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# SUSTAINABLE MANAGEMENT OF INDIGENOUS TROPICAL FOREST

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#### **ABSTRACT**

Sustainable forest management means the environmentally appropriate, socially beneficial and economically viable management of forests for present and future generations.

The forest ecosystem is highly complex and influenced by numerous external factors. Criteria for sustainable forests management must be constantly adapted to new circumstances: they must reflect the national context and the specific ecological and environmental conditions, as well as social, economic, political, cultural and spiritual dimensions. 70% of 38.6 million Kenyans in the rural areas depend on forests for livelihood. Wildlife based tourism contribute 10% to the Kenya's GDP and is the third largest foreign exchange earner after Tea and horticulture (National Tourism Police, 2006). In the power sector, 51% of the country's electricity is derived from hydrogenation that is dependent on our waters and rivers (Kenya Vision 2030) over 80% of people in Kenya rely on plants as primary sources of medicine.( Testing and Selecting Criteria and Indicators for Sustainable Forest Management Ravi Prabhu, Carol J. P. Colfer and Richard G.)

Key words:-sustainable, management, Rivers, Forests, Ecosystem

#### INTRODUCTION

While over 57% modern medical drugs are biodiversity derivatives (AMNH-CBD 2003). Attachment of MDGs and realization of Vision 2030 depend on biodiversity and forest resources conservation strategies ("Evans, K., De Jong, W., and Cronkleton, P. (2008) .Those who manage forests must set robust standards and realistic criteria for sustainability and be compliant with international requirements of stakeholders around the world and that are



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continuously updated to incorporate new knowledge, best practices and changing expectations.

#### STATEMENT OF THE PROBLEM

The forest management must reflect the national context and specific ecological and environmental conditions as well as social, economic, political and spiritual dimensions. Forests are under a threat from loggers, poachers, medicine-men and countries are having water shortages as a result of less forest cover.

#### PURPOSE OF THE STUDY

Forests are among the most bio-diverse and valuable terrestrial ecosystems on the planet. There are very many species of trees and forests are home to abundant and complex communities of plants, animals, insects and microorganisms. Their presence and interaction result in many of the significant ecological processes that take place within forests, including pollination, seed dispersal or soil fertilization. Forests biodiversity forms the basis of many of the values and services that society derives from forests. These values and services include food (berries, mushrooms), fibres, biomass and wood (timber); habitats and shelter for people and wildlife and spiritual and recreational benefits (hunting). (Lutz, E, and Caldecott, J. (1996). Decentralization and biodiversity: a World Bank symposium. Washington: The World Bank.)

#### **OBJECTIVES OF THE STUDY**

Was to create awareness of the importance of forests and its management. To ensure that those given the task of forest management like NEMA ensures that standards are adapted to meet local cultural, socio-economic, physical, biological, climatic and geopolitical realities while at the same time meeting internationally recognized benchmarks for sustainable forest management globally recognized principles, guidelines and criteria developed by international and intergovernmental bodies with broad consensus from interested stakeholders.

#### **METHODOLOGY**

Purposive selection technique was used to identify three forests namely: Kakamega, Mau forest and Karura forests. The research design was through cross-sectional survey. Data collection was through the use of structured closed ended questionnaire, Internet, newspapers, magazines, journals. It was analyzed using frequencies and percentages.

#### **RESULTS**



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Forests degradation and deforestation result in serious negative impacts for forest biodiversity. The Food and Agriculture Organization (FAO) estimated that 13 million hectares of forest that are lost each year to deforestation which has a significant impact on species. Biodiversity in degraded forests negatively impacted resulting in less resilient ecosystems that are less able to adapt to or recover from changing climatic conditions. Maintaining forest biodiversity is both complex and sensitive Jump up Margulis, S. (1999). 'Decentralized environmental management',

Annual World Bank Report).. It is made over more difficult by increasing human demands anthropogenic impacts on forest ecosystems. Those who manage forests must set robust standards and realistic criteria for sustainability and be compliant with international requirements of stakeholders around the world and that are continuously updated to incorporate new knowledge, best practices and changing expectations.

#### DISCUSSION

Sustainable forest management should be an evolving process and the parameters defining it change over time based on the latest scientific knowledge and society understanding of the concept. Different forest types in different regions of the world require different sustainable management strategies.

#### CONCLUSIONS

There must be "bottom up" approach whereby national certification systems are developed independently and globally recognized principles, guidelines and criteria developed by international and inter-governmental bodies and stakeholders. Everybody to respect and take care of our forests. Human interactions with forest ecosystems need to be managed with careful attention to resource conservation and sustainability Ribott, (1990). 'Accountable representation and power in Participatory and decentralized environmental management'). Forests should remain the most bio-diverse terrestrial ecosystems on the planet and that society's forest needs and demands will be met in the long term. More "bottom down" approaches should be emulated where more trees are planted when a person cuts one tree (Standards and Guidelines for the Sustainable Management of Indigenous Forests (Fifth Edition, 2013). UNEP is assisting residents of Eldoret plant more trees along river kuresoi by funding this activities and giving them more seedlings.

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