

## **PREFACE**

This is the Second Working Plan (2012-13 to 2022-23) for Mannarkkad Division. This revises the Working Plan prepared by Sri. A. Ramankutty for the period from 2001-02 to 2010-11.

The fieldwork for the preparation of the plan started during January 2010 and completed during December, 2011. I have taken charge of the Division on 05-08-2009. The Range Officers Sri. K. Rajindran; Sri. A. N. Abdul Basheer; and Sri. P. S. Sreedharan and Foresters Sri. V. Vijayan; Sri. M. P. Sankaran; Sri. K. S. Ussan; Sri. C. Rajith Babu; Sri. K. M. Unnikrishnan and Sri. V. Vasudevan worked in this Division bestowing their abilities in collection and analysis of data required for preparation of this Plan. Forester Sri. Rajith Babu, who has expertise in computer applications, had done a commendable job in surveying the area using GPS and preparation of sketches. Smt. Dolly Antony, Data Digitalizer helped in compiling data required for finalization of plan.

Sri. Lakhwinder Singh IFS, The Chief Conservator of Forests (WP&R) had guided me in the beginning of the preparation of this plan. Sri. N. V. Trivedi Babu, IFS. The Addl. Principal Chief Conservator of Forests (WP & R) had given valuable suggestions in the preparation. Above all, Dr. B. Shivaraju IFS, The Addl. Principal Chief Conservator of Forests (WP & R) had rendered whole-hearted assistance in moulding the Working Plan to its present shape.

Sri. N. K. Sasidharan, IFS. The Chief Conservator of Forests (Eastern Circle) has guided me by offering valuable suggestions in preparation of the revised draft of the plan. Suggestions of Sri. James Mathew, Divisional Forest Officer, Mannarkkad were of much help in collection of data and its presentation.

I am very much thankful to all of them in guiding and assisting me in preparing the plan. I also thank all my office staff for their co-operation and help at all stages in preparing of this Working Plan.

Date: 13/08/2012

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## **GLOSSARY OF TERMS**

Archaean Rocks	Broadly, rocks of Pre- Cambrian age, the term is sometimes restricted to the older, crystalline part of the pre - Cambrian
Abundance	The number of individuals of any species per sampling units of occurrence.
Alluvial soil	Soil, formed by deposits, which have been carried in suspension by River/ flood and laid down where, the speed of flow has come to a check. They are very much productive.
Amphibians	Transitional between aquatic and terrestrial life. Have gills in young and lungs in adults. Limbs are fingered and toed. Exoskeleton absent.
Basic dykes	A sheet of igneous rock formed by crystallization of magma that has forced its way up through a cleft inclined at a high angle to the layers of pre existing rocks.
Biotite	A black mica of variable composition, consisting of silicates, with Potassium and hydroxyls. Widely distributed, original constituents of igneous rocks.
Breast height	Standard height for measuring girth, diameter etc. of standing trees. In India and in other former British colonies it is taken as 1.37 m above ground level. On slopes, BH is taken on uphill side.
Commercial volume	A measure of volume of trees, which consists of the volume of the commercial bole plus volume measured to a thin end diameter.
Current Annual Increment	Strictly, the increment in a specific year. Usually taken as the periodic annual increment over a short preceding period.

Density	Numerical strength of a species in the community. The number of individuals of a species in any unit area is its density.
Dominant trees	All trees which form the uppermost leaf canopy.
Diseased trees	Trees, which are infected with Parasites, to such an extent that, their growth is seriously affected, or they are a danger to their neighbours.
Erosion	The lowering of the land surface by weathering, corrosion, and transportation under the influence of gravity, wind, and running water.
Ecology	Study of organism in relation to its surroundings.
Felspar	A very important group of rock forming minerals, essentially silicates of Aluminium, Potassium, Sodium, Calcium, and Barium.
Frequency	The number of sampling units in percent in which a particular species occurs.
Forest management	It is the practical application of the scientific technical and economic principles of forestry.
Forest soil	Soil having the deposition of organic matter derived from the forests.
Gneiss	A foliated crystalline rock, generally Felspatic and of Granitic composition. Individual folia are discontinuous.
Growing stock	The sum by number or Volume of all the trees growing in the forest or on a specified part of it.

