and mitigation by Mombasa County. It may be assumed that such a strategy would enumerate mitigation strategy options.

In summary, sectors for which mitigation was proposed are **forestry, energy and waste management**.

Adaptation (SC 3)

Adaptation received a lot of attention in terms of the number of strategies currently being implemented and/or put forward. These included:

1. Water harvesting. At household level, this is often through roof-top catchment, which is becoming more of a conventional practice in Kenya.
2. Alongside rooftop catchment is the need for large scale water capture and storage mechanisms or facilities. A number of such that were mentioned include water pans, dams and boreholes. Regarding the first two, i.e. water pans and dams, there was a strong recommendation that their development should proceed only after a thorough EIA or SEA (the latter for large scale/wider coverage projects) has been carried to avert any unintended negative environmental consequences. There was also the mention of multi-purpose water infrastructure (i.e., dams) by Taita Taveta County.

3. Livestock offtake programmes, which is a GoK initiative in conjunction with development partners.
4. Sea water desalination, which is an important strategy for coastal communities given the projected sea level rise which will lead to intrusion of brackish/salty water into freshwater resources.
5. Early warning systems. One of the likely impacts of climate change is the increase in the frequency and intensity of coastal storms. Such likely weather extremes will require robust early warning systems to manage. There was a recommendation that this system should incorporate regular drills or to test its workability.
6. Construction of sea walls and piers as well as the use of natural beach enrichment strategies such planting of mangroves as measures against sea level rise. Sea walls were reported for all the counties bordering the Indian Ocean.
7. Alternative livelihood options-water vending, bee keeping, mariculture, and aquaculture were some of the livelihoods that were mentioned. It was observed during the plenary that eco-friendly livelihood options such as these were key to halting environmental degrading economic activities such charcoal-making.
8. Cultivation of drought tolerant and high value, traditional crops such as millet, sorghum and cassava. This is one area in which the Ministry of Agriculture has been playing an active role.
9. Improvement of infrastructure, particularly WATSAN infrastructure. This is an important measure against water borne and water wash diseases whose incidences are projected to increase under floods and droughts, respectively.
10. Irrigation schemes-both large scale and small scale. It was also suggested that such irrigation schemes should also be water efficient to meet both food security needs and water conservation goals.
11. Establishment of watering points in parks and protection/fencing of parks as adaptation strategies in the wildlife and tourism sector, hay harvesting and preservation as well as sustainable heads of cattle for the livestock sector.
12. Vulnerability mapping with regard SLR, flooding and landslides.
13. Other measures mentioned included improved disease surveillance to enhance emergency response measures and expansion of weather dissemination services through expansion of networks (these may be considered as part of the EWS).

In summary, **agriculture and food security** and tourism sectors seem to attract the most adaptation strategies in all the counties, either as current or proposed/future projects.

Infrastructure (both physical and social such as health) development and climate proofing are also mentioned.

Policies and Regulations (SC 2)

Relevant issues mentioned include the need for the government and its agencies to enforce various environmental laws and regulations as well as enactment or enforcement of “polluter pays principle”.

Technology (SC 5)

Issues of relevance to SC 5 on technology revolved the technology for adaptation and mitigation as has already been highlighted above. In adaptation, relevant technologies include EWS which would comprise an ICT system, drought tolerant crops, fast-maturing crop varieties, improved livestock, and sea defences. In mitigation, they are renewable energy technologies such as solar, biogas, geothermal and wind.

Monitoring and Reporting (SC 6)

This workshop did not discuss monitoring and reporting of climate change activities.

Knowledge Management and Capacity Building (SC 7)

Key highlights relevant for this SC include:

1. Awareness creation and capacity building on climate change implications on key sectors through barazas and other forums and education.
2. Devolution of climate change institution(s) up to the county level (fully equipped climate change office at the county), which touches on institutional capacity building.

Finance (SC 8)

Various financial models for addressing climate change adaptation and mitigation were alluded to, and included the use of public private partnerships in promoting environmental sustainability, “polluter pays principle”, and tax rebates on green technologies.

1.0 INTRODUCTION

1.1. Convening of the Workshop

The workshop was convened as part of the work plan for the development of the National Climate Change Response Strategy's Action Plan.

