

Approaches to Building Policy-Relevant Future Forest Scenarios

Experience from Indonesia

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Outline

- **Indonesia Forest Future Scenarios Process**
 - What were we asked to do?
 - What did scenarios look like?
- **Understanding Scenarios**
 - Definitions, Principles, Examples
- **How Can Scenarios Be Used?**
- **Steps and Lessons**

Indonesia Forest Futures: Purpose & Approach

Purpose

- Produce analysis for nat'l debate on role & future of NR
- Build framework for analyzing implications of NR approaches
- Consider future trends of alternative scenarios, 20+ yrs
- Show ways to manage NR to maximize development potential
- Commissioned by GOI/National Planning Commission

Analytical Approach

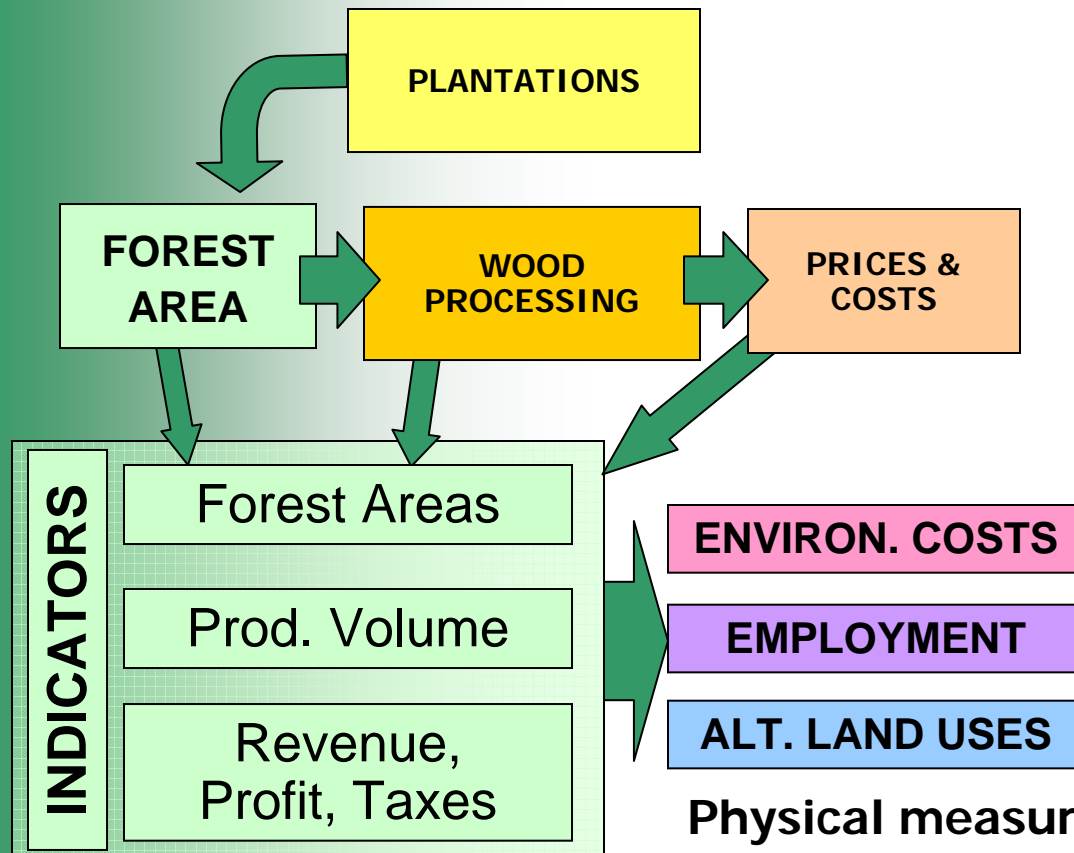
- General, consistent, interactive, simple, realistic framework
- Focus on a few key indicators, clear graphic comparison
- Compare "what if" scenarios for policy makers, provide menu
- Discuss & seek agreement with multiple groups

Indonesia Forest Futures

What we were trying to achieve – *and not*

- “What if” analysis of options,
 - ***not*** choice of “right” option
- Consistent projection of indicators for comparison,
 - ***not*** “true” predictions
- Menu of realistic policy choices,
 - ***not*** one final answer
- Quick acceptable assumptions,
 - ***not*** detailed primary research
- Reasonable sensitivity analysis,
 - ***not*** focus on every possibility

