SOCIO - ECONOMICS POLICY AND GOVERNANCE RESEARCH PROGRAMME

CREATING CONDUSIVE ENVIRONMEMT FOR CONSERVATION AND COMMERCIAL FORESTRY IN KENYA

DR. JORAM KAGOMBE DD-SPG



Presented in the 7th Colloquim on 29th March 2023

CONTENTS

- Role of SPG program
- Key results in policy and legislative
- Valuation and Pes and NCA
- Financing in forestry
- Marketing and trade and value addition
- PFM and livelihoods
- Governance in foresty
- Commercial forestry
- Challenges
- Opportunities
- Conclusion

Introduction

- Forest sector in the country forest and tree cover, contributuon to GDP,
- Forest cover 8.3% but one reported under REDD 5.99% with aspiration to achieve 10% by 2030
- Tree cover 12.13% with aspiration to increase to 30% by 2032
- Forest guided by Constitution 2010, Vision 2030, National Forest Programme, FCMA 2016, Climate change Act 2013,
- 30% tree cover and rehabilitation strategy

30% tree cover 15B trees by 2032

- Whole government whole society approach
- Multiple bnefits, Landscape restoration, biodiversity, livelihoods and decent jobs
- To cover 10.4 M ha conservation 65% (9.76B) and commercial 35%(5.3B)
- 70% equivalent to 10.6M Ha in ASAL
- Private sector 1.5 B, Faith based 50M
- Commerical Tree growing 3.8B
- Private commercial 500M
- wood producers 100M
- Sustainable charcoal 500M
- Gums and resins 200M

Problem/Research Gaps Addressed by SPG

Research in Socio-Economics, Policy and Governance addresses cross cutting issues that influence forestry and environmental development in Kenya which include;

- \checkmark Poor governance of forest resources
- ✓ Forest land tenure and conflicts over resources
- ✓ Society interests, gender and special interest groups in forests and forest resource management
- ✓ Trade and marketing of forest products
- ✓ Contribution of forests to livelihood improvement
- ✓ Forest investment and financing

"Policies should be based both on science and empirical data, but often times policies are made on the basis of political convenience and sometimes on vested interests with no reference to science."



Keriako Tobiko (Cabinet Secretary Environment and Forestry), at the Sixth Global Environmental Outlook (GEO-6) negotiators meeting, Nairobi, January 2019



Forest, Policy Legislation and Governance

- Areas of research focus;
 - Evaluation of polices and legal frameworks for enhanced forestry sector development
 - Review, development of subsidiary legislations and operationalization for Forest Act, 2016
 - Evaluation of viable models for stakeholder participation in forest management and equitable sharing of costs and benefits
 - Studies on Forest History, Indigenous communities and indigenous knowledge in management of forests
 - Development of Policy briefs to inform policy action

Policy Legislation and Governance

- Activity 1: Drafting of KEFRI Bill and Strategy
 - Development of a stand-alone Bill and strategy to enable it to carry out it's forestry research mandate and activities more effectively and to achieve its strategic objectives

• Progress

- Draft bill developed and subjected to internal discussion with inputs from scientists and top management
- Bill presented to KEFRI board and forwarded to Principal Sectary (P.S) to schedule public participation
- Bill to be presented to go into pubilc participatiom
- Bill will create enabling environment for Reasearch in Forestry

Key Achievements

• Activity 2: Review of Policies and Legislation

Progress : The Draft National Forest policy, 2020 was reviewed finalized and submitted to the Ministry of Environment

- Finalization of Policy will set direction on Forest sector in the country
- Review of FCMA 2016 and Climate change Act
- Subsidiary legislations in FCMA 2016
- Model County Forest Policy and Legislation

• Activity 3: Participation in the development of subsidiary legislations

Progress: Participated in the drafting of:

- The Forests (Community Participation in Sustainable Forest Management) Rules, 2021
- The Forests (Incentives and Benefit Sharing) Rules, 2020
- REDD+ Strategy
- Draft National Forestry Research Strategy
- Legislation set up enabling environment

Key achievements

• Activity 4: Participation in the development of subsidiary legislations

Progress: Participated in the drafting of:

- Forest Policy
- Draft recommendations of review of FCMA 2016
- Inputs to amendment of FCMA 2016
- Draft Forestry and Allied Resources Regulatory Authority framework
- Inputs to Kenya Water Towers Agency Bill
- Inputs to Review of EMCA
- Model County Forest Policy and Legislation
- Draft Forestry and Allied Resources Regulatory Authority framework

National Key Achievements

- Community participation in forest management.
- Chapter of community participation in FCMA
- Regulation developments.
- FCMA review
- Forest policy
- County forestry policy and regulations
- Benefit sharing
- Need to develop regulations to operationalize the FCMA and climate change act.