1.2. Objectives of the Workshop

The main objective of the workshop was to collect climate change related information from key stakeholders in Kilifi, Kwale, Lamu, Mombasa, Taita-Taveta and Tana River counties as input toward the development of the National Climate Change Response Strategy's Action Plan.

The workshop had the following three specific objectives:

- (i) To inform stakeholders of the ongoing activities geared toward developing the NCCRS' Action Plan;
- (ii) To obtain stakeholder input for incorporation into the Action Plan; and
- (iii) To engage and interact with stakeholders as a way of buying their ownership of the expected output.

1.3 Participation

The workshop was attended by key stakeholders on climate change (from government, private sector, media and civil society organisations and community representatives) from the six counties of Kilifi, Kwale, Lamu, Mombasa, Taita-Taveta and Tana River, representatives of the Climate Change Secretariat in the Ministry of Environment and Mineral Resources, representative of the Climate and Development Knowledge Network (CDKN) and the consultants working on the different subcomponents of the Action Plan. There were 2 representatives of faith-based organisations (FBOs), 24 representing civil society organisations (including 7 women representatives, 12 youth representatives, and 8 representing men agenda), 9 NGOs representatives, 1 representative of the private sector, and 34 representatives of the government including both government ministries and agencies. The list of participants is hereto attached as Annex I.

2.0 OPENING OF THE WORKSHOP

The workshop was called to order by Dr. Charles Mutai of Climate Change Secretariat, Ministry of Environment and Mineral Resources. He welcomed the participants and thanked them for honouring the invitation to come and share their expert contribution on and experience in climate change to the consultations toward developing the National Climate Change Response Strategy's Action Plan. He informed the workshop that the workshop was meant to obtain input for the Action Plan in fulfilment of the Constitutional requirement that stakeholders be consulted in such processes. A minute of silence was then observed in memory of the late Hon. John Michuki, former Minister for Environment and Mineral Resources and under whose tenure the National Climate Change Response Strategy (NCCRS) was prepared.

Stakeholders were asked to provide their expectations from the workshop. The following were captured:

1. To learn more about the impacts or effects of climate change and measures to respond to or address these impacts;
2. To understand why the snow caps of Mt. Kenya and Mt. Kilimanjaro are receding as well as the receding water levels in various rivers and streams;
3. How to make carbon markets/trading work at the grassroots/with community especially in relation to communities residing in mangrove forested areas;
4. To understand why the Tana Delta wetlands are drying up; and
5. To take stock of where Kenya is in terms of climate change response, and to probably come up with strategies locally or at the county level to respond to the problem [climate change].

2.1 Adoption of the Agenda

The programme of the Workshop is hereby attached to this report as Annex II.

2.2 Opening Remarks

Statement by the Provincial Commissioner, Coast Province

Mr. Hamasi Shivogo, the Deputy Provincial Commissioner, Coast Province, delivered the opening remarks on behalf of Mr. Ernest Munyi, the Provincial Commissioner (PC) of Coast Province. He conveyed the PC's apology for not being able to attend and open the workshop in person due to exigency of duty. He emphasised that the Constitution 2010 required countrywide consultations for processes such as the Action Plan's development; hence the reason the workshop was convened. The PC's remarks are attached to this report as Annex III.

3.0 PRESENTATION ON THE OBJECTIVE OF THE COUNTY CONSULTATIONS

Mr. Stephen King'uyu from the Climate Change Secretariat in the Ministry of Environment and Mineral Resources, who is the coordinator of the Action Plan process, provided an overview of the objectives of the workshop. He informed the workshop that the main objective of the consultations was to ensure that Action Plan was informed by stakeholders across the country. He emphasised that it was the government's decision to have the Action Plan's development process be as participatory as possible including CSOs, government, the private sector, and the "mwananchi" (i.e., the common citizen). The presentation of the objectives of the consultations is attached to this report as Annex IV.

4.0 PRESENTATION ON AN OVERVIEW OF THE ACTION PLAN

An overview of the NCCRS' Action Plan was presented by Mr. Stephen King'uyu. He started by giving a brief history of the process of developing the Action Plan. The aim of the Action Plan was to operationalise or implement the National Climate Change Response Strategy, which was launched at COP 15 in Copenhagen for purposes of engaging and sensitising the international community on Kenya's efforts towards addressing climate change, and formally in Kenya in April 2010. The presentation of the overview is attached to this report as Annex IV.

