

# Wildland fires part III: Regional focus on north-east Asian

**Dr Leonid Kondrashov** introduces the Regional North East Asia Wildland Fire Network and its main activities in an area where wildland fires are increasing as a consequence of changes in societies and regional climate

**TAKING MANY OF THE GLOBAL** drivers of economic change into consideration, the north-east Asian countries are currently developing as part of one of the world's major regions of economic growth. The primary sources of growth are Japan, South Korea and China. Should economic reforms and restructuring be successful in Russia, it is likely that this country, too, will join these high-performing economies. It is likely that North Korea alone will lag behind for some time owing to its political system.

North-east Asian countries generate about 20 per cent of global gross domestic product. Together, Japan, China, and South Korea generate 85 per cent of the GDP of east and south Asia. They also represent 30 per cent of humanity. Communist China has 1.3 billion people; capitalist Japan has a population of more than 100 million; developing South Korea has 48 million inhabitants; and 22 million people live in Stalinist North Korea.

The region is diverse in its culture and beliefs. Currently, more than 50 per cent of the population in north-east Asia lives in urban areas, among

which are four of the world's 14 mega-cities.

This dynamic region represents rapidly growing markets for consumer goods and services, capital goods, and infrastructure construction expertise. The region's role in world trade is increasing at a rapid rate. The Asia-Pacific region generated more than 25 per cent of the world's merchandise exports in 2006, up from ten per cent in 1963 and 18 per cent in 1983. The northeast Asia governments accumulate foreign currency reserves at an amazing rate. The region is also a magnet for attracting foreign investment.

## ENVIRONMENTAL PRESSURE

The significant growth rate demands huge volumes of raw materials, energy and water. This is leading to current environmental problems that will worsen in the future. With increasingly intensive land use, significant degradation of arable land will continue, as well as the loss of forests, and increasing air and river pollution by industrial and agricultural waste. Wildland fires losses will remain true to their established trends in affecting both nature and society.

The forests in the north-east Asia region provide space for human occupation and a basis for economic activities. Most wildfires in this region occur as a consequence of human activities.

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Agriculture, medical and edible crops, industrialisation accompanied by recent economic growth, hiking, recreation and tourism, etc, are the main causes of forest fires.

Global warming also means a change in regional climate patterns. As a consequence, over the past decade, the region's countries have seen an increase in scale, frequency and area burned by forest fires. The effects on individual countries vary considerably. However, there is economic damage with the cost of fire suppression, efforts to regroup forces and attract volunteer firefighters, and achieving awareness of the general public and national/local politicians.

The negative effects of forest and wildland fires continue to be a major issue in the region; wildfires influence the quality of life, land, air and water. Unacceptable resource losses and the spread of transboundary pollutants need immediate attention by the north-east Asian nations and their international partners. If these negative effects are not fully addressed, they will result in the loss of sustainability of forests, public health and economic opportunities.

The countries of north-east Asia are experiencing growing effects of wildland fires on their natural environments and on societies. In fire-sensitive ecosystems, fires contribute to the degradation of the soil, water resources and biodiversity, endangering the sustainability and biodiversity of ecosystems. In the region, approximately 60 per cent of forests are concentrated in mountain regions which limits access and firefighting. Every year the region experiences about 12,000 fires, which burn no less than one million hectares.

Individual nations are increasing their efforts

▶ to manage fires. However, the magnitude of the problem is requiring united efforts and international co-operation. The NEA countries intend to work together with the UN and other international organisations, notably through the Global Wildland Fire Network under the auspices of the United Nations International Strategy for Disaster Reduction (UNISDR) and the Global Fire Monitoring Centre (GFMC).

## FOUNDATION MEETING

The foundation meeting of the Regional North East Asia Wildland Fire Network (RNEAWFN) was held in Seoul, Republic of Korea, on March 6, 2004. It was hosted by GFMC and the Korea Forest Research Institute and supported by the UNISDR. One goal included each country expressing a desire to establish the RNEAWFN. The members of the newly established network discussed and expressed their support to develop bilateral and multilateral agreements on co-operation in wildland fire management, based on international standards as proposed by the International Wildland Fire Summit. They also planned to investigate the introduction of the Incident Command System (ICS) as the international standard for all wildland incident management.

Members acknowledged the importance of training and capacity building in wildland fire management, community involvement in fire management, bilateral and multilateral wildland fire emergency exercises and of exchange visits and programmes to share lessons learned and to solve problems. They also considered the need to develop arrangements to support the collection and dissemination of wildland fire information, the facilitation of regular regional dialogue and joint projects, and to provide technical support to countries in need of aerial assets and personnel.

The participants discussed the forest fire problems in Russia, the Republic of Korea, China, Japan and other countries. They looked at monitoring fires and suppression methods identified sources of possible technical and funding assistance and support to activities related to fire management, as well as making a joint field trip to burned areas. The participants also drafted a five-year plan and a mission statement for the network.

The next meetings of the network in Japan in 2005, Russia in 2005 and 2006 and China in 2007 were used to strengthen the dialogue to discuss the draft UN Fire Management Voluntary Guidelines and pave the way to participate in the 4th International Wildland Fire Conference in Spain in 2007.

The main outcomes of the Regional



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Session of the Seville Conference included the following recommendations to national authorities and international organisations:

- Foster the bilateral and multilateral co-operation in the field of wildland fire management, realisation of joint research and practical projects advancing the knowledge on wildland fires;
- Promote the utilisation of advanced methods and instruments of fire monitoring and decision support;
- Develop a system of fire specialists' training and awareness of the population on wildland fires and their prevention;
- Arrange a detailed consideration of such documents as 'Fire Management: Voluntary guidelines. Principles and Strategic Actions', proposals for international co-operation development in fire management;
- To support the efforts of the UNISDR Global Wildland Fire Network, its Secretariat, the GFMC, the Regional Wildland Fire Networks in uniting the international activities in fire management, especially in collecting and disseminating the fire information, arranging the intensive international dialogue, projects, etc;
- To promote the establishment of an International Wildland Fire Training Centre, having also the functions of the Regional Fire Monitoring and Research Centre in one of the north-east Asian countries; and
- To attract members of the UNISDR Global Wildland Fire Network as experts and technical specialists in the elaboration of solutions in complex

international disputes and problems.

The participants of the Regional Session urged authorities and international organisations to provide the financial and technical assistance to the Global Wildland Fire Network, and in particular to the three regional networks covering temperate-boreal Eurasia and Asia. In order to realise this strategic plan, a timetable of concrete actions in fostering international co-