

## Implications of the National Forest Policy to the Sustainable Forest Management in Sri Lanka

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### Abstract

Sustainable forest management is one of the most important tools to manage the extraction from forests, ensure the ecological characteristics and the coverage of forests. Though the government has implemented several policies to manage the forests, the effectiveness of those has not been studied. Therefore this study mainly focused to analyze the impacts of National Forest Policy-1995 (NFP) to sustainable forest management in Sri Lanka. As the policy formulation and implementation are completely vested on higher authority of the forestry sector organizations, the study sample was mainly consisted of 40 executives of Ministry of Environment. Simple random sampling technique was used. Primary data were collected using a structured type pretested questionnaire. Data were analyzed with Descriptive and Inferential Statistics. Results revealed that majority (98%) were positive about adaptation and implementation of sustainable forestry concept through the NFP. Among the various activities, it has been found that zoning and boundary demarcation were progressive. Results showed that actions taken to enhance the joint management, industrial plantations, incentive schemes and bottom up approach were not very much effective in forestry sector master plan (FSMP). Multi-disciplinary decision making and leasehold forestry concepts were not succeeded. Recognizing home gardens and agro-forestry systems as a supplier of wood has become successful (86%). Majority (90%), identified plant and seed distribution as popular incentive schemes. Lack of green accounting system was one of the major constraints identified. Results further emphasized that law enforcement should be regulated while enhancing awareness among the people. Animal corridors should be considered in boundary demarcation. Green accounting system should be implemented and financial incentives should be granted to develop home gardens. It is concluded that National Forest Policy implemented in 1995 has considerably contributed to the sustainable forest management.

**Keywords:** National Forest Policy, Forestry Sector Master Plan, Sustainable forest management

### Introduction

Forest policies are concerned with the manner in which forests and tree resources should be managed to meet society's demand for goods and services that forests provide for current and future generations. However the Government development policies, which mainly aim at increasing the revenue, in the form of wood and agriculture products, are putting pressure on the existing forest cover. Removal of forest cover for development programs, obtain the wood and widen the

plantation has caused a huge deforestation in Sri Lanka.

National annual average of timber demand is 1.6 million m<sup>3</sup>. Ninety three per cent of timber demand is met by local timber supply (Ruwanpathirana, R 2011). As custom statistics reveals in 2011 Sri Lanka has imported various types of wood items. Timber enterprises need to be expanded to cater upcoming demand.

Considering all these realities well concerned policies are much important for forestry sector. Not only policies but also implementation strategies such as master and action plans are very much important. In regulating the policy and related work instruments are needed and that necessitates strong, updated laws and regulations. Consequently, there arises a need to review the existing forest policies. When a policy addresses the sustainability concept, it should address the production for the demand of the present generation and the possibility of supplying the needs of the future generation. Policy should be defined to address the both adequately. Hence this study was aimed to analyze the impact of the Forestry Sector Master Plan to achieve sustainability in forest sector through National Forest Policy-1995.

### **Methodology**

Ministry of Environment was selected as study area because it is the main government body who is vested with all the legislative power and responsibilities on environment and forests of the country. Sustainable forest management concept mainly focuses on production of timber for present day need and conservation of forests for future needs. Due to that State timber cooperation (STC) and Department of forest conservation (DF) were selected for this study considering their production and conservative roles towards forestry sector of Sri Lanka. Executive level professionals of State timber cooperation and Department of forest conservation were identified as target population. Thirty six respondents were selected using simple random sampling technique according to 1:1 proportion from STC and FD. Relevant data and information were collected through primary and secondary sources. Primary data were obtained by a structured pre-tested questionnaire through formal discussions with respondents. Secondary data sources included books, journals, articles, research papers and

annual reports of Department of Census and Statistics, Central Bank of Sri Lanka, Department of Forest Conservation, Ministry of Environment and Custom Department. Data were analyzed using basic statistical tools and presented as graphs, bar charts, tables and pie charts. Wilcoxon Signed Rank Test and Freedman tests were done to find out degree of significance in implementation activities of National Forest Policy-1995 working plan, Forestry Sector Master Plan.