Observations/Comments

- (a) Recommendation on construction of water harvesting and storage infrastructure in drought-prone areas such as Magarini should also incorporate the importance of feasibility studies, which would assess both the economic and environmental viability of such projects;
- (b) Environmentally sound solid waste management such as through recycling and re-use are some of the issues that the Action Plan's SCs on NAMAs and Technology will look into;
- (c) In general, in regard to climate change finance, various reports indicate that significant finance is already flowing into Kenya for climate change adaptation and mitigation, but there is no mechanism in place for tracking this flow and for accountability. This is one of the areas that the Action Plan will address;
- (d) In regard to the Action Plan management and coordination, the role of the task-force is that of a coordinating entity. The implementation of the Action Plan will take place at different levels including at the grassroots where most of the projects will be implemented (the taskforce will not be implementing the projects); and
- (e) Kenya is one of the few countries that have made significant strides in efforts towards addressing climate change.

5.0 CONSIDERATION OF THE BREAK OUT SESSIONS' REPORTS

The participants then divided up into different groups based on their counties of origin to deliberate on a number of climate change related topics such as the evidence of, impacts on and current as well as proposed/recommended actions to respond to climate change within their counties. The following is a summary of the deliberations:

Kilifi County	
<p>Evidence</p> <ul style="list-style-type: none"> - Sea level rise, submergence of infrastructure (Ngomeni area) - Extinction or reduction in some fish species due to rising sea temperatures - Shifting rainfall patterns (shorter rainy durations and shift of onset from March to April) - Earlier onset of East Monsoon winds (Kusi) than is normally the case - Coral bleaching - Destruction of infrastructure - Increased disease and public health burden 	<p>Impacts</p> <ul style="list-style-type: none"> - Sea surface temperatures increase-leading to migration and/or extinction of sea organisms - Reduction in agricultural production - Changes in diet and lifestyle - Increased incidences of pests and diseases-e.g. the maize stalk borer menace - Introduction of new crop varieties that don't have a ready market, hence negative impacts on the economy - Coral reef bleaching having an impact on the tourism sector-reduced number of tourists - Reduced rainfall amounts-increased food insecurity, increase in food prices, and school drop outs as children opt to engage in income generating activities
<p>Current Actions</p> <ul style="list-style-type: none"> - Fast maturing and drought tolerant crop varieties - Adoption of aquaculture - Promotion of sustainable fishing industry, e.g. 	<p>Recommended Actions</p> <ul style="list-style-type: none"> - Fast maturing and drought tolerant crops - Train in the use and equip fishermen with deep sea fishing gear

<ul style="list-style-type: none"> using appropriate gear - Afforestation projects - Awareness creation - School feeding programmes 	<ul style="list-style-type: none"> - Promotion of aquaculture - Afforestation and re-afforestation programmes using tree species adapted to the changing climate - Awareness creation and capacity building on climate change implications on key sectors such as energy, forestry, etc through barazas and other forums and education - Devolution of climate change institution(s) up to the county level (fully equipped climate change office at the county) - Expansion of weather dissemination services through expansion of networks - Implementation/enforcement of environmental policies, laws and regulations - Improvement in water distribution infrastructure/services - Multi-purposed water storage infrastructure, e.g. earth dams in ASALs within the county - Promotion of sustainable livestock keeping, e.g., small, improved stocks - Improved disease surveillance to enhance emergency response measures - Introduction of improved livestock varieties that can withstand the changing weather
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Kwale County	
<p>Evidence</p> <ul style="list-style-type: none"> - Reduction in fisheries production (e.g. reduction in the number of catches) - Coral reef bleaching as a consequence of rising sea surface temperature - Changing rainfall patterns including intensity - Drought and famine, e.g. in Kinango area - Human-wildlife conflicts around Kwale area - Mangrove degradation, inundation and migration - Migration of birds - Drying up of watering points, e.g. in Kinango, Mkurumudzji River 	<p>Impacts</p> <ul style="list-style-type: none"> - Degradation of cultural sites - Loss in biodiversity (mangroves, fish, corals) - Loss of livelihoods (arable farming, artisanal fishing, etc) - Decline in marine tourism, e.g. associated with loss of marine biodiversity such as corals - Increase incidences of climate-sensitive diseases and erosion of health infrastructure
<p>Current Actions</p> <ul style="list-style-type: none"> - Promotion of integrated and participatory natural resource management, e.g. the involvement of WRUAs, CFAs, the government (KFS) in catchments management and protection - Afforestation programmes, e.g. the Miti Mingi Maisha Bora by the KFS and its partners in the programme - Integrated coastal zone management (ICZM), also made possible by the EMCA 1999 - Carbon trading opportunities, e.g. efforts by the Mikoko Pamoja's mangrove carbon project-under development 	<p>Recommended Actions</p> <ul style="list-style-type: none"> - Fast maturing and drought tolerant crops - Afforestation and re-afforestation programmes including seeking carbon market opportunities and implementation of the 10% forest cover on individual land policy - Awareness creation and capacity building - Alternative livelihoods such as aquaculture - Expansion of weather dissemination services through expansion of networks - Implementation/enforcement of environmental policies, laws and regulations - Improvement in water distribution