Indonesia Forest Futures: Overview Of Framework, Data, Outputs



Data Sources

- Neraca Sumber Daya Hutan
- Statistik Kehutan and BPS
- Respected published sources

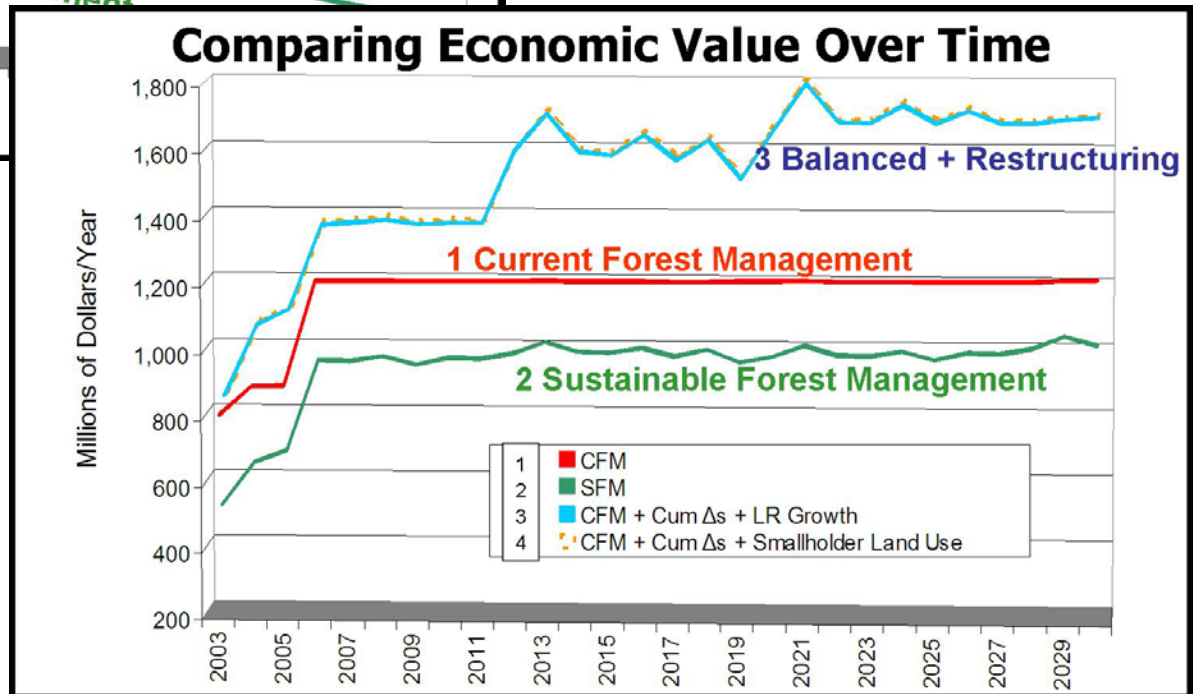
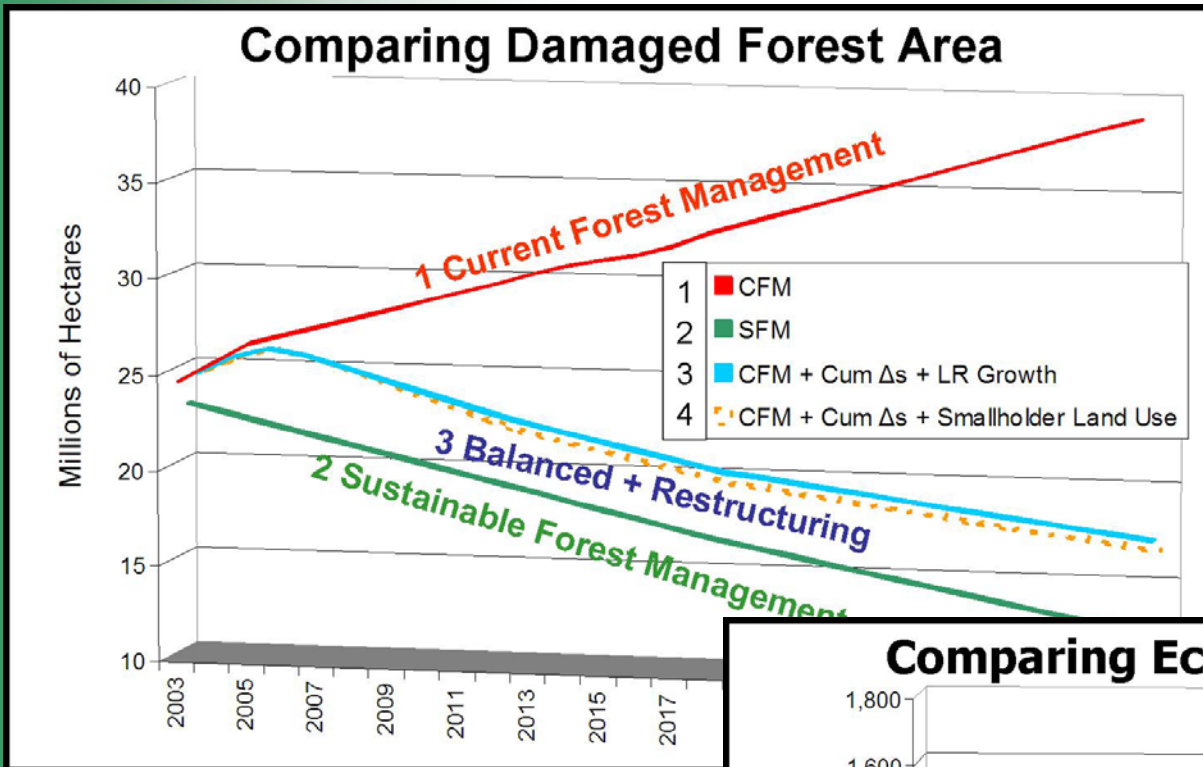
Value (monetized) measures

