# **Forest Economics**

**Training Course for IFS Probationers** 

2020-22 Batch

Total Sessions: 22 (one hr.each)

Concurrent assessment-I: 15 Marks

Concurrent assessment-II: 15 Marks

End-term examination: 70 Marks



- Relevance of economics to forestry
- Economy-environment interaction
- Limit to economic growth on supply constrain
- Supply side aspect of forest products

## Relevance of economics to forestry

Economics is all about optimum allocation of scarce resources for meeting unlimited wants of economic agents

- → Analyze through production process w.r.t. resource owner (with positive and/or normative objectives)
  Positive economic analysis more on straightforward application of traditional economic theory
  Normative economic analysis largely relies on special treatment with reformulated economic model
- Economics of forestry (in particular) or environment (in general) deals with issues in application of theory/model
- The notion of theory remains same whether dealing with forestry or firm, issue is its application to specific sector
  - → Economists typically search for why the issues rather learning merely about how to deal
- Why **why**? Why a specific site be used for growing tree rather use for alternative other activities
  - Why more wood be produced in given site-A rather than another site-B
  - Why forest should be manage for timber rather than outdoor refreshment

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☑ Knowing why is central issue ☞ desireness of agents change over time (economic/social/technical changes)

## Relevance of economics to forestry



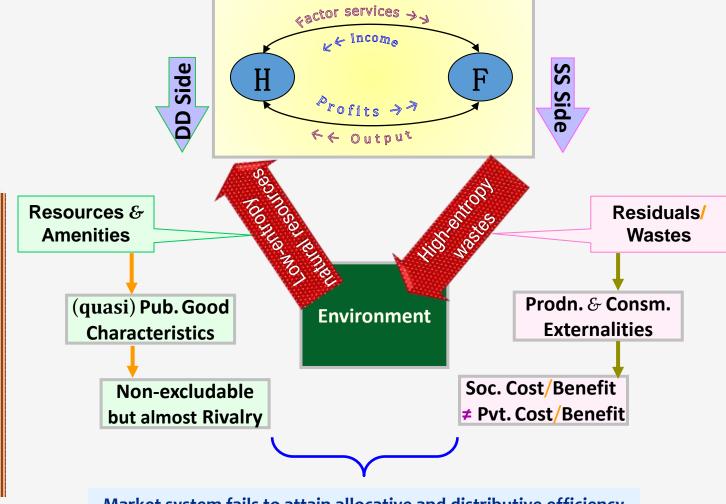
#### <u>Issues with economic applications in forestry sector</u>

- → Perspective of governing environmental recourses → normative views of public purpose rather than private one
- → Large-scale production and long gestation period → let's say land-intensive forestry, trees grow for a larger time
- → Production most often found as multiproduct firm → simultaneous output of timber & non-timber forest products
- → Weakly-defined market structure for most outputs → lacking apt market for nontimber especially in developing world
- → Consequence of the multifaced effects externality → environmental resources subject to external costs/benefits

## **Economy-Environment interactions**

#### **Solutions**

- > SS-side valuation of environmental resources/externalities to create the market
- DD-side allocation of private property rights to emerge the market



Market system fails to attain allocative and distributive efficiency

# Limit to economic growth on supply constrain

There are only two agents of production, nature and man. But, man does not create things. He only rearranges matter Alfred Marshall

Principles of Economics (1891)

Disaggregation of any commodity ended up with material that ultimately came from the nature



Availability/supply of resources ultimately limit to growth for any economy

(>resource generation for industrialization through colonization policy of Europe)

Higher national output and pro-growth policies may lead trade-off between alternative uses

 → Issue of opportunity costs and sustainable development → efficiency in resource allocation