<ul style="list-style-type: none"> - Establishment of marine protected areas - Promotion of alternative income generating activities, e.g. mariculture, aquaculture, apiculture, aloe vera farming, eco-tourism, e.g. the Kayas and Mwaluganje (cultural sites) - Jimbo Community Environmental Project-mangrove rehabilitation, renewable energy (solar) and energy saving jikos - Awareness and capacity building initiatives - 10% forest cover on individual land policy-a government of Kenyan initiative - Renewable energy options including the use of bricks by large institutional energy consumers such as hotels 	<p>infrastructure/services</p> <ul style="list-style-type: none"> - Multi-purposse water storage infrastructure, e.g. earth dams in ASALs within the county such as Kinango - Rain-water harvesting - Energy efficiency and renewable energy programmes
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Lamu County	
<p>Evidence</p> <ul style="list-style-type: none"> - Drying up of water sources-pans, etc - Erratic rainfall patterns-annual floods & extended dry periods are common 	<p>Impacts</p> <ul style="list-style-type: none"> - Unpredictable, often low, agricultural yields-loss of livelihoods, increase in poverty levels - Increasing dependence on irrigation - Emergence of drug-resistant pests and diseases - Reduced pasturelands - Human-human and human-wildlife conflicts over depleting natural resources (water and pastureland) - Encroachment into protected areas-illegal logging and poaching - Increased forest fires - Loss of mangroves and some fish species - Destruction of infrastructure by floods - Increase in water-borne diseases - SLR and shoreline erosion impacting on the hotel industry mostly - Longer distances travelled in search of water and firewood
<p>Current Actions</p> <ul style="list-style-type: none"> - Tree planting and tree nurseries establishment - Peace-building initiatives (including setting up of committees) as measures toward averting resource-based conflicts - Water harvesting and storage, e.g., pans and roof-top catchment - Water-treatment, e.g., chlorination - Alternative livelihoods-water vending, fish farming, bee keeping, etc - Livestock offtake programmes - Drought-tolerant crops-cassava, millet, etc - Agricultural extension services - Rehabilitation of infrastructure - Disease preventive measures, e.g. provision of ITNs - Construction of sea walls, piers as protection 	<p>Recommended Actions</p> <ul style="list-style-type: none"> - Awareness on the importance of natural resource, e.g., water conservation - Tree planting - Multi-purpose water infrastructure/reservoir - Integration of water harvesting in building plans - Water-efficient irrigation technologies - Establishment of watering points in wildlife protected areas/parks - Hay harvesting and preservation - Promotion of less-resource intensive economic activities in ASALs such as eco-tourism - Wind power and other alternative/green energy - Improvement of sanitation - Economic and livelihood diversification