Payment for Ecosystem Services and Forest Valuation

- Areas of research;
 - Development of frameworks for Piloting and implementation of Payment for Ecosystem Services (PES) Schemes
 - Participation in PES schemes
 - Total forests ecosystems valuation
 - Natural capital accounting
 - Developing models for rewards and incentives for sustainable land management for enhanced flow of ecosystem services

Forest Valuation and Payment for Ecosystem Services

• Strengthen Forest and Allied Resources Valuation

• Development of a National Program for Payment of Ecosystem Services in Kenya

• Progress

- Development of a national framework for PES ongoing to incorporate case studies from Coast and Central Kenya
- Working with partners to develop national framework of PES and pilot the same

Mainstreaming of forest ecosystem values in national system of accounts

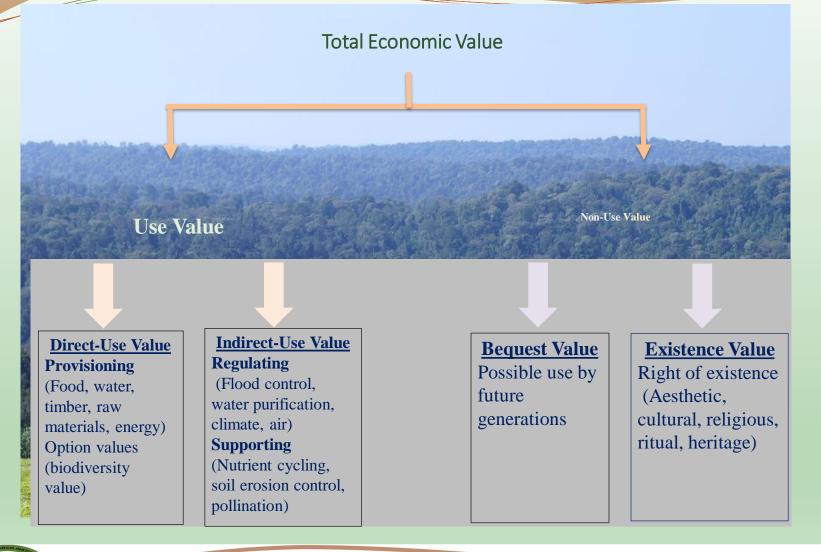
 Economic valuation of ecosystem services is critical for the provision of data that would contribute to the long-term sustainable management of the landscape by all stakeholders



Undervaluation and inadequate information has resulted in marginalization of forest ecosystems in budget allocations- landuse change decisions and degradation



ECOSYSTEM SERVICES VALUATION



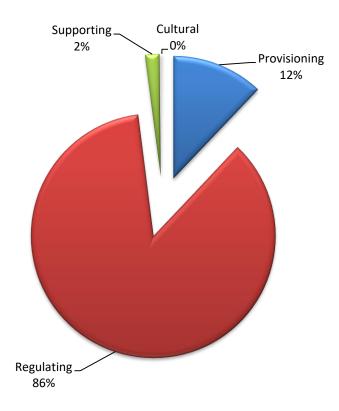
Summary of key findings

- Supply about 35 million cubic meters of water valued at 3.4 billion shillings per year for irrigation, industry, and commercial uses by various stakeholders.
- The total economic value (TEV) of the three ecosystems is about KES 350 billion (USD 3.5 billion) per year.

forest valuation

- Economic valuation of East Mau and community dependence (2013-2016)
- TEV is ~ KES 24 bill(US\$266mil.)
- Economic value of Mau complex, Cherangany hills and Mt. Elgon-2018
- TEV= 350bill./yr
- Regulating and supporting forms bulk of TEV

