

# Forest Economics



## Enterprise Development Forestry Promotions Rural Forest Use



### Forestry Enterprise Simulator (ForEntSim) Project

The aim of the “Forestry Enterprise Simulator” (ForEntSim) project is to provide a tool with which the feasibility and profitability of forestry enterprises and the efficiency of value chains can be tested through value chain simulations. The ForEntSim addressed the following objectives:

- Ex-ante simulation of new enterprise ventures to test viability and capital requirements.
- Simulation of existing forestry value chains to identify potential improvements that will increase profitability.
- Simulation of the effect of research results on forestry value chains to define return on research investment.

### Development of enterprise guidelines for Department of Environmental Affairs, Natural Resource Management, Value Added Industries

Value Added Industries (VAI) have the potential to increase the economic sustainability of Natural Resource Management (NRM) operations, but limited success has been achieved with the establishment of such ventures. There is currently no system that can evaluate the potential success of new ventures, or provide guidance on the investment of capital into VAI. The study aimed at addressing the following objectives:

- Understanding of the business dynamics of existing and failed NRM Value Added Industries.
- Developing of VAI enterprise development guidelines that could assist NRM in evaluating the potential success/failures and investment required of new and existing VAI enterprises.

### Feasibility assessment and guidelines for the invasive plant biomass-to-bioenergy value chain

The conversion of biomass to bioenergy is an option for clean energy production and could serve as a possible use of biomass from invasive plant clearing operations. There are however many different harvesting, comminution, transport and energy conversion equipment-configurations available for the biomass-to-bioenergy value chain and the selection of the wrong system for a specific value chain scenario could lead to failure. The objectives of this study were:

- Consolidation of information from South African biomass-to-bioenergy conversion studies, projects and experiences into a comprehensive report.
- Identification of the most feasible biomass-to-bioenergy value chains for various biomass types and guidelines for implementation.