measures against SLR as well as beach enrichment – Early warning system to enhance preparedness – Sea water desalination – Feasibility studies for wind power	
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Mombasa County	
Evidence – Rising temperatures – Unpredictable weather patterns – Rising sea levels – [Increased wind intensity]	Impacts – Increase in tropical diseases – Coral bleaching, shoreline erosion and loss of marine biodiversity – Decrease in fish catches – Reduced agricultural yields/crop failures, increase in food prices/cost of living – Increased water scarcity-more time spent on fetching water, impact on women and girls-girl child education – Floods-destruction of property, loss of life – Heat-related stress – Reduced vegetation cover as a consequence of reduced precipitation and increased temperatures – Water scarcity-increased depletion of underground water resources – SLR and flooding-destruction of coastal infrastructure-beach hotels, port facilities, etc – Resource based conflicts
Current Actions – Water harvesting – Tree planting, e.g. mangrove forest establishment and conservation measures – Drought tolerant crops – Sea walls construction – Green/environmental friendly energy – Alternative agricultural technologies – Alternative sources of livelihoods – Energy conservation and efficiency measures – Improved waste management including recycling and re-use – Use of modern/improved pollution control technologies, e.g. the use of rubber scrubbers controlling exhaust emissions in industries	Recommended Actions – Enforcement of all environmental laws – Vulnerability assessment with reference to SLR, flooding, and landslides i.e., identify and map all areas prone/subjected to SLR, flooding, and landslides to inform appropriate measures – Establishment of ecologically appropriate shoreline protection measures, e.g. through mangrove or sea wall as appropriate – Enactment/enforcement of wetland laws and regulations – Establishment of landfills in appropriate locations – Enforce/enact “polluter pays principle” laws/regulations – Promotion of green initiatives through fiscal, punitive and other measures, e.g. tax rebates – County strategic plan incorporating climate change – Afforestation programmes – Public private partnerships in promoting environmental sustainability – Rain-water harvesting – Energy efficiency and renewable energy programmes

Taita-Taveta County	
<p>Evidence</p> <ul style="list-style-type: none"> - Seasonal floods in Taveta, Buguta, Voi, Wundanyi - Extended droughts - Changes in rainfall patterns marked by reduced amounts and storm events (recent examples are 175 ml of rainfall per day, 100 ml of rainfall per day and 156 ml of rainfall per day in Voi, Chala, and Kitobo respectively), hailstorms in Voi, Wundanyi, Chala - Increase in temp of as much as 0.6°C in the past 10 years (data from the Voi Met Station) 	<p>Impacts</p> <ul style="list-style-type: none"> - Increase in food insecurity-loss of incomes and life - Invasive species, e.g., Prosopis juliflora menace in the county and nearly the whole country - Encroachment into forests/protected areas-illegal, increased rates of deforestation for charcoal - Increase in disease burden (water-borne diseases) - Migration - Drying up of rivers, springs and lakes - Frequent forest fires - Water and firewood scarcity
<p>Current Actions</p> <ul style="list-style-type: none"> - REDD+ in 14 ranches and 5 locations within the county - Tree planting and forest rehabilitation - Flood control - Civic education - High-value traditional crops such as millet, cassava, etc - Livestock offtake programmes - Renewable energy (eco-charcoal, biogas) and energy efficiency (energy saving jikos) - De-silting of rivers, water pans, dams, springs and riverbank protection - Revamping of irrigation schemes/canals - Food relief to vulnerable households and individuals, i.e. food for assets - Alternative and sustainable livelihood options, e.g., eco-tourism, bee-keeping, butterfly farming - Environmental friendly livestock farming, e.g. small, improved stocks - Rain-water harvesting - Research and development in climate change 	<p>Recommended Actions</p> <ul style="list-style-type: none"> - Rehabilitation of old and development of new water infrastructure - Capacity building in climate change adaptation and mitigation - Afforestation and re-afforestation programmes - Adoption of appropriate grazing and browsing practices (appropriate stock size/rate, type) - Appropriate farming techniques including adoption of high value traditional crops such as millet, sorghum, cassava, etc - Irrigation programmes/projects - Renewable energy technologies-wind, solar, biogas, eco-charcoal, [biofuels] and energy efficiency-improved jikos - Promotion of and involvement of communities in wildlife resource conservation, e.g. through carbon markets and other PES systems as well as support to community projects - Wildlife habitat protection and enhancement-construction and protection of watering points, springs, fencing of parks - Climate change institution at the county level

Tana River County	
<p>Evidence</p> <ul style="list-style-type: none"> - Persistent/prolonged droughts - Flooding - Unpredictable rainfall patterns - Increased temperatures 	<p>Impacts</p> <ul style="list-style-type: none"> - Flooding-led to introduction of farming of rice [a positive impact] - Droughts and floods-reduced agricultural productivity, e.g. crop failure in Wenje in 2011 due to floods - Emergence of new pests - Change in eating habits and lifestyle in general - Food insecurity, dependence on relief food - Reduction in heads of livestock kept