Contribution of ES types of aggregate TEV of Mau,

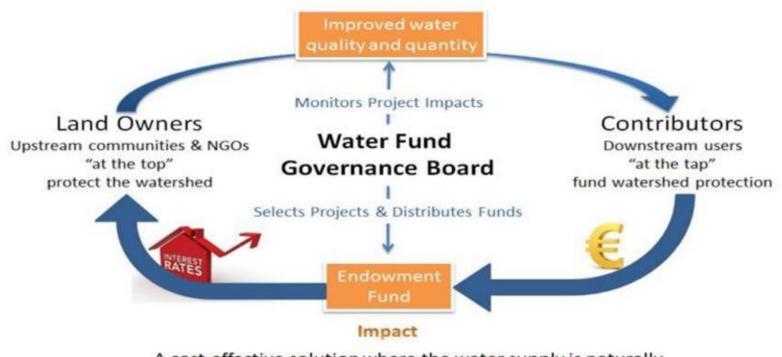




Water Fund model

Our Goal

Harness nature's ability to capture, filter, store and deliver clean and reliable water



A cost-effective solution where the water supply is naturally replenished and filtered and rural livelihoods are improved

Forest Valuation and Payment for Ecosystem Services

- Strategy : Strengthen Forest and Allied Resources valuation
- Activity : Development of a Framework and Tools to Support the Incorporation of Ecosystem Service Values in National Accounting Systems of Kenya through the Kenya National Bureau of Statistics

Progress

- Total economic Valuation conducted for key ecosytem and methods developed
- National PES framework development ongoing with support of USAID/US Forest Service
- Key Collaborators: KFS, KNBS, USFS, USAID, KWTA

Natural Capital Accounting (NCA)

- Contribition of forest to GDP 3.1%
- Undevaluation of Forest as only farm gate prices captures
- Total Ecosytem service valution done for Cherangani, Mt. Elgon and Mau showed in 2016 showed that indirect benefits from forest ecosystems contributed to 84 % of the total forest ecosystems value (which goes uncaptured) while direct value was 16% of the total value
- TEV of three ecosystems (Mau, Cherangany, and Mt Elgon) at approximately USD 3.5 billion with regulating services dominating at over 80% of the total ecosystem values, followed by provisioning and cultural, supporting services in that order.

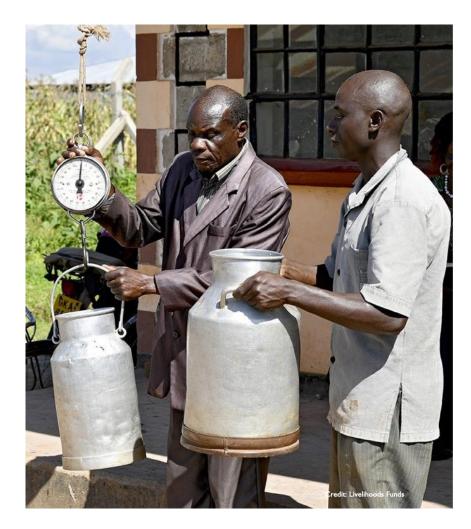
WHAT IS NATURAL CAPITAL?

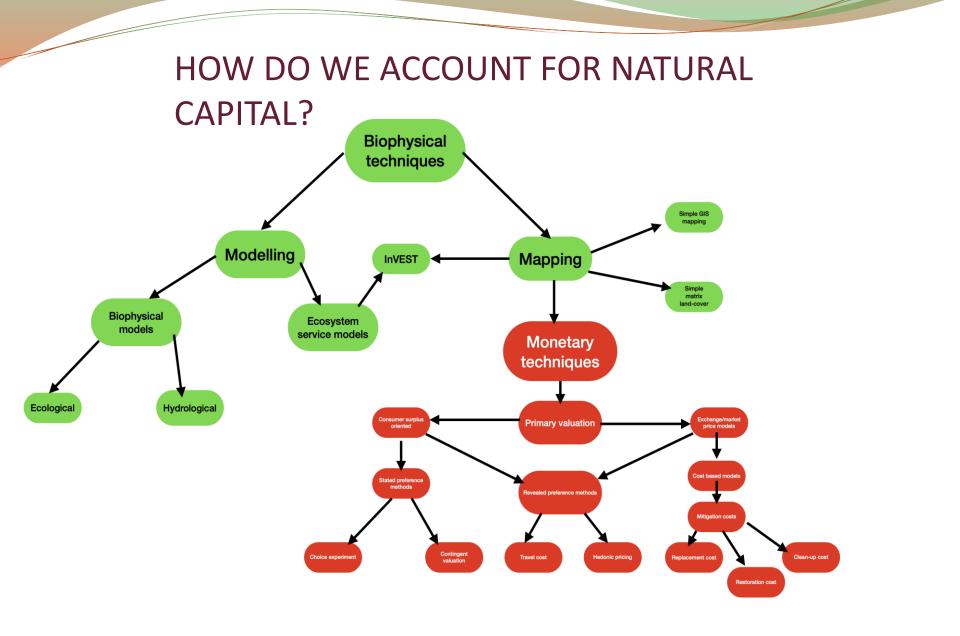
- The stock of renewable and non-renewable natural resources on earth (e.g., plants, animals, air, water, soils, and minerals)
- These combine to yield flow of benefits or "ecosystem services" to people and hence important for sustainable development, e.g., forage for livestock production, water flow regulation