### **Results and Discussion**

National Forestry Policy 1995 is the forestry policy approved by the government in 1995 states that all the forest areas are to be managed in a sustainable manner in order to ensure the continued existence of important ecosystems and flow of forest products and services. It also recognizes and respects the traditional rights, cultural values and religious beliefs of people living in and adjacent to forest areas. It adequately addresses the seven criteria of sustainable forest management agreeing itself with internationally accepted declarations. The FSMP 1995 is trusted as a comprehensive long term development framework for the forestry sector. Its development objectives are the same as those of the National Forestry Policy of 1995. The FSMP covers the period 1995-2020 (Forestry planting unit 1995).

Majority of the respondents agreed and assured the need of the sustainability concept to manage forestry sector in Sri Lanka. Majority had positive opinions about the adoptability of concept. 47% stated that cultural attitudes of this country, sustainability concept will be adopted with least strength.

FSMP suggested a few possible activities that can be implemented. Joint management is one of a key concept in FSMP. However results depicted that joint

management concept has no significant effect to promote sustainable forest management in Sri Lanka. Leasehold management has a negative significant impact. The establishment of industrial plantations incentive schemes and bottom up approach, though are practiced do not have a considerable effect on the forestry sector. Zoning of forests and boundary demarcation of forests are done in satisfactory level.

Recognizing of home gardens and agro-forestry systems as a supplier of wood and other forest products is successful (86%). Furthermore, several programs like Parisara niyamu and Thurujana banku have mobilized people for the task. Home gardens were diversified by industrial timber value tree species which is a current trend but legal framework acts as a barrier for removing timber from home gardens (Ariyadasa KP, 2002). Results depicted that 80.5 % agreed plant distribution and seed distribution are popular incentives for home gardening.

Majority identified absence of clear boundaries, division of administrative responsibilities for forest areas, encroachments and conflicts between forestry and other land uses are common problem in all three climatic zones for conservation. Dry zone conservation of forests has been threatened by rural poverty, chena

cultivation and human-animal conflicts. 86% believed that chena cultivation in dry zone is a major problem for the conservation. 50% stated that human-animal conflicts are due to the destruction of former corridors. Issues related to boundary demarcation in major Climatic Zones are similar to mentioned facts.

Inter-linkages between institutions have received much attention by FSMP. Conservation role in FD and Department of Wildlife Conservation is a factor that is spoken widely and highlighted as a critical institutional problem. As results depicted, the statement had negative significance. Double counting of designated areas had a negative value proving that it is not a big problem anymore. The result indicated that there is a central information base for conservation areas. In spite of the monopoly that is spoken widely STC, they always try to motivate private organizations to engage in felling operation. Many village level organizations become non-functional. The solution for this non functional nature is to introduce the forestry related task to functioning village base community delegating power to control the actions. As results depicted extension servicers should be strengthen through self committed extension workers (44%). Majority agreed that the technology in timber sector is satisfactory.

**Table 1. Limitations in Forestry Sector**

Statement- Limitations in Production Sector	Average Value
Inadequate support and incentives for private sector involvement in commercial forest plantation development	3.6
Inadequate attention paid to non-timber forest products	4.8
Collection of plants often done by destructive harvesting techniques	3
Outdated or inefficient machinery in the wood industries that generate much waste	2.5
STC's monopoly for extraction of timber from state forests	1.4
<b>Statement- Limitations in Institution Sector</b>	
Ineffective manage of forest plantation	3.89
Inadequate legal framework for effective participatory forest management	2.8
The lack of participatory forest management and benefit sharing mechanisms	2.6
Inappropriate national accounting systems which do not consider the total value of forest products and services	5
Management plans of class IV forests (multiple use) was not prepared with the help of FD & DWLC	1.3

Major limitations that were identified in both production institutional format aspects were prioritized and average values were obtained (Table 1).

### **Conclusions**

The National Forest Policy-1995 is the most influential forestry sector policy for sustainable forest management in Sri Lanka. Among implementation strategies zoning was successful in contrast industrial plantations, joint management program and incentive schemes are not very effective. Least hold forestry and bottom up approach are proved to be failed activities in FSMP. Boundary demarcation of forests was done successfully and policy reforms and institutional development has been done in satisfactory level through FSMP and NFP. Implementation of green accounting system is a current need of the country.

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