6. SUGGESTED DIRECTIONS AND ACTIONS

To overcome forest degradation in the S-RFE caused mainly by two major proximate causes unsustainable commercial logging and large-scale forest fires—this research suggests that effective measures to prevent or stop the negative impacts of the underlying causes mentioned earlier should be clarified

The members of research group propose the following two basic directions:

- Promote social and economic infrastructure development to realize a market economy, under natural Resource policies that give full consideration to the environment as well as local people's rights and local economies.
- Reform and strengthen forest governance and the forest industry sector, ensuring sustainable
 - forest resource use and forest conservation by prompting modernization and forest conservation.

The members of research group also propose strategic solutions grouped into the six headings shown below.

6.1. Government Responsibilities

Central and local governments should continue to show the **political will** to regulate and monitor forestry using strong measures—while balancing state, business and local community interests—with a master plan for appropriate, sustainable and equitable development.

The following actions should be taken:

- Allow for transparency and consultation on all decisions regarding the forestry sector, and provide for participatory processes that actively engage a wide range of stakeholders.
- Ensure that they take into account all social, environmental and economic costs when considering the benefits of any land or forest development.
- Promote stronger legislative regulation that includes a harmonious and integrated system of laws and codes on nature, on both the federal and local levels.
- Careful coordination of transition to sustainable forest use, while taking into consideration social and political problems.

6.2. Forest Development

The improved management of forest development alone, such as timber concessions and forest conversion projects, will not solve deforestation. Wise use of forest resources and local alternatives to concessions should be considered.

To progress in this direction the following prerequisites should be met:

• All concessionaires should be required to complete an Environmental Impact Assessment

(EIA), as well as a Social Impact Assessment that would focus on the social impacts of proposed logging.

- The national government, in close co-operation with provincial authorities and local communities, should conduct long-term monitoring of logging operations, as well as log transport and exports. Monitoring groups in villages should be encouraged and provided training.
- The forest industry sector should promote modernization and consideration of the environment under the frame of integrated management.
- Improvement should be made in timber pricing, forest use fees and the allocation of fees collected, aiming to realize sustainable forestry.
- Guidelines, law enforcement, and supporting measures on market mechanisms for sustainable resource use should be developed and properly implemented.

6.3. Fire Control

In the short-term, it is essential to prevent forest fires caused by various human activities. With this in mind, the authors emphasis two key solutions: strengthening the weakened fire control system, and raising public awareness about fires.

The following actions are needed:

- Administration of national and local forest fire control systems, coupled with the national fire control policy and programs, should be strengthened.
- Well-balanced forest control measures should be allocated in the system, with attention to both advanced technology and practical equipment.
- Public awareness should be promoted both for local people and urban residents, regarding fire prevention and environmental education about forests.
- International cooperation for fire control and expansion of international aid should be promoted, under the full support of developed countries in the Asia-Pacific region.

6.4. Community Forestry and Participatory Forest Management

Due to environmental constraints, the shortage of financial source and the weakened pubic forest sector, in the new market economy, the existing forest sector alone cannot provide the whole livelihood of local people, as was the case in the Soviet period. Consequently, forest development with an industrial emphasis and narrow-minded resource use are likely to accelerate, and the connection between local people and local forests may be weakened further. In contrast, local communities should be encouraged to continue to value forest resources through their increased involvement in management of forests.

Thus, the authors believe that at the local level, people should be involved as key actors of forest management. In this context the introduction of community forestry, which has been widely employed in tropical countries and the promotion of local participation are key solutions for forest conservation in the RFE.

In order to make progress in this direction, the following actions should be taken:

• Legal mechanisms should be developed or strengthened for recognizing traditional land-use

practices and systems of customary tenure, in order to protect the rights of indigenous peoples. The management status of "TTP' should be improved and the area expanded.

- Sufficient flexibility should be maintained at the national and provincial levels to allow local institutions and knowledge to frame locally unique solutions, in order to promote local economy and industry aiming for financial autonomy (i.e., social forestry).
- Strategies should be compiled for nature and cultural resource conservation at both the federal and *krai* levels.
- Education and advocacy should be promoted on social forestry, nature and culture resource conservation.

6.5. Sustainable Trade

Timber trade can provide an economic basis for the development of the area. The Russian central and local governments, along with consumer countries and NGOs must take action now to make the timber trade environmentally sustainable.

Based on these research findings, the authors emphasize the necessity for quick action to:

- crack down on corruption and bribery;
- ensure full enforcement of existing Russian laws and regulations;
- examine and introduce market-based measures, such as timber certification, to ensure sustainable timber trade;
- ensure accuracy and transparency at all levels of trade statistics; and
- carefully reform and implement forest and resource development policy, keeping in mind the impacts on regional timber trade.

6.6. Responsibilities of the International Community

Forest conservation is an urgent concern of both local and international society. In addition, the role of the international community in forest loss in the RFE region is vital, as this study has shown. Thus the support of international communities is essential to halt forest loss and realize forest conservation in the region.

For these purposes the following actions should be taken:

- The international community should place increased emphasis on the importance of community involvement and participation in approaches to forest conservation, natural resource management and land planning.
- Pledges of loans or grants made by the international community should be carefully conditioned on the basis of respect for human rights and sustainable management of natural resources, in agreements that are informed and transparent to the public. Compliance with such written conditions should be closely monitored and the government must be held accountable for its policies.
- The International community must give carefully consideration of aid from international institutions and bilateral cooperation for large-scale forest development projects aimed at forest carbon sequestration.
- The international community should assist governments to develop community forestry or joint-forest management systems.
- Regional coordination on the impacts of deforestation should be encouraged.
- The international community should provide funds for research projects, to find solutions to overcome forest loss.