WHY ACCOUNT FOR FOR NATURAL CAPITAL?

Natural capital accounting (NCA) refers to the use of an **accounting framework to provide a systematic way to measure and report on stocks and flows of natural capital**, analogous to accounts for other forms of capital.

Kenya need to put in place a system to account for the status and use of its valuable natural resources and use it to inform important decisions.





LINKING NCA WITH THE SYSTEM OF NATIONAL ACCOUNTS (SNA)

- The 43rd session (March 2012) of the United Nations Statistical Commission adopted the first international statistical standard for environmental-economic accounting.
- The System of Environmental-Economic Accounting 2012—SEEA Central Framework (SEEA Central Framework).



TECHNICAL COMMITTEE

- Kenya Forest Service (KFS),
- Kenya Forest Research Institute (KEFRI),
- Kenya Water Towers Agency (KWTA),
- Kenya National Bureau of Statistics (KNBS),
- University of Nairobi (UoN),
- Council of Governors (CoG),
- Kenya Wildlife Conservancies Association (KWCA),
- Natural Resources Forum (NAREF),
- National Museums of Kenya (NMK),
- USFS, and
- USAID

KEY FINDINGS No framework for applying SEEA in Kenya

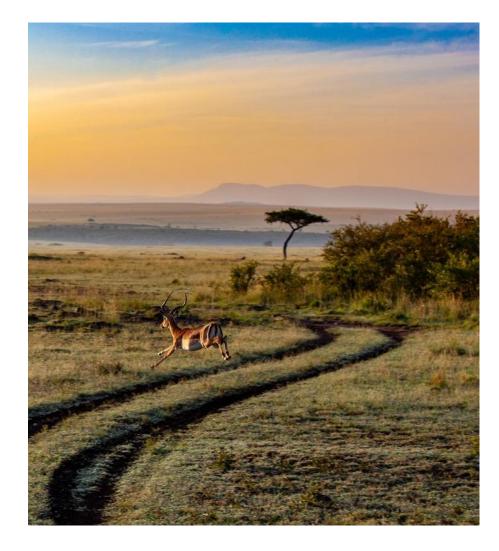
No enabling policy on PES and as a result environmental benefits that would accrue from PES arrangements have not been fully exploited.

No enabling policy on PES and as a result environmental benefits that would accrue from PES arrangements have not been fully exploited.

NEED TO GENERATE FIRST-EVER FOREST ACCOUNTS

demonstrate:

- the country's dependence on its forest assets,
- the many pressures on them,
- the risks to them, and
- how forests can contribute to sustainable developm



WHAT IS REQUIRED TO CARRY OUT THE FOREST ACCOUNTS?

- Quantifying natural capital and its benefits using the SEEA is always done in physical terms and may be translated into monetary values in cases where this is useful and appropriate.
- KFS to generate physical supply and use tables (PSUT) as designed by KNBS.



