

# ICCA NEWSLETTER

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## GREEN ECONOMY INITIATIVES NAKURU AND MOMBASA

By Jacob Olonde

In order to arrest the phenomenon of climate change, developing economies have been encouraged to adopt Green Economy which is aimed at reducing environmental risks and encouraging sustainability. The Government of Kenya has set in motion series of steps to advance the economic transition from business-as-usual to a Green Economy. The transition is based on the Green Economy Assessment

Report on Kenya done by UNEP in 2014.

The assessment report findings provided a basis for a joint GIZ-UNEP project "Operationalizing Green

Economy Transition in Africa: Status of Green Economy initiatives in Ethiopia, Ghana, Kenya and Rwanda". The project's aim is to complement national efforts in selected countries



Workshop on Green Economy

in Africa in transforming their economies towards efficient and competitive engines that reduce poverty while not threatening the environment. The project

supports Kenya by developing key planning and management tools for Green Economy at the sub-national and local level, building the capacity of County governments and other relevant stakeholders from the public and private sector, supporting pilot demonstrations and developing an appropriate national framework for replication.

The project is expected to lead to an enhanced integrated planning as well as changes in County policies that lead to pro-poor and financially viable, resource efficient, ecosystem restoring, low carbon and

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## IMPLEMENTING REDD+ AT THE NATIONAL LEVEL



Mau Forest Masaita Block

By Joannes Atela

Reduced Emission from avoided Deforestation and forest Degradation (REDD+) has been recognized as a mechanism for promoting forests as natural sinks for the

absorption of excess carbon dioxide in the atmosphere.

The effective implementation of rules on REDD+ depends on the compatibility between these rules and existing sectoral policies associated with forests. In a study on the same, researchers applied a

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Graphic from  
globalwarmingisreal.com

*The study established that operationalization of Green Economy at the County level is largely on course.*

Preparation of national REDD+ strategies is usefully coordinated by the Kenyan forestry sector



ICCA Students at Masaita

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climate resilient programmes, build capacities and provide a framework for further replication of pilot lessons and experiences.

It is against this background that the Institute for Climate Change and Adaptation of the University of Nairobi (ICCA/UoN) was awarded a consultancy to undertake a study on behalf of: the International Climate Initiative (IKI); the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB); UNEP; GIZ; Kenya's Ministry of Environment, Natural Resources and Regional Development; and County Governments of Nakuru

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content analysis of policy documents, semi-structured interviews and case study analysis to examine the interplay between REDD+ rules and Kenyan sectorial policies and local socioeconomic settings.

Results reveal that the preparation of national REDD+ strategies in Kenya is usefully coordinated by the Kenyan forestry sector drawing on the sector's policy mandate

and Mombasa.

The study team visited Nakuru and Mombasa Counties where they engaged stakeholders to establish the status of Green Economy initiatives.

The study examined priority sectors selected out of UNEP's classification of eleven sectors namely - agriculture, buildings, cities, energy, fisheries, forestry, manufacturing, tourism, transport, waste and water.

The study established that the operationalization of Green Economy at the County level is largely on course. The required legislations, regulations, systems and structures are at various stages. The progress made so far in both Counties sets the foundation for effective main-

streaming and capacity development. That notwithstanding, it was also evident from the study that there was need to expedite the establishment as well as the review of existing policies, legislations and institutions in order to ensure that they facilitate mainstreaming of greening concepts in development process and service delivery.

In order to address bottlenecks and mitigate other related risks, the report recommends among others; enhancing fiscal and monetary tools to steer economies to the green growth path; revisiting existing laws and tuning their jurisdictions through amendments and directives; re-evaluating sub-

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## IMPLEMENTING REDD+ AT A NATIONAL LEVEL

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and past experiences in forest management. This sectoral mainstreaming however degenerates into negative vertical policy interplay caused by poor consultations with key sectors outside the forestry sector e.g. lands and agriculture and is further exacerbated by sectoral competition for climate finance. Analysis of REDD+ coherences with sectoral policies revealed that forest policies on reforestation and decentralisation are coherent with REDD+ rules (horizontal interplay) but this

coherence is impeded by limited implementation of these measures e.g. poor support and coordination of Community Forest Associations. Lack of coherence was mainly observed between REDD+ rules and resettlement and agricultural mechanisation policies prescribed in the lands and agriculture policies. Agricultural mechanisation and resettlement policies are synonymous with deforestation especially through illegal

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11-13 Nov 2015 Addis Ababa, Ethiopia  
 ICCA staff James Row 5, 3rd from right Eunice Row 2, 2nd from left

national training Eunice Boruru and James Kaoga from ICCA were selected to attend technical trainings (TOTs). Two trainings were conducted last year one at UNEP Nairobi and another one at

ing the Green Economy in their sector specific development plans. The TOTs gave an overview of steps to be followed in the implementation of Green Economy.