	<ul style="list-style-type: none"> - Increased rates of outbreaks of livestock diseases - Shifting to goat rearing from the traditional keeping of cattle - Reduction in fish catches from oxbow lakes such as L. Shakababo - Reduced water levels in rivers and streams - Disappearance/drying up of wetlands - Change in river course, e.g. in Ngao and Chara areas - Drying up of some pockets of forests, e.g. in Galilie location (Onkolde) - Reduction in some species of wildlife, e.g. hippos, antelopes and birds - Loss of marine biodiversity, e.g. dolphins in Kipini area
<p>Current Actions</p> <ul style="list-style-type: none"> - Fish farming - Agri-business/enterprises - Drought tolerant and improved varieties of crops, e.g. cow-peas, hybrid maize, etc - Sinking of boreholes, construction of dams - Efficient irrigation, e.g. pumping as opposed to flood irrigation - De-stocking - Diversification of income generating activities - Migration, e.g. toward Kipini and Hurara - Wildlife conservancies and other wildlife protected areas - Land-use planning capacity building involving the government and communities - Leasing of ranches to private individuals - Awareness raising, capacity building and education 	<p>Recommended Actions</p> <ul style="list-style-type: none"> - Water resources/wetlands management - Drought tolerant/fast maturing crops - Enactment/enforcement of laws and regulations - Alternative livelihoods such as fish farming - Afforestation and re-afforestation programmes promotion through various incentives - Awareness and capacity building - Sustainable livestock keeping-appropriate stocking rates - Renewable energy and energy efficiency

Comments and suggestions on the presentations on the evidence, impacts and current actions

1. It is important to delink climate change impacts from general environmental degradation. As an example, the reduction in fish stocks as in the case of River Tana and River Sabaki could be a cascading consequence of inappropriate fishing gear which takes out fingerlings, and therefore impacts negatively on fish reproduction. Caution should therefore be applied with regard to attribution of climate change.
2. A number of irrigation projects planned for in Tana River County (for Tana and Sabaki rivers) could be included under current and/or future adaptation projects. It is however, necessary that environmental impact assessment (EIA) and strategic environmental assessment (SEA) (the latter for large scale development projects) be carried out for such projects to avert unintended negative consequences.
3. Encroachment into marine protected areas as a result of declining fish stocks in traditional fisheries grounds should be included [as an impact of climate change] for almost all the five counties bordering the Indian Ocean.

4. There are several pieces of legislation on natural resource management (particularly on wildlife management with regard to wildlife-human conflicts) that the team working on the policy and regulatory framework should analyse in attempt to addressing climate change/ human-wildlife dimensions.
5. As an element of weather and climate, wind is one of the parameters that are likely to change (e.g. a change in wind direction and/or speed/intensity) with the changing climate. This therefore justifies its inclusion as a potential evidence of climate change for Kilifi County.
6. Local communities are involved in natural resource management particularly in forest resources management through community forest associations (CFAs). Together with the Kenya Forestry Service (KFS), provincial administration and other stakeholders, they constitute forest conservation committees that perform a number of functions including decision-making on allocation of licenses for logging. Therefore, the suggestion that the KFS is single-handedly awarding logging licences is [may] not be true.

Comments and Suggestions on Recommended Actions

1. The implications of mining and mining explorations on climate change and vice versa particularly in Taita Taveta should be included as an additional impact of/on climate change.
2. Education and awareness might not have been highlighted by all the counties as a necessary action, but it is important and should be considered by all the six counties.
3. It is not wise to promote unsustainable economic activities such as burning of charcoal for sale on the basis of their contribution to livelihoods and economic wellbeing particularly of the poor and marginalised members of society. What is critical is to provide the poor and other marginalised groups and persons with the means to productively engage in environmental benign livelihood options.
4. The linkages between climate change and energy issues and the implications of one on the other and vice versa are clearly understood and appreciated by the government, and it is for this reason that the Ministry of Energy is actively involved in the Action Plan's development process. A representation from the ministry headquarters might have been missing in the Mombasa consultation, but the ministry has been represented in past consultations and will be represented in the future ones, and is also represented in the TWGs as well as the taskforce for the Action Plan's development.
5. It is important that politics of international climate change negotiations, particularly those related to antagonising positions taken by some parties, be divorced from national processes or initiatives to address climate change. While the outcomes of the negotiations can and do indeed inform national actions, the divergent views taken by various countries (e.g. on whether to take on binding emission reduction commitments or not) should not be a basis for Kenya's inaction, and should not be a subject of discussion on what Kenya needs to do in order to attain sustainable development and increase its resilience to climate change impacts. Furthermore, the decisions and actions taken locally can also inform the negotiations and their outcomes.

