3.FRAMEWORK OF THE STUDY

Many causes of forest destruction exist. This study addresses the primary underlying (i.e., ultimate or root) causes which contribute the most important proximate (i.e., direct or immediate) causes of forest destruction.

In the study, an explanatory model of forest loss proposed by Hirsch (2000), which was developed based on existing studies, was employed as a main analytical framework to consider the existing discussion aimed at addressing the causes of forest loss. This model is a schematic representation of the ways and modes of explaining deforestation (**Fig. 2**)

The diagram shows the different ways in which more immediate causes are framed in terms of means, purposes and agents or key actors in the process of deforestation or the degradation of forests. It also shows how underlying causes can be identified with reference to contextual and developmental factors. Debates over deforestation are often confused by arguments between those more concerned with proximate causes and those interested in ultimate causes. One way in which clarification can be sought is to ensure that debate occurs in one of two ways. The first way is to consider causation in a mode that seeks to identify proximate or ultimate causes within the same frame of reference (vertical Mode 1 in **Fig. 2**). The second way is to identify relationships between immediate and underlying causes (horizontal Mode 2 in **Fig. 2**). Policy frame works and development interventions also need to be developed with reference to these considerations.

Lebedev et al. (1998) carried out an analysis on the underlying causes of forest destruction in the Sikhote-Alin region. His analysis appears to be based on abstract contextual causes according to **Mode 1** in the analytical framework used in this paper.

In this study the authors aimed to clarify the underlying causes connected with a given proximate cause. Thus the analysis focuses on possible underlying causes of unsustainable logging and large-scale forest fires, which are recent major proximate causes of forest degradation in the S-RFE, according to **Mode 2** in the analytical framework. This is because a clear- understanding of causation among the causes of forest loss is useful to identify concrete directions and actions that could halt forest destruction.
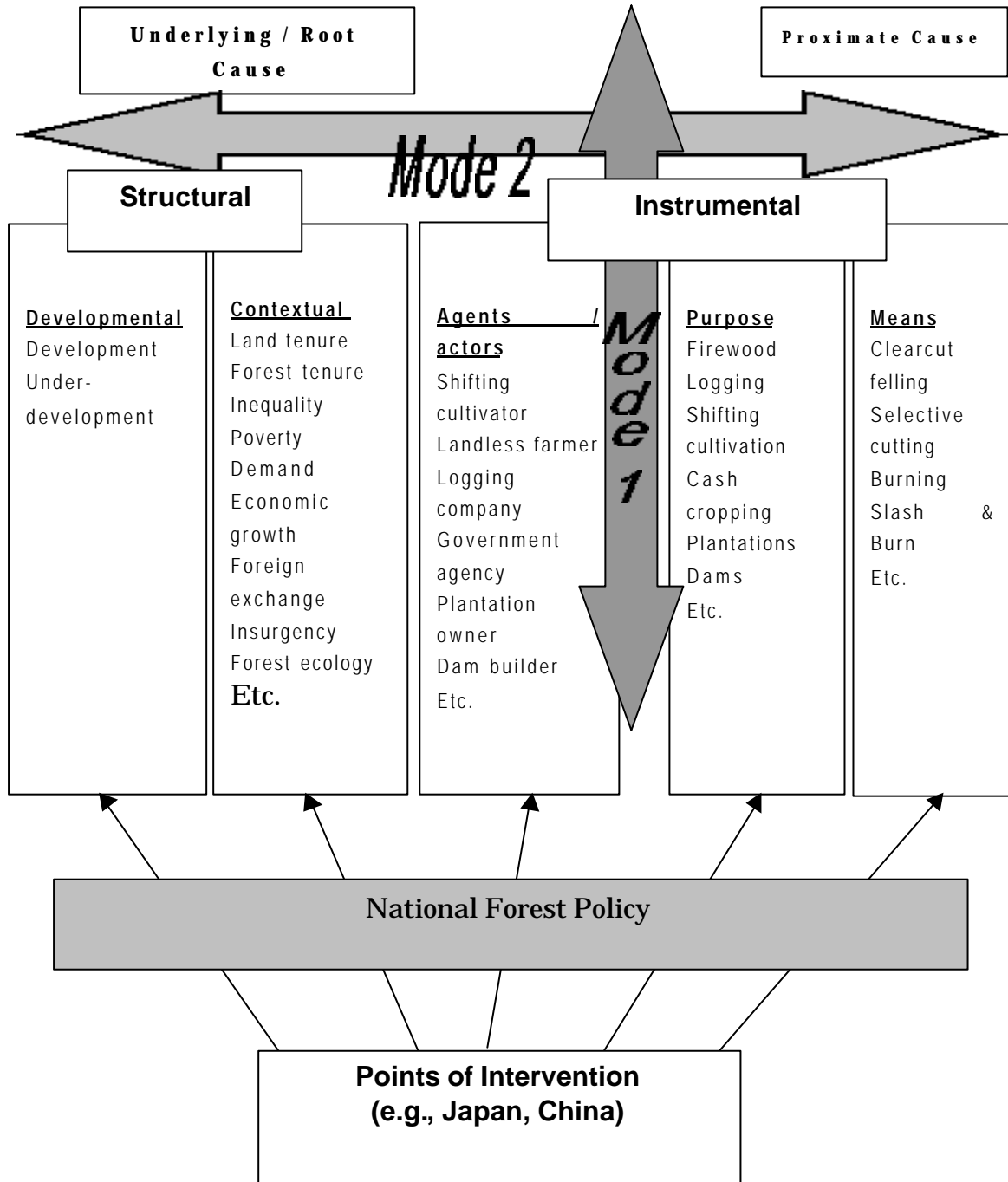
Figure 2. Explanatory modes of Underlying Causes of Forest Loss
Source: Hirsch, 2000