The training in UNECA in Addis Ababa focused on natural capital assessment. The TOTs gave an introduction to the concept of natural capital, the importance of Natural capital to humanity and to sustainable development. The participants were also taught to identify the types of capital available around their environment and the ecosystem services they provide. The last part of the training focused on steps in natural capital assessment and the linkage between Green Economy and natural capital assessment.

ICCA technocrats are waiting to participate in the national training that will be conducted in July 2016.

**ICCA and the ministry of environment were selected as the technical institutions to spearhead the trainings.**

**By Eunice Boruru**

GIZ and UNEP are in the process of integrating Green economy in five African countries namely Kenya, Ethiopia, Rwanda, Ghana and Mozambique both at national and sub national levels. In Kenya, ICCA and the ministry of environment were selected as the technical institutions to spearhead the trainings. As part of the capacity building programme for the

UNECA in Addis Ababa.

The two staff members gained more knowledge on the concept of Green Economy and its implications on various economic sectors in Kenya and its overall contribution to national economy and sustainable development goals. The training in UNEP focused on the tool kit that will be used to train the stakeholders from various sectors on steps to be followed in implement-

## ICCA RESEARCH IN TURKANA

**By James Kaoga**



ICCA Research Team in Turkana

One week in Turkana County was a real experience for the ICCA. Needless to say we were a bit apprehensive upon arrival as we didn't know how the new conditions will treat us. Fortunately, this turned out to be one of best field experience as the community displayed a friendlier engagement. After spending some time with the local communities, gaining invaluable

first hand experience on the real impact of climate change among the pastoralist communities



## IMPLEMENTING REDD+ AT A NATIONAL LEVEL

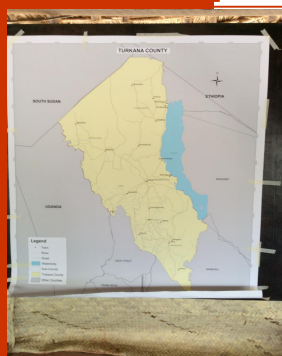
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and politically motivated agricultural or settlement expansions into Kenya's forest areas. At the local level, REDD+ showed potential to positively influence local livelihoods but the aforementioned national institutional gaps and strict carbon standards and prices lead to negative trade-offs between carbon sequestration and alternative livelihoods. Strong multi-stakeholder consultative mechanisms are required so that both Kenyan policy and socioeconomic settings can support effective REDD+ implementation.



ICCA Students at the Kenya Forestry Training Institute discussing with the Principal of the Training Institute in Londiani

# MIGRATION AND CLIMATE CHANGE



Turkana County Map

Climate Change has been identified as one of the causes of conflict and migration in a 2015 survey undertaken by the University of Nairobi's Institute of Climate Change and Adaptation (ICCA). The December 2015 survey report carried out in Samburu and Turkana indicate migration as a consequence of climate change. Extreme

migration is natural or caused by climate change, and be able to assess the trend," said Prof. Wandiga. The University of Nairobi's Institute survey adopted

tion, different approaches have been and are continuously being implemented. These include building of water resources, diverse economic activity including introduction of agriculture and incorporation of early planting. Interfaith platform represented by Evans Onyiego advocated building capacity for peace keeping commit-

To counter climate -change induced conflict and migration, different approaches have been and are continuously being implemented



The Director ICCA presenting participants with certificates

weather conditions with varying rainfall and temperatures have led to cattle raiding and displacement of human population as communities compete for pasture and water. While officiating the stakeholders' workshop, Acting Director of Institute of Climate Change and Adaptation, Prof. Shem Wandiga said that the aim of the survey was to understand the pattern of migration, its causes and disasters. "We wanted to find out whether the

United Nations report, which revealed that more than 150 people are killed annually in cattle raids in Turkana, Samburu and Isiolo, while 15% of animals die in these counties due to drought. Chris Imana, Deputy County Secretary, Government of Turkana, added that cattle rustling, scramble for oil in Turkana and political incitement were also contributory factors to conflict. To counter climate-change induced conflict and migra-

tees to help solve societal conflicts. He said that traditional methods employed earlier helped identify rainfall patterns, but drought in the region has led to conflict where communities raid cattle. The half-day stakeholders' workshop awarded participants with certificates of participation. The participants hailed from European Union, International NGOs including International Livestock Research Institute (ILRI), Care Kenya, Community Based Organi-

Characteristically dry landscape of Turkana



# TECHNOLOGY, INTELLECTUAL AND CLIMATE CHANGE



*Electric Cars. One technology that can be used to reduce greenhouse gasses in the atmosphere*

Climate change poses future uncertainties as fossil fuels continue to be exploited and land use changes progress unabated. This calls for a global response in terms of strategies to this challenge. Paris COP 21 was the venue of a historic universal agreement aimed at achieving a global reduction of Greenhouse gasses (GHGS) and maintenance of global temperatures at below 2 degrees Celsius in this century. The ambitious efforts to further limit the global temperature increase to 1.5 degrees Celsius above pre-industrial levels as is demanded by the island states, will be significant in defending against the worst

impacts of the changing climate.