Forest Investment and Financing

- Areas of research;
 - Role of public private partnerships (PPPs in forest sector development
 - Evaluation of viable concessions and leaseholds for public and community forestlands
 - Impacts of forest technologies on socio-economic, cultural and environmental resilience
 - Evaluation of Technical and financing opportunities for forest investment
 - Unlocking finance for forest investment in Kenya

Forest Governance Researc

- Governance of CFA in Kenya
- Assess the Opportunities and Constraints in Green Economy Development in Kenya's Forestry Sector -Policy Brief developed
- Evaluation of Governance Structures and Management of Urban Green Spaces in Kenya-Data collected in Nakuru, Kisumu, Mombasa and Nairobi.
 Draft technical paper prepared
- Governace second generation issues

Strengthen Forest And Allied Natural Resources Forest Resources Management And Livelihoods

• Undertake Economics Studies on Forest Enterprises

• Carry Out Comparative Studies and Cost Benefit Analysis of Forest-Based Enterprises

• Progress

- Mapping of key commercial forestry actors in Nyandarua and Laikipia Counties
- Viable economic models and enterprises identified Main costs and revenues in the enterprises identified
- Observations: Poor record keeping (cost/ revenue data), informal market affecting tree valuation, poor adoption of technologies, i.e. improved seeds

Forest Extension

Assess Effective Technology Transfer and Information Platforms –*Ongoing projects* Objectives

- Explore new approaches in extension (animations, games, infographics, comics, and SMS)
- Analyze learning outcomes from traditional and contemporary extension approaches
- Develop a framework for integration of new and old methods of extension
- Target youth



Component : Forest Extension ctnd...

- Development of animated dissemination materials, accessed through; https://www.youtube.com/watch?v=XZh7rv-3p94
- Assessment of social media as a dissemination platform for animated video was conducted and has shown great potential
- Draft guideline on developing animated videos as dissemination materials has been undertaken.

RESEARCH IN FOREST TRADE AND MARKETS

- Forest play a key role in Kenya's socio-economic development
- Kenya is the largest importer of timber in the Eastern Africa
- KEFRI has been at the forefront in undertaking research in forest trade and markets to enhance trade both locally and regionally
- Key research outputs generated include;
 - Yearly report on tree products market situation (Price trends and product flow)
 - Mapping transboundary timber trade and flow within the East Africa region

Forest Products Marketing And Trade ctn...

Preliminary Results

- There is generally Scarcity of timber (raw materials) in the markets
- There is flow of timber products from the regional markets
- There is harvesting of young juvenile trees, thus affecting quality of timber in the market the most affected species is cypress
- There is high demand for byproducts such as sawdust, wood shavings and offcuts from companies dealing in briquette making and others for energy generation in boilers



TOWARDS ENDING DROUGHT EMERGENCIES: ECOSYSTEM BASED ADAPTATION IN KENYA'S ARID AND SEMI-ARID RANGELANDS KEFRI-TWENDE PROJECT

- Kenya Forestry Research Institute (KEFRI) is implementing the TWENDE Project with other partners with funding from Green Climate Fund (GCF)
- KEFRI is supporting the **Gums and Resins** value chain by providing **value chain support** and **market development**.
- The value chain support to gums and resins cooperatives and groups is expected to boost and diversify local communities' sources of income and livelihoods
- The project is working in five Counties Marsabit, Isiolo, Samburu, Garissa and Tana River

KEFRI-TWENDE PROJECT ACTIVITIES

- Organizing value chain actors to explore value chain opportunities
- Building the capacity of gums and resins cooperatives and groups
- Linking producers and buyers to markets
- Training on sustainable natural production and postharvest handling practices
- Infrastructural support- Provision of basic equipment and aggregation centers

Land Tenure

- Key to forest sector development due to long duration trees before harvest
- Ownership: Public, community and private
- Acess rights in lieu of ownership title lease, licenses, hire, concessions - clarity required
- How to deal with community land especially on benefits and tragedy of common
- Dealing with conflicts arising from planting trees along boundary leaving 3 metres
- Develop frameworks for leasing land for tree planting

Other Research Areas

- Economic studies on forest enterprises
- Development of forest extension tools and methods
- Participatory forest management
- Urban forestry
- Green economy
- Natural Capital Accounting
- Social Protection in forestry

CASE STUDY: PELIS REVIEW

- PELIS is carried out in an area of **28,800** ha of the total plantation area. It involves approximately 30,000 farmers in about 135 forest stations in the country
- Review Committee was launched on 14th Nov 2019
- Cultivation of food crops greatly impacted on their livelihoods contributing to one of the national goals of poverty reduction. With average yield per ha of 64 bags for maize, 17bags for beans and 138bags for potatoes from the 28,800 ha of land under PELIS
- CROPS INCOME Analysed to be **Ksh 1,759,956** per ha within the 4 years

