

## Problems and Prospects of the Regional Forest Fire Policy Implementation in the Southern Far East

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Ladies and Gentlemen,

Let me welcome the Conference participants on behalf of the Governor of the Khabarovsk Kray, Victor Ivanivich Ishayev, and the Kray Government, and express the hope that this event will be fruitful and result into relevant decisions. The issue considered by the Conference is of great importance not only for the Russian Far East, it affects the environment in the entire Asian Pacific Region. We appreciate that experts from the USA, Canada and Germany have joined Russian specialists to take part in the Conference.

Our commitment to the conservation and replenishment of the Far East forests, to a great extent, defines the life standards in this territory as a whole with the central and southern areas of the Khabarovsk Kray, the Primorsky Kray and the Jewish Autonomous Oblast where about 4 million people live on an area of around 1 million km². In this ecoregion, the flora is represented by 23 forest formations consisting of 150 forest types, over 200 tree and shrub species, and its extraordinarily diverse fauna includes about 300 species of birds and 70 mammal species. The ecoregion has an already developed ecosystem with its unique vegetation and wildlife.

The ecoregion still contains forest ecosystems that have disappeared in the neighbouring countries of China, Korea, and Northern Japan. However, human activities, and many years of industrial timber harvesting have significantly disturbed the forests in the south of the Far East and their ecological balance.

The southern areas of the Far East are exposed to higher forest fire hazard and incidence. Periodically returning extremely dry seasons, the abundance of forest fuels, mountainous terrain poor accessibility of the areas and the severe wind regime – all these precondition the high probability of forest fire occurrence, fast fire spread, and the difficulties of fires fighting. About 78 % of the Forest Fund area is referred to the highest classes of natural fire hazard.

Suffice it to say that during an average fire season, the total burned area is 2 to 3 times vaster than the annual area of industrial logging and still vaster during the driest seasons. In the Khabarovsk Kray alone, the 1976 fires burned an area of over one million ha, and in 1982, the burned area exceeded 2 million.

The change of the country's economic system lowered the life standards for a significant part of the population, particularly, in rural areas, and made people use the taiga as a source of incomes. Forests have become a site of mass visits. This is coupled with the "underdeveloped and too soft" legal framework for punishing those who are to be blamed for fire incidence, and due to this, as much as 75 - 80% of all fires are human-induced fires.

In such a context, to reduce the fire occurrence rates is a most important challenge not only for the public authorities, but the whole society. The fire records for this year (2003) testify to the effect that the year has exceeded the average annual levels of fire incidence and may be called a year of high fire incidence. As of 1 September 2003, almost 1,800 fires occurred in forests and nature reserves in the Jewish Autonomous Oblast, Khabarovsk and Primorsky Krays. They burned 330,000 ha. It means that these three regions accounted for 53 % of all fires, and 34 % of the total area burned in the Far East. In the southern part of the Far East, the average annual number of fires reaches 1,000 with the area burned amounting to about 200,000 ha.

Significant efforts are undertaken by the Forest Service of the Ministry of Natural Resources of the Russian Federation, the regional executive authorities, units of the Ministry of Emergency Situations of the Russian Federation to prevent and combat this calamity. A fire detection system is operational and includes satellite monitoring. Hundreds of various machines, aerial units, thousands of ground-based forest protection workers, and staff from local enterprises are involved in fire fighting. Guards are placed on the roads leading forests, and the public access to the taiga is closed.

All these organizational measures are taken jointly with units of the Ministry of Natural Resources of the Russian Federation, the Far East Aerial Fire Centre ('Airbase'), the Ministry of Emergency Situations, and also involve law enforcement bodies.

At the same time, we have not yet achieved due efficiency in this work. In the Khabarovsk Kray alone, the annual costs of fire fighting vary from Rbl. 100 million to 200 million, and the aggregated losses from fire are estimated at several hundred million roubles.

