

Forest Management

1. Fundamentals of Forest Management

- 1.1 Theory, history of forest management
- 1.2 Classification of forests (global and national)
- 1.3 Management of forest on the basis of mode of regeneration

2. Normal Forest

- 2.1 Definition and concept of normal forests
- 2.2 Attributes of normality and its implications
- 2.3 Abnormal forest and its management

3. Rotation and Conversion

- 3.1 Concept of rotation and conversion in forest management
- 3.2 Choice and application of rotation

4. The Growing Stock and Increment

- 4.1 Concept of growing stock and its determination
- 4.2 Concept of Forest Increment and determination
- 4.3 Relation between Growing Stock and Yield
- 4.4 Calculation of NGS in different forest systems
- 4.5 Effect of tending operations on Increment

5. Felling series

- 5.1 Felling series and stand age
- 5.2 Application of felling series with different silvicultural systems
- 5.3 Utilization percent and Reduction factors

6. Site quality and Site Index

- 6.1 Relation between site quality and tree characteristics
- 6.2 Implications of site index in forest management

7. Yield regulation

- 7.1 Concept of Yield and its types
- 7.2 Principle of sustained yield management its pre-requisites
- 7.3 Yield regulation of Regular forest
- 7.4 Yield regulation of Irregular forest
- 7.5 Yield table, preparation and its uses
- 7.6 Concept of Annual Allowable Cut and its practices in different forest types

8. Tree stand characteristics

- 8.1 Standardizing and categorizing tree growth models
- 8.2 Tree mortality, probability of individual tree mortality and mortality functions.

9. Sustainable Forest Management

- 9.1 Concept and principle of sustainable forest management
- 9.2 Criteria and indicators of sustainable forest management
- 9.3 Modes of Sustainable Forest Management and its challenges in the Nepal

10. Forest Certification

- 10.1 Concept of forest certification and its elements
- 10.2 Forest certification schemes in Nepal and their challenges

11. Forest Management Plans

- 11.1 Preparation of forest operational plans and forest management plans
- 11.2 Implementation scope/issues of forest management plans

12. Applied Forest Management

- 12.1 Opportunities and Challenges in application of forest management Principles in context of Nepal
- 12.2 Decision making support tools in forest management