- PELIS effective arrangement for plantation establishment- Compliance to regulations is at a score of 67.61%.
- Survival of tree seedlings in PELIS stations is above average at 69.1 % which gives allowance to minimal beating up.
- Unplanted areas (back logs) are declining indicating successful plantation establishment. 🛛
- Funding levels and timing need to be improved and made reliable for successful plantation establishment.
- Review and enforcement of PELIS legislation and guidelines are important to address challenges









RECOMENDATIONS PELIS

- PELIS Rules and guidelines to be amended 🛛
- Cultivation permits for plots to include handing over conditions by farmers back to the forester after cultivation
- Capacity building for CFA and KFS officers on application of PELIS guidelines. 🛛
- Adequate and timely funding is important for PELIS to be beneficial.
- Develop activity standards for determining PELIS success in future audits 🛛
- Farmers benefits beyond plantation establishment to I be documented and where possible increased, to create a long term att

CASE STUDY: Impact of Timber moratorium 2018 todate

- Scarcity of wood product increased prices and income from forestry products and encouraged individuals and syndicates to venture into commercial tree growing.
- Triggered increased interest in financing tree growing by the government, individuals, private sector and corporates and increased efforts in rehabilitation of degraded forests and tree planting in general.

- Resulted in **increased forest products prices** in the country notably, timber whose price rose by on average 22.7%, firewood (25.5%), charcoal (40%) and treated poles (15.3%).
- Increased in prices culminated in additional firewood expenditure of KES1.3 billion, KES 3 billion, KES 46 million and KES 19.7 billion by KTDA factories, schools, tobacco curing and charcoal consumers respectively.
- Redundant employees estimated at 44,000 and hence annual income loss of KES 4 billion. Saw milling sector estimated losses due to idle machinery was KES 10 billion. Additionally, the KFS lost KES. 4 billion in uncollected revenue
- increased timber imports leading to foreign exchange loss of KES 1.04billion.
- Led to economic collapse of forest dependent urban centres and increased poverty among the local communities.

Recommendations

- Urgent need to develop a system of managing harvesting and timber sale by assigning the monitoring of pre-harvesting inventory, volume assessment and stock valuation and disposals to independent agency/unit to ensure transparency and accountability.
- Strengthen infrastructural and establish an effective monitoring system to ensure sustainable management of the country's forest resources with special focus on periodic independent multi-stakeholder reviews.
- Review licensing system to make it be fair, equitable and transparent.
- Strengthen sector non-state umbrella institutions to enable them play their respective roles in forest sector development and governance (KTMA, CFAs, KWPA, and KTGA.)

- Development of customized set of Principles, Criteria, Indicators and Standards for SFM in Kenya through a participatory process.
- Hasten the concession policy and subsidiary legislation to guide Concession Management Framework to attract private sector players with their financial and operational efficiency ethic into the sector development.
- Enhance decentralization of funding and operations to facilitate efficiency and more participation by County Government and stakeholder on forest resource management in the country.
- Kenya should strategize to position itself to exploit the vast regional high-quality forest resources in oder to become the regional hub for secondary processing and export

1st Kenya Commercial Forestry Investment Conference and Expo (KCFIC)

- Successfully held from 23rd to 26th
 Nov 2021. Attracted about 300 pax per day
- A platform stakeholders to share knowledge, experiences, innovation, and opportunities in the commercial forestry sector in Kenya and the region.

• Key Partners:

 MoEF, KFS, NRF,COG,FAO, UNDP, JICA, Base Titanium Ltd, KCIC,GATSB Y Africa, WeEffect,Global,FamilyBank,K CB), Ukulima Sacco,AsiliSacco,Better,Gl obeLtd, Komaza Ltd, Kakuzi Ltd, One Acre Fund and FSK.





KCFIC&E Ctn...