As of today, the forest service has no more than 55 % of the amount of fire machinery, equipment and fire fighting tools required according to the established standards. The wear-out of the logistic and technical resources has is as high as 60 %, with practically no new modern equipment and radio communications available.

In our opinion, great losses are caused by delays in fire detection and fighting within the first three days after the incidence of a fire. This is primarily accounted for by the curtailed operations of the Far East Aerial Forest Fire Center and lack of mechanized mobile teams of fast deployment. Therefore, fires are rapidly spreading, and it is next to impossible to cope with large fires, so this turns into a problem.

A particularly tense period was recorded in the Kray in the third decade of this July when after the fourmonths of drought, up to 100 - 105 fire were burning at the same time. There emerged a threat to a number of settlements. Central areas of the Kray and the City of Khabarovsk were covered with dense smoke for a fortnight.

Under such conditions, with resources of the forest fire units depleted, it became again obvious that the existing regional policy of long-term lease of the bulk of industrial forests was really a right decision. In the Khabarovsk Kray, 80% of the Forest Fund passed into long-term lease tenures for 25-49 years.

The Kray and Rayon Commissions for Emergency Situations managed to attract about 2,000 people, up to 470 various machines (including 130 heavy bulldozers, 110 tractors and cross-country vehicles, 50 fire engines and water carriers, and up to 20 aircraft) from the lessees and other enterprises. The joint efforts and the August monsoon rains put an end to the critical fire situation.

There are other statistics in favour of long-term lease of the bulk of industrial forests. This year, 1,030 forest fires have occurred in the Kray, with the area burned amounting to 280,000 ha, including 117 fires in leased forests, where they burned 43,200 ha which is, respectively, only 11 % and 15 % of all the fires.

I deem it necessary to say that the currently persistent underfunding (both for preparatory operations and during fire seasons proper) limits the effectiveness of the whole work and reduces its efficiency. We are constantly colliding with significant accounts receivable in this area.

In the recent years, the intervals between the years of catastrophic fires have got shortened from 10 to 12 years to 6 to 8 years, in the south of the Khabarovsk Kray. Due to this, it is evidently vital to improve and strengthen the forest protection system to make it capable of preventing destructive impact of fire on forests. It should be built upon effective prevention coupled with rapid detection and fighting of fires while their areas are still small. In this context, in fire-prone areas, the forest guard should include both mobile fire teams equipped with cross-country and all-terrain vehicles and sets of module forest fire-fighting equipment, and mechanised teams with heavy bulldozers.

There is a need to revise the programmes of equipping *leskhozes* with forest fire machinery and tools. The prepared programme: *Forest Protection against Fire for 2004-2010* is rather of a theoretical and advisory nature, and is in no way supported financially.

We hope that the Khabarovsk-based Far East Regional Forest Fire Coordination Centre (newly established on the basis of the Far East Aerial Forest Fire Centre / Airbase) will help improve the performance in terms of timely fire detection and suppression, reduce the damage inflicted by fire on the environment, ecology and human health.

In the southern part of the Far East, the implementation of the forest fire policy could be substantially supported by the GEF Project of Fire Management in High Biodiversity Value Forests in the Amur-Sikhote-Alin Ecoregion, so we welcome this project and are ready to render all possible assistance.

This project can play an important role for the programmes of improving the systems of fire management, monitoring and prevention, as well as for public awareness/information activities in local communities to prevent forest fires. It can ensure better coordination among Russian and international fire research programmes. Efforts should be focused on improving the system of early warning based on weather events forecasts; timely planning; and distribution of financial resources. There is a need to improve anti-fire arrangements in protected areas and fire prevention and suppression technologies.

We expects that project outcomes will include strengthened capacity of the forest fire services and the Far East Regional Forest Fire Coordination Centre through improved quality of satellite and ground observation data processing, forest fire monitoring, and forecasting, development of up-to-date communications, information support and fast response.