Achieving this objective requires technology, technology transfer and innovation which will transform current technologies into cleaner, climate-resilient technologies.

Developing nations are highly vulnerable to climate change and thus, have to embrace innovation as the foundation for sustainable economic development.

Intellectual property law in climate change may hamper the diffusion of clean technologies and as such, there is need to address this. Technology transfer in the context of climate change is defined as “a broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change

amongst different stakeholders such as governments, private sector entities, financial institutions, non-governmental organizations (NGOs) and research/education institutions” (IPCC 2000 Methodological and Technological Issues in Technology Transfer).

Anticipatory mitigation through technological innovations and adaptation strategies should both be pursued actively and in tandem and not as alternatives. Mitigation is essential while adaptation is inevitable because without mitigation future generations are likely to be confronted with overwhelming climate change negative impacts, that adaptation will no longer be feasible. Climate change stabilization requires ubiquitous technological innovation, transfer and diffusion. The

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*Developing nations are highly vulnerable to climate change*

## Migration and Climate Change

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sations (CBOs), Universities, International Research Organizations, as well as Ministry of Environment and Ministry of Agriculture, Livestock and Fisheries.

Prof. Shem Wandiga heads the Institute for Climate Change and Adaptation established at

the University of Nairobi in 2013. The institute admitted its first cohort students in March 2013 and the sixth PhD cohort in June this year. Currently it has a total of 170 Masters and PhD students. Prof. Wandiga notes that the institute has interest not only in the science of climate change, but also in the

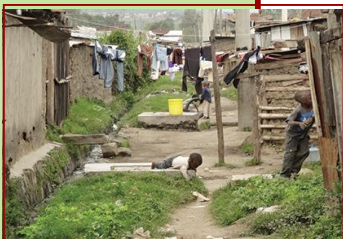
impact of climate change on the livelihoods of the communities who must adapt to this change or perish. Also of interest to the institute are the technologies in climate change that will support adaptation and sustainability.



*Mapping migration through a participatory process*

## URBAN FORM AND CLIMATE CHANGE

By Helen Wanjohi



65% of Nairobi's residents are estimated to live in informal settlements

Nairobi city has already felt the impacts of climate change in weather extremes with massive flooding causing loss of property and life,

In urban centers such as the City of Nairobi, the interplay between the desire to live close to jobs and amenities, coupled with land scarcity and high rents in urban areas forces poor communities into informal settlements with lower rents, often located on hazard prone areas such as flood plains or steeply sloped land. 65% of Nairobi's residents are estimated to live in such informal settlements, a population expected to double over the next 10 years.

Nairobi city exhibits uneven urban form, ranging from the planned airy suburbs, the relatively dense middle-income residences to the dense slum areas. As climate changes Nairobi city has already felt its impacts in the form of weather extremes with massive flooding causing loss of property and life, while affecting major city functions such as traffic flow and electricity supply in the past year alone. According to WHO and UN Habitat, dense urban form amplifies the impact of climate-change induced disasters and the residents of informal settlements are forced to bear a disproportionate burden of

hazard risk. They also do not take action to reduce their exposure to environmental risks because they are consumed by the immediate demands of survival and of avoiding the physical, social and psychological risks associated with poverty. The shack architecture (on ground level) of most informal settlements mean that instances of climate disasters, such as flooding, have the potential to cause destruction to a large number of urban functions. In most informal settlements, the roofs and walls are built of iron sheets, a material that is not strong enough to endure severe flooding, and can expose residents to heat

## PAJCA HOSTS YOUTH FORUM ON CLIMATE

By Naaman Agengo

Climate change has several effects which include loss of biodiversity, increased temperatures, increase and decrease of rainfall in some areas, desertification and increase in sea level and among others. It was against this background that

Pan Africa Climate Justice Alliance organized an event to demonstrate to the youth the seriousness of climate change and what needs to

be done in order to control the rate at which the

climate keeps changing.

The objectives of the meeting were to raise environmental awareness amongst the youth as the determinants of future generations; inform the general public on how to preserve the environment sustainably so as to manage and adapt to climate change.

