

Summary of:

Considerations Involved in Developing an Economic Assessment Framework for the Prince Albert Model Forest Region.

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Forests have many uses. To decide on how to manage forests for the future, all the different uses and issues, such as social, economic and environmental issues, must be considered. A framework is necessary to assess all the different issues. The framework provides structure to the process of assessing all the important subjects that forest manager should consider as he/she develops a forest management plan. By following an assessment framework, a forest manager will not overlook issues that are important to the forest he/she is managing.

This report looks at what should be considered in developing an assessment framework for the economic uses of forests. This economic framework can then be included in an overall assessment framework that includes such things as social and environmental considerations.

The major objectives of this study are:

1. to review information on concepts that will provide guidance in the development of an economic assessment framework for the PAMF.
2. to identify which issues are important so managers can limit themselves to those issues as they analyze options for the future management of forests in the PAMF area.
3. to identify which issues should be included in an overall assessment framework for forest management options in the PAMF region.
4. identify the most important parts (components) of an assessment framework for economic issues.
5. to review the most up-to-date ways of quantifying components that might be included in an economic assessment framework.
6. to evaluate a variety of techniques that could be used to analyze the components of an economic assessment framework.

The two most important concepts that guide the development of an economic assessment framework are integrated forest management, and sustainable development. The main goals of sustainable development are to use resources efficiency while maintaining environmental integrity. Integrated forest management strives to consider and reconcile all important issues in the management and use of forests. These two concepts can be combined into sustainable integrated forest management. When applying this combined concept, managers must:

1. consider social, economic and environmental issues.
2. recognize conflicts and trade-offs between issues.
3. consider the total economic value of a forest as they assess the value of timber and non- timber benefits of a forest.
4. make decisions with several objectives in mind.

An economic assessment framework should include these components:

1. criteria for economic assessment
2. integration with non-economic components
3. tools to estimate impacts
4. an analysis of trade-offs
5. tools to make decisions based on multiple criteria

The two main criteria for the economic framework are economic efficiency and economic equity. These can be used to rank various management options. Extended benefit-cost analysis is probably the best tool for ranking economic efficiency. Economic efficiency is not the only thing to consider when assessing the economic contribution of a forest management option. Equity and the distribution of benefits are just as important, and improving the economic welfare of local Aboriginal people may also be important to consider.

Integrating social, economic and environmental components would not be easy. The multiple account framework (MAF) approach appears to have the most potential to resolve these components. The overall MAF framework should include economic, combined economic and non-economic, social and environmental components.

There are several tools that can be used to evaluate the economic benefits of a forest, such as benefit-cost analysis, regional economic impact analysis model, aboriginal community economic impact model, regional employment model, and fiscal impact model. For a specific economic evaluation, the most appropriate tool from the above tentative list must be selected.

Trade-off analysis would be used when a conflict arises between alternative uses of a forest. If the resource cannot sustain more than one type of use, then trade-off analysis would indicate which uses should prevail. To conduct such an analysis, biological and physical information would need to be translated into economic values.

Multiple criteria decision making is the most challenging component of the economic assessment framework. Goal programming and compromise programming are the most frequently used tools. They offer the most potential to resolve potential conflicts.

The economic assessment framework presented in this report is conceptual, and specifies the broad components of the framework. Applying this framework to a specific task requires extending the conceptual framework to an empirical economic assessment framework.