

CHAPTER 1 RESULTS OF RESEARCH EDUCATIONAL PROJECTS

1.1. Applicability of the projects. Market driven Forest and Road Operations

The project scheme has been developed within the framework of an integrated and market driven Forest Operation Chain (Wood Supply Chain) organized as a business unit. This entity could be either an independent forest enterprise or a market oriented profit centre in the context of a larger forest or forest industry company. The basic structure of the operating chain is shown in Figure 1.

This type of chain provides a useful model structure for the optimizing of operational efficiency defined by criteria and indicators including:

- Productivity and resource utilization.
- Operating income, cost and profit.
- Stumpage.
- Wood treatment, recovery and value.
- Ecological indicators regarding treatment of stand, soil, water and biodiversity.
 - Long term wood production within a SFM-system.

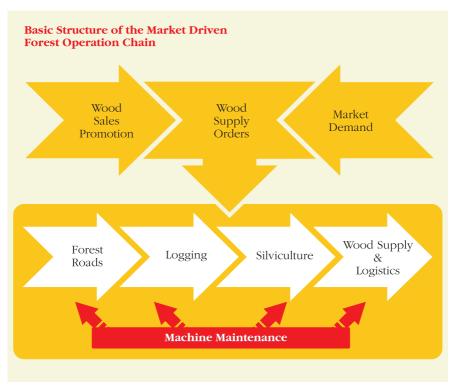


Figure 1. Outline model of market driven Forest Operation Chain (Wood Supply Chain)

1.2. Strategic focus in OPLWSO & AFRFRN

The joint OPLWSO & AFRFRN scheme handles knowledge from many disciplines as well as from best practices in advanced Forest and Road operations. A competence platform on relevant applied operating and steering systems has been established and the following two focus areas have been defined:

- FRAP: Forest and Road Accessibility Planning and Design System;
- FOPC: Forest Operation Planning and Control System.

The principles for the system design of FOPC & FRAP with their roots in theory and best practices are outlined below in Figure 2.