Box 3. Underlying Causes Addressed at CIS Regional Meeting of IFF-NGO /

UC Process

As a regional meeting of the NGO-UC (Underlying Causes) Initiative of the IFF (Inter-governmental Forum on Forests), a meeting was held for the Commonwealth of Independent States (CIS) at Krasnoyarsk, Sakha, on 29th June 1998. In the meeting, poverty was recognized as the most important cause of modern forest loss and degradation in the country. Poverty has become serious through unstable economic conditions as well as a transition to a market economy after the collapse of the Soviet Union. Critical socio-economic conditions also contributed a 'relative poverty' which is based on the avarice of Russians who are aiming eagerly at power and wealth, and such behavioral patterns are another main cause of forest degradation (Laletin, 1998 . Political factors such as changeable policies and short-term leadership pursuing quick results in a shortsighted way are also recognized as common underlying causes of deforestation in Russia (Laletin, 1998).

In a case study of the Sikhote-Alin region of the RFE (Lebedev et al, 1998 , legislative and administrative shortcomings for sustainable forest management/use were exposed, and market pressures, which have a strong connection with the Asian economy, and low citizen awareness of the problem were also recognized as critical socio-economic causes. Our preliminary research in Khabarovsk showed that legislative and administrative shortcomings as well as structural defects of the wood industry (Sheingauz 1998a   were main underlying causes of deforestation in the RFE.

(YAMANE Masanobu)

Underlying Causes Identified in the Sikhote-Alin region
(Lebedev *et al*,1998

Categories	Underlying Causes	
Institutional Causes	Legislative and administrative shortcomings	Defects of legislation and governmental strategy based on an old-fashioned methodology of forest evaluation, a lack of forest research institutions, etc.
	Violations of forestry rules	Permanent violation of logging rules in former times, Industrial logging under the label of salvage, etc.
	Violations of customs and financial rules	Fabricated list of timber sorting and prices in comparison to real consignments, intentional padding of volume, etc.
Economic Causes		Strong influence from Asian market Absence of a new non-timber forest product market
Social Causes		Low citizen consciousness of the problem Weak NGO contribution