- Timber harvest & processing
- Environmental services lost
- Production on alt. land uses

Physical measures

- Forest area & planting by forest type
- Timber harvest & volume of processed wood
- Gross revenue, tax revenue, profit
- Numbers of people employed
- Land area in alternative land uses

Indonesia Forest Future Scenarios:



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What's a "Scenario"?

A possible future path or outcome:

- Described by outcome indicators projected into future
- Based on a particular set of parameters & assumptions
- Consistent with an identifiable trend or policy path
- Based on an analytic framework (optional?)

A scenario is not:

- A single trend or path: rather a package of outputs based on several variables
- Consistently positive or negative in direction: different outcome indicators will go in different directions

Scenarios: Basic Principles

For policy relevance, alternative scenarios should be:

- Understandable
- Acceptable
- Accessible
- Changeable (responsive to discussion and feedback)

To support this, the analytical framework should be:

- General and interactive
- Able to consider alternative inputs from policy makers
- As simple as possible, but realistic -- not simple minded
- Able to produce future projections with clear graphics
- Make key points about future impacts on key indicators

Distinctions and Definitions

“Parameters” = technical inputs that drive the calculations

- Ex: Timber prices, rate of planting, production costs

“Assumptions” = ranges of values for parameters/inputs

- Conservative, moderate, realistic, achievable?
- Optimistic, Pessimistic?
- Current trends, expectations?

“Indicators” – Outcome variables that we want to project

- Physical measures: Forest cover, Timber harvest, Jobs
- Value measures: Net revenue, Export earnings, Ave wage
- Qualitative measures: Impacts on poverty, social relations

What Does a Scenario Look Like?

Quantitative Presentation

- Snapshot of current situation, past trends
- Projected evolution of key indicators over time
- Underlying assumptions and policies required
- Graphic representations, highlighting trends
- Comparison, key differences among scenarios

Qualitative Discussion

- Key concerns associated with each scenario
- Constraints, opportunities, and costs
- Institutions, policies, human resources
- Mitigating policies or approaches

Scenarios: Examples from Indonesia

Current/Status Quo:

- Projects implications of over-harvesting, under-planting
- Baseline (pessimistic?) for comparison

Ideal/Sustainable:

- Assume sustainable harvest, compliance with law, etc.
- Baseline (optimistic?) for comparison; unrealistic?

Slow Intervention:

- Gradual change in policies & practices over time

High Investment:

- Active effort to change industry mix, establish plantations

Egalitarian/Reallocation – Pro Poor

- Assumes greater role for small holders, land access

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What Are Scenarios For?