6. Demonstration/pilot projects on energy saving jikos and other forms of energy efficiency/renewable energy should be implemented at the grassroots, and where possible, contacts of industries and entrepreneurs engaged in the same be provided to facilitate wider adoption of these technologies.
7. An important element that needs to be included alongside enforcement of laws and regulations in order to enhance compliance is awareness.
8. Gender mainstreaming has been identified as key to dealing with gender differentiated aspects of climate change, and is being done for all the subcomponents. In addition, a specific consultant has been hired to handle this aspect.
9. Incorporation of indigenous knowledge in conservation of natural resources and climate change responses should be included as recommended measure.
10. Legal implications of the Action Plan's proposals should be considered. As such, a recommendation on the ban of power saws as a measure against deforestation as recommended by a participant is one such untenable proposal. An important dimension to consider in such a recommendation is how to reduce over-reliance on wood and wood products (e.g. alternative forms of construction that uses less timber, furniture made from non-timber materials, alternative energy, etc).

6.0 CLOSING REMARKS

6.1 Presentations by consultants on progress made

The consultants present in the workshop (SC 3 and SC 2) provided highlights of the objectives and scope of their assignments as well as the progress they had made. In addition, SC 3 engaged the stakeholders in a priority ranking exercise meant to provide indicative priority adaptation actions that needed to be implemented in each county.

6.2 Remarks by the Climate Change Secretariat (the Director)

Dr. Michael Makokha, the Director of CCS, provided closing remarks. He thanked everybody for their "tremendous response" to the invitation to the workshop. He reiterated the importance of the county consultations in meeting constitutional provisions, and indicated that these signalled an end to an era when Nairobi made all key decisions without involving local communities.

6.3 Vote of Thanks

Ms. Lucy Kamande from the Climate Change Secretariat (CCS) gave a vote of thanks. She acknowledged the PC for Coast Province through the Deputy PC for officially opening the workshop, and the participants for honouring the invitation to come and share their expert opinion on and experiences in climate change.

6.4 Next Steps

Mr. Stephen King'uyu provided the next steps in the process. Indicative dates of the remaining county, national (validation) as well as expert groups' consultations were provided. He indicated that a first draft of the Action Plan would be ready by June 2012. A National Validation

Workshop would be held in Nairobi, and county representatives from all the 47 counties in the country would be selected to participate in this workshop with a view to ensuring that the counties' issues that would have come up during the county consultations would have been captured in the Action Plan. The Action's Plan information resource, www.kccap.info, was also provided.

7.0 ANY OTHER BUSINESS (AOB)

There being no other business, the workshop was closed at 1.00pm.

8.0 ANNEXES

Annex I: List of Participants

Annex II: Workshop Programme

County Level Consultative Meeting, 19-20 April 2012 Mombasa for Coast Province

Time	Activity
Wednesday, 18th April, 2012	
17.00 -20.00	Arrival at Reef Golf Hotel & Registration of Participants Requiring Accommodation
Thursday, 19th April, 2012	
8.30– 9.00	Registration
9.00 – 9.30	Official Opening and Welcome: a) Remarks by Mr Paul Olando, CBS (MEMR) b) Statement by Provincial Commissioner
9.30 – 10.15	Objectives of the county consultations
10.15 – 10.45	Health Break
10.45 – 11.00	Overview presentation of the climate change Action Plan & Q& A
11.00 – 11.20	Introduction to consultants
11.20 -12.50	Evidence & Impacts of Climate Change in the Counties Groups discussion and Plenary
12.50 -14.00	Lunch Break
14.00 – 15.15	What Actions are being taken to Address Climate Change in the Counties Group discussion and Plenary
15.15 – 15.45	Health Break
15.45 – 17.00	Reporting from Group Discussions & Plenary Q&A
17.00 – 17.15	Wrap Up & Close from, Day 1
19.00 – 20.30	Group Dinner
Friday, 20th April, 2012	
8.30	Reflection from Day 1 of the Workshop
9.00 – 10.15	Actions needed to address Climate Change Group Discussion
10.15 – 10.45	Health Break
10.45 – 11.30	Groups Report to Plenary on Actions Needed
11.30 – 12.00	Feedback from Consultants
12.00 – 12.30	Next Steps in the Action Plan Process & Workshop Evaluation Exercise
12.30 – 13.00	a) Closing Remarks by Dr Alice Kaudia (ES - MEMR) b) Wrap-Up & Close
13.00 – 13.30	Lunch
13.30	Departure