Key highlights

- Benchmark innovative public plantation management models such as Leasehold as used in Uganda
- Need for adoption of *innovative* and *efficient production, harvesting* and *processing* technologies across the value chains
- Establishment of a platform to support linkages in the sector (technology, information, marketing, advisory, financial etc)
- Way forward: conference and expo proceedings out



Key Messages

- Capacity building, Policy and financial support to innovators in commercial forestry such as solar drying facilities of tree seeds
- Forest certification to promote sustainability in the sector through proper chain of custody
- Benchmark innovative public plantation management models such as Leasehold as used in Uganda
- Need for adoption of innovative and efficient production, harvesting and processing technologies across the value chains
- Capacity building of youth, women and other affirmative action groups in the forestry sector across the forestry value chain including seeds and seedling production

Way forward

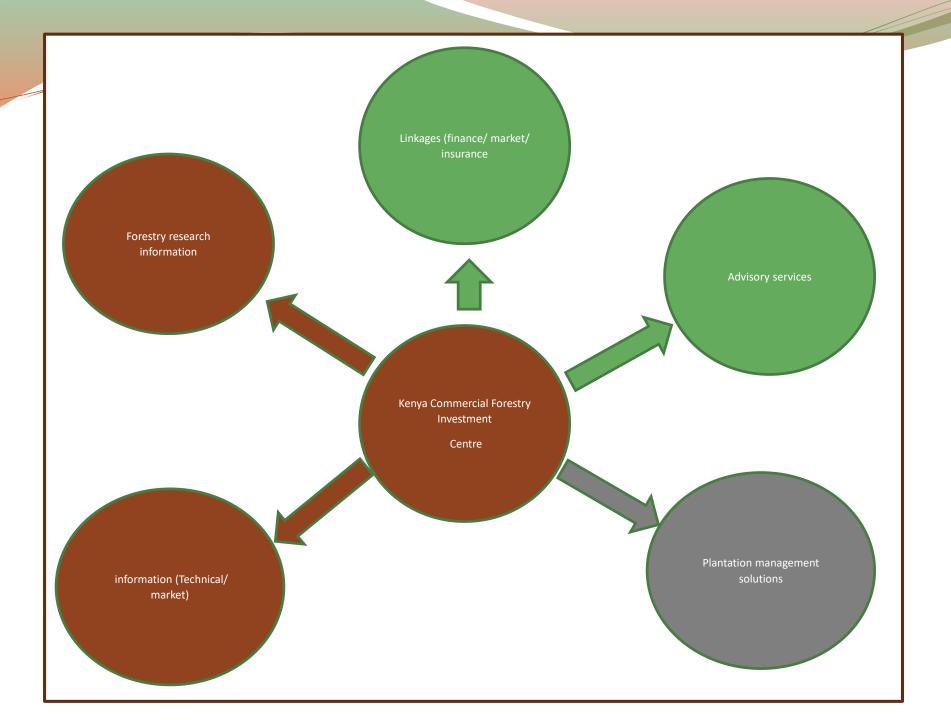
• The need to hold the conference and expo bi-annually to assess the status and progress of the sector

Establishment and operationalization of the Kenya Commercial Forestry Innovation and Investment centre to continue the discussion on improving commercial forestry in Kenya .

- Develop a strategy for the center .
- Create platform for continuous engagement with stakeholders from both public and private investors including youth and women interested in commercial forestry .
- Engage with stakeholders on better markets and prices of FTP and NTFPs-on going

Kenya Commercial Forestry Innovation Centre Objectives of the Centre

• To enhance the adoption and promotion of commercial forestry in Kenya as a competitive land use option to diverse investors and landowners



Proposed Activities

- Market information,
- Financial/ Market linkages
- Extension services: products, and services through suitable Public Private Partnership (PPP) models.
- technical advisory services,
- plantation management solutions,
- science laboratory services,
- forestry research dissemination, among others.
- Other services as may be required by the industry

Partners involved and their

interest

- KEFRI Dessimination of tested technologies, use of high skilled staff in consultancies, raising corporate profile
- FAO -Upscaling tree growers coopratives through marketing and value addition
- UNDP Using ICT decision support systems to bring onboard Youth in forestry enterprises
- KCIC/UNDP Incubation of forestry enterprises
- Gatsby Use of technology to improve productivity and efficiency in forestry
- KFS Upscaling dessimination technologies
- Ministry Upscaling 30% tree cover

Governance arrangements

- The Centre's governance will adopt a *multi-institution*, *multi sectoral* approach
- KEFRI will adopt a coordination role
- Different organizations involved in commercial forestry at different levels i.e tree growers, harvesters, processors, manufacturers, traders, policy making entities e.t.c to be part of the Secretariat overseeing the operation of the Centre.
- Different roles within the Centre will be led by different actors along the value chain for the Centre activities to portray a wholesome representation of the commercial forestry sector in Kenya.

