



Planning Tools for Community Economic Development: Forest Enterprise Modelling

Many First Nations are receiving offers to enter into Forest and Range Agreements (FRAs) with the provincial government. Components of these agreements may include revenue sharing from forestry operations in traditional territories, provisions regarding access to tenure (type, term and volume), consultation and accommodation processes, and conditions under which agreements may be suspended or cancelled. Volumes of timber available through FRAs comprise a portion of the allowable annual cut (AAC) in specific areas – generally a timber supply area or a tree farm licence area that comprises part of a First Nations’ traditional territory.

A First Nation can use forest enterprise modelling to understand how an FRA “fits” in the Nation’s larger picture of community development – how to balance the economic benefits of forest development with community goals to maintain forests for spiritual uses, wildlife and other opportunities. Forest enterprise modelling is a process that explores the effects of forest-land management strategies and alternative levels of harvesting on the forest, and traces the implications to the community in terms of revenue and employment. Forest management strategies may include preservation and traditional use and may exclude timber harvesting completely.

The modelling process categorizes the land base using inventory data, yield tables, management information and assumptions, then uses computer-based modelling to determine the volume of timber that is available under various management scenarios (e.g., commercial thinning, riparian boundaries). The economics of forest resource production, manufacturing, and trade can be factored into models so that levels of employment and profit are estimated for each scenario. Forest enterprise modelling can be done with a variety of computer models, from the simple to the complex. The choice depends on the purpose of the analysis and the available information, time, and budget.

Over the past several months, Cortex Consultants Inc. has been working with Hul’qumi’num Treaty Group (HTG) on an economic analysis of forest development options for HTG statement of intent (SOI) area. We developed a spreadsheet-based forest enterprise model that used HTG’s GIS data for a portion of the area and extrapolated from that to model other forest land in the area. We used publicly available economic data as the basis upon which to estimate volumes and values of timber harvested in recent years, and to estimate potential non-timber forest product (NTFP) values. With the forest enterprise model we were able to illustrate the probable economic and employment implications of different harvesting options in forest development scenarios. With this information HTG will be in a strong position to engage in research and plan land uses that meet diverse community goals over short and long-term time frames.

Forest enterprise modelling is one of many tools that First Nations will find useful in exploring various resource development opportunities for their traditional territories.