A SYSTEMS APPROACH TO CORPORATE FOR IT

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A SYSTEMS APPROACH TO CORPORATE FOREST DEVELOPMENT PLANNING IN INDONESIA

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ABSTRACT

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This study argues that problems in forestry planning are rooted on a system that operates on the planning situation and therefore should be approached using systems paradigm.

An extensive exploration of the existing planning system was conducted using survey responses of 76 forest concessionaires and various policy packages as bases of investigation. The system characteristics were identified and an alternative design for forest development planning system was constructed.

It was concluded that the forest development planning system in Indonesia should be designed using a mixture of process and blueprint modes, a mode of disjoint-incremental moving toward rational-comprehensive modes, and a dominance of normative mode of planning.

Validation of the proposed system was performed by experimentation. To accomplish this, an interactive computer algorithm, posessing proposed design properties was constructed and the area of PT Inhutani II, South Kalimantan, was chosen as the experimental unit. It was shown that the algorithm gains superiority to the in-effect development plan in terms of effectiveness, efficiency, and flexibility, without losing the attainability of the planning objectives.

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INTRODUCTION

Rationale

From the practical and procedural view, planning is generally defined as the process of working out how to achieve objective(s) in practice (FAG,1974). It is a means of drawing up the interrelationships among various dimensions: "what is", "what ought to be", "thought", "knowledge" and "action" of a specific system into a total and unique picture.

Planning theory has wide application in forestry. Forests are unusually subjected to changes both in their natural and manmade settings. Forestry is a long-term activity; forests take considerable time to grow and for their environment to evolve. Such changes and growth may affect the productive potential, operational techniques, profitability, or even the long-term objectives of an enterprise. The time lag between the completion of a strategy in forestry and the first results of its effect on the environment is unavoidably long. Furthermore, the environment responds in interactive forms to the adoption of forestry strategies. The scarcity of information on the forest and the environment also complicates the situation.

This complexity prompts forest managers to have planning as a top priority activity, which eventually posses a big challence to the planning researchers. Focusing on the forestry situation in Indonesia, studies on planning particularly in