Scenarios can help:

- Describe/quantify future trends, probable outcomes based on assumed inputs (initial conditions, policies)
- Explain pros & cons associated with a particular path
- Clarify intended outcomes vs. unintended side effects
- Educate policy makers about development choices
- Determine the objectives of policy makers (based on choices among outcomes)

How Should Scenarios be Presented?

Which indicators most interest policy makers?

- Revenue and jobs: usually key
- Physical / environmental measures?
- Economic / value based measures?

How do they receive and process information?

- Verbal or visual: text, graphs, tables
- Private meeting vs. Seminar?
- Big picture findings or technical details?
- Interactive, responsive vs. clear choices?

What's the right time frame?

- Short run, long run
- Immediate decisions vs. long run possibilities

Considerations for Developing Scenarios

Three main directions: Status Quo, Optimistic, Pessimistic

- Variations can be explored for more realism, acceptability
- Many options can be analyzed
- Only a few can be reasonably presented
- Details can be grouped into policy packages
- Wildly optimistic or pessimistic options tend to be cut

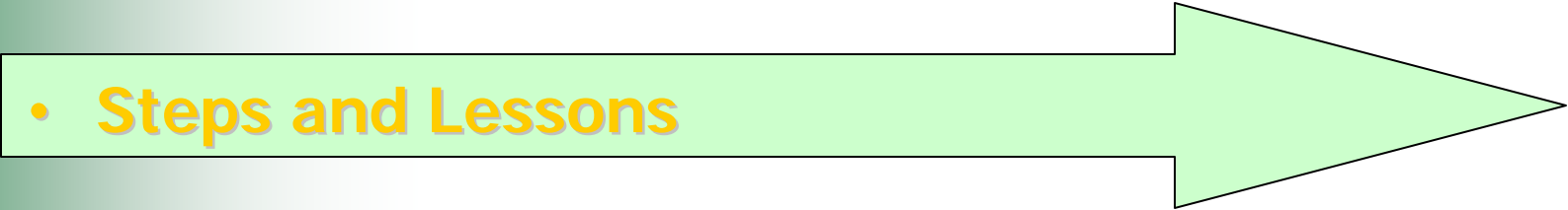
How many?

- Policy makers can only consider 3 or 4 options
- Too many options confuse practical choices
- Fewer options create clearer outcomes, policy relevance
- Best to limit to a few big picture trends at the outset.

Choosing Scenarios: Optimistic or Pessimistic?

- Choosing a simple set of scenarios isn't simple
- "Optimistic" means different things to different people
- Industrial expansion:
 - Optimistic for industrialists & investors
 - But pessimistic for environmentalists
- 'Optimistic' assumptions for econ. growth can lead to 'pessimistic' projections for forest quality & env. services
- Scenario names can help describe the real underlying trend or outcome vision

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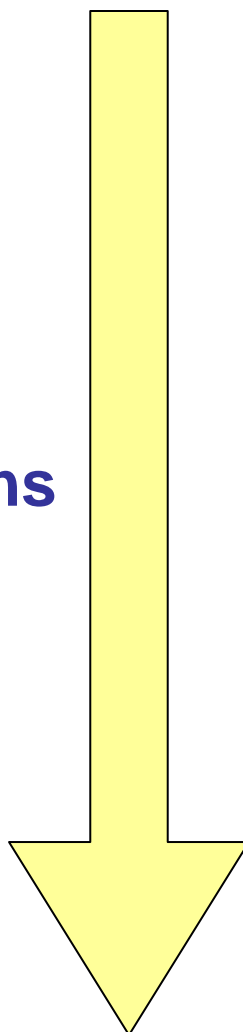
Steps/Process for Developing Scenarios Need to Discuss, Clarify, & Agree

Analytical Approach

- Basic analytical framework
- Key interactions & variables
- Technical assumptions
- Specifications for alternative policies
- Interim results & interpretations
- Specific outputs & formats

Consultation Process

- Overall concept
- Critical indicators & outputs
- Basic alternative policy choices
- Future visions to be explored
- Interpretations for policy making
- Timing & key entry points



**Scenario Framework Supports
Political Discussion**

Lessons Learned / Recommendations

- Focus on the biggest picture possible
- Strive to get the attention of policy makers
- Focus on things that matter to them, not to you
- Timing is important: work to create opportunities
- Policy change is a long term process
- Policy analysis is not enough; presentation matters too
- Delivery matters, not just content: repetition
- Policy dialogue contributes, but it needs to converge