Annex III: Official Opening Speech

Statement by Mr. Ernest G. Munyi, Provincial Commissioner - Coast Province; at the Stakeholder Consultations on the Kenya National Climate Change Action Plan

Venue: **Reef Hotel– Mombasa**

Date **19April 2012**

Good morning Ladies and Gentlemen;

I would like to welcome each one of you to this important meeting on behalf of the Kenya Government and on my own behalf. I would further like to welcome all of you to Mombasa, which is the Gateway to the rest of Kenya, and hope that each one of you will find time to sample Mombasa's famous tourist attractions.

Distinguished Ladies and Gentlemen;

Agriculture is the mainstay of the Kenyan economy, directly contributing 26% of the GDP, and another 25% indirectly.

The sector accounts for 65% of Kenya's total exports and provides more than 70% of informal employment in the rural areas.

Kenya's agricultural operations are mainly rain-fed, making Agriculture extremely vulnerable to climate change and variability.

Climate change has impacted negatively on Kenya's agricultural sector, leading to heavy economic losses. Recent years have witnessed repeated crop failures in parts of the country due to prolonged droughts, including in areas that were traditionally considered 'safe' from extreme climate and weather events like droughts and floods.

Other more recent examples of climate change impacts include the recent extreme frost that especially affected the Highlands East of the Rift Valley, among other areas. This is likely to translate to heavy economic losses for the country, given that these areas are among the leading tea producing areas of the country; and also adversely impact on the country's food security due to the destruction of food crops.

Other climate sensitive sectors include tourism and hydro power generation.

I am reliably informed that climate change is likely to adversely impact the low-lying coastal zone through sea-level rise, which may lead to the submerging of our beautiful beaches and our finest ports like Kilindini. This will have far-reaching repercussions on tourism and the hotel industry, and may lead to large-scale laying-off of our people. There is also fear that sea-level rise will lead to displacement of our populations living near the oceans and along large river valleys as these areas become flooded. These are just but few examples of the likely adverse impacts if nothing is done to avert the current trends of climate change.

Ladies and Gentlemen;

The Kenya Government, with support from development partners and other stakeholders, is in the process of developing a comprehensive Action Plan to implement the National Climate Change Response Strategy (NCCRS) that was launched in 2010.

The Action Plan has eight operational subcomponents covering Low Carbon Development Pathway; Enabling policy and legal framework; National Adaptation Plan; Nationally Appropriate Mitigation Actions (NAMAs); Technology Development and Transfer; Knowledge Management and Capacity Development; National Performance and Benefit Measurement (Measuring, Reporting and Verification); and Finance.

Once the Action Plan is ready, the eight operational subcomponents will be mainstreamed into the relevant socio-economic sectors and funds identified for implementation. The Action Plan hence provides the potential for collaboration with Kenya's development partners to ensure full implementation of the National Climate Change Response Strategy.

The process is designed to involve county stakeholder consultations in line with the Kenya Constitution 2010 so as to ensure a true Kenyan process, owned by Kenyans. There is therefore need for all of us here to play our rightful roles as stakeholders in order to inform this important process.

Distinguished Ladies and Gentlemen;

To make the Climate Change Action Plan respond to our needs, we must be ready and willing to share our experiences of the evidence and impacts of climate change; strategies we have put in place to address it; what we think should be done to help us cope; and the role we think the Government should play to help us fight climate change.

I am informed that towards the conclusion of this process, the organisers will share with the stakeholders their proposals on how best to address climate change so that we can ascertain that our views have been taken on-board.

I would therefore like to reiterate the need for all of us to present our views to help the Government formulate ways of enhancing our resilience to climate change as well as ensuring that our development ventures do not compromise environmental sustainability

Lastly, allow me to thank all of you for being here and wish you most lively deliberations.

Thank you.