Funding mechanism

- Development partner initiatives
- The Kenya government (national and county),
- Private sector players,
- Revenue streams from services rendered by the Centre,
- Endowment Fund as stipulated in (FMCA, 2016)
- Advertisements through the digital platform,
- Payment for consultancy services among others.

Sustainability of the center

- Adoption of a *multi-agency, multi-institutional approach*, through a public private partnership model to manage the affairs of the Centre
- Leveraging on *local, regional, and international linkages* in forestry sector where services can be offered at a cost
- Mechanism for self-finance raising such as sale of technologies, professional fees charged for advisory services, membership fees, levies ploughed back

Potential benefits of the Centre

- Promote sustainable production of farm forestry products
- Marketing of products/sourcing the markets
- Lobby for farmers to increase membership in organized groups/come up with proposals
- Resource mobilization for the farmers/center
- Capacity development to members based on needs
- Representation of many farmers in a diverse platform
- Advocacy, policy dialogues e.g., tax regimes

Potential benefits of the Centre

- Avail funds for accessibility to farmers and stakeholders
- Training in matters of finance
- Networking/linkages with development partners, financiers, and government
- Publicity and awareness creation
- Financing the center
- Support to farmers
- Best practices eg exchange programs, capacity development, grants, and others

KFIC strategy -2022-2027

 A Centre for Commercial Forestry Investments, Innovations, Advisory and Linkages

STRATEGIC FOCUS

- Vision --To make Commercial Forestry a competitive sector that contributes to economic growth
- Mission -To enhance commercial forestry investments in Kenya through providing a platform for generation of technologies and showcasing innovations
- Goal -To increase investments in commercial forestry by 20% by 2030

Objectives of the Centre

- 1. To Provide a platform for incubation of technologies and showcasing innovations in commercial forestry
- 2. To offer tech cal advisory services and consultancies for increased productivity in commercial forestry
- 3. To support development of viable commercial forestry business models
- 4. To provide a platform for market information and linkages
- 5. To strengthen policy and governance for commercial forestry
- 6. To attract increased investment for commercial forestry in Kenya

Strategies for KCFIC

- To Provide a platform for incubation of technologies and showcasing innovations in commercial forestry
- To offer technical advisory services for increased productivity in commercial forestry To develop commercial forestry business models
- To provide a platform for market information and linkages
- To strengthen policy and governance for commercial forestry
- To attract increased investment for commercial forestry in Kenya

Unlocking Finance in Forestry

- Enhanced goverment support
- Private sector partnership
- Develop bankable products
- Insurance schemes in forestry
- Tap from pension scheme
- Carbon financing
- Devevlopment of National Forestry Financing strategy
- Regional conference on unlocking financing in forestry to take place from 18th to 20th April 2023 organized by FAO

Summary of areas of enabling environment

- Policy and Legislative
- Financing in Forestry
- Incentives to forest conservation
- Social protection social safeguards and inclusion
- Gender inclusion Youth engagement
- Good governance
- Certification and

standards and chain of custody

- Data sharing and communication
- Capacity building
- Land tenure and land acesss

Challenges

- Development of technologies without considering cost implications lead to low adoption
- Link between research and Policy makers need for more engagement
- Mainstreaming SPG work in other programs
- Inadequate incentives
- Low levels of funding
- Inadequate policies and legal frameworks
- Forestry not seen as competitive land use option

Opportunities

- Mainstreaming SPG in other programs
- commercial forestry investment private sector engagement
- Implementation of REDD+ strategy
- Green economy and Green growth
- NCA and PES
- Social protection
- Forest Financing strategy
- Value addition and timber industry hub foe E. Africa



Conclusion

- Mainstreaming SPG in other thematic areas
- Linking forest research strategies to livelihoods of Kenyans
- Continuous monitoring of effects of policy and legislative changes to the sector
- Support development of policies and legislations
- Capacity building, demos and awareness creation
- Continuous engagement of research, practotioners and policy makers



Acknowledment

- Directorate
- Scientist and staff in the Program
- Develoment partners
- Community members
- Ministry of Environment, Climate Change and Forestry
- Faith based Institutions
- Private sector actors

THANK YOU

Contact jokagombe@kefri.org

THE END