Habitat	In common parlance, it connotes to the place in which an organism lives.
Humidity	The invisible water vapour present in the air. This is the amount as percentage of the maximum quantity that the air can hold at a prevailing temperature.
Igneous rocks	All rocks of magmatic and plutonic origin, such as lava dykes, sills, and intrusions.
Increment	The rate at which, a tree or a crop increases with age. The term is often applied to the increase in girth, diameter, basal area, height, volume, quality, price or value of individual trees or crops during a given period.
Loamy soil	A detrital material deposit consisting of nearly equal proportions of particles of sand, silt and clay grades.
Mammals	Highly evolved animals, derived from their reptilian ancestors between 250-150 million years ago.
Mean Annual Increment	The total increment up to a given age divided by that age.
Quartz	An important mineral; SiO <sub>2</sub> , Resistant to acids, slightly soluble in alkalis
Reserved forests	An area, legally notified as Reserved Forests under the statute.
Reptiles	Characterized by scaly skin. Have two foetal membranes. Have no gills, and cold blooded.
Rotation	The time chosen for any proposed cycle of operation. Often applied to the planned number of years between the formation or regeneration of a crop and its final felling.

Site quality	A measure of the relative productive capacity of a site for a particular species. The Top height is generally taken as the basis for classification.
Sustained yield	Continuous production with the aim of achieving in the earliest possible time the highest practical level or approximate balance between net growth and harvest by annual or somewhat longer period.
Working Circle	An area subjected to one and the same cultural treatment by means of a distinct series of operations. Where, the condition and composition of the crop render it advisable, a working circle for which, a definite method of treatment is prescribed may overlap portions or the whole of other working circles.
Watershed	A region or area, bounded peripherally by a waterparting and draining ultimately to a particular watercourse or body of water.
Yield regulation	It is the calculation of the amount of material that can be removed consistent with the prescribed treatment and how and from where in the forest that quantity is to be removed.

## **ABBREVIATIONS**

Ar	Aar (River)
ANR	Assisted Natural Regeneration
CA	Compensatory Afforestation
CAI	Current Annual Increment
CCF	Chief Conservator of Forests
CMA	Clonal Multiplication Area
CPI	Consumer Price Index
CRZ	Coastal Regulation Zone
DA	Daily Allowance
DCF	Deputy Conservator of Forests
DFEIC	District Forest Extension and Information Centre
DFO	Divisional Forest Officer
F&WLD	Forest & Wildlife Department
FCA	Forest Conservation Act.
FDA	Forest Development Agency
FIT	Forest Industries Travancore ltd.
FMIS	Forest Management Information System
GBH	Girth at Breast Height
GI S	Geographic Information System
GO	Government Order
GOK	Government of Kerala
GOI	Government of India
HRD	Human Resource Development
IRM	Industrial Raw Materials

KFD	Kerala Forest Department
JFM	Joint Forest Management
KFP	Kerala Forestry Project
KFRI	Kerala Forest Research Institute.
MAI	Mean Annual Increment
MCL	Malabar Cements Limited
MSL	Mean Sea Level
MoEF	Ministry of Environment & Forests
NGO	Non Governmental Organization
NWFP	Non Wood Forest Produce
NRF	Non Revertible Forest
PCCF	Principal Chief Conservator of Forests
PCK	Plantation Corporation of Kerala
PRA	Participatory Rural Appraisal
PFM	Participatory Forest Management
PFMS	Participatory Forest Management System
QC	Quality Class
RDF	Rehabilitation of Degraded Forests
RFPF	River Forest Protection Fund
RRB	Reed, Rattan and Bamboo
RO	Range Officer
SF	Social Forestry
SSP	Site Specific Plan
SPA	Seed Production Area
STP	Stores, Tools and Plants
VSS	Vana Samrakshana Samithy
WGDP	Western Ghat Development Programme



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