The meeting was attended by Members of the public, Former U.O.N student leader (Irene Kendi), Students from The University of Nairobi and from other universities across the country. Several Kenyan celebrities, Primary and Secondary school pupils. The event was successful as was indicated by the attendance.

Participants were educated on environmental issues regarding conservation and extinction of species in an innovative entertaining way. A tree planting ceremony was conducted at the Uhuru park to raise awareness on environmental awareness and to enhance the aesthetic beauty of the park. After the tree planting session, all the participants marched around Nairobi central business district to create even more awareness amongst the members of the general public who could not make it for the meeting.

Youth who attended the PAJCA event demand action on Climate change



# Nairobi's Forgotten Poor

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**The nightmare of poor urban Planning impacts all including children**

stress in the event of extreme temperature rise. In other areas dominated by stone-built high rise buildings, the quality of construction is poor, leaving residents at risk of collapse in the event of heavy rainfall (such as the collapse of a six-storey building in the neighbouring Huruma Estate). Majority of these apartments also have narrow staircases, inadequate to channel residents out safely in the event of a disaster. At the same time, narrow non-symmetric paths constrain any efforts by rescue vehicles to access disaster scenes. As the majority of residents of informal settlements are tenants paying low rents, landlords have little incentive to improve the condition of housing to reduce the exposure to and losses from climate hazards.

There has been a two-fold link between the urbanization of Nairobi city and climate change. In Nairobi alone, the urban poor in particular contribute to GHG emission through fossil fuel burning biomass use for energy (53.9% of household use paraffin for cooking while 16.5% use charcoal), both of which are

unclean energy sources. At the same time, climate change contributes to rapid urbanization, because as the NCCAP notes, climate change will in the coming years exaggerate the rural-urban migration trend by making rural livelihoods and conditions more challenging.

In Kenya in particular, there has been a heavy focus on climate change impacts on rural areas, with little focus being availed to urban areas, yet in Nairobi alone, over a sixth of the city residents live in informal settlements, a population expected to double over the next 10 years. Indeed, in acknowledging in the NCCAP that

Kenya is expected to become predominantly urban country by 2033 it is noted that the urban poor living in slums are particularly vulnerable to floods and related climate disasters. While there have been efforts both by

government and non-governmental institutions to upgrade urban poor settlements, little effort however has been specifically targeted at ensuring that climate change adaptation and mitigation are integrated into any urban form interventions.

There will be little achievement of Kenya's desire in her Intended Nationally Determined Contribution (INDC) to enhance the adaptive capacity of the population, urbanization and housing sector as well as the eleventh Sustainable Development Goal (SDG 11) that targets to make cities and hu-

**climate change will in the coming years 'exaggerate the rural-urban migration trend' by making 'rural livelihoods and conditions more challenging'**



**Urban housing challenges in Kibera, Nairobi**

Image copywrite: voanews.com

man settlements inclusive, safe, resilient and sustainable by the year 2030, unless deliberate efforts to mainstream climate change considerations into planning and infrastructural design for informal settlements.

## Institute for Climate Change and Adaptation



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*Focused on Developing Capacity for  
Climate Change and Adaptation in Africa*

### Thematic Areas for Research

- Climate Risk Management and Food Security
- Human Dimensions and Health
- Policy and Communication
- Technologies
- Water Environment and Eco-systems

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technologies transferred and diffused should be context specific, this raises a challenge for the developing world as the transfer of technology from the developed world still needs to be adapted to be applicable in the local context. and it should be noted that, while mitigation technologies might be a completely new task, adaptation technologies are a continuation of an ongoing process.



Image from energynext.in



Image from power-eng.com

**Solar and Wind Energy - A Clean Alternative to Carbon based Fuels**

## GREEN ECONOMY INITIATIVES

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sidey provisions and redirecting funds towards ventures that provide permanent solutions; supporting stakeholders to decide on the preferred renewable technologies; giving due attention to human capital investments; initiating institutional adjustments or realignment at the county level to enable the adoption and adaptation to innovative solutions; developing a common language through standardizations of targets and benchmarks and; undertaking sensitization and communications programme to bridge the knowledge gap. The study team was headed by Professor Shem Wandiga, the Director of the Institute for Climate Change and Adaptation, University of Nairobi.

## ICCA IN SAMBURU



By James Kaoga

This was after having one week experience in Turkana County. Unlike Turkana trip, this time round we were more prepared no matter the conditions. We anticipated hot weather in Maralal only to encounter the contrary. Guess WHAT! This place also experience chilly mornings. Therefore, we had to put on our pullovers.



Addressing a workshop in Samburu

The one week was full of surprises and we learn how the Samburu community cope with climate change and its impacts on conflicts and migration.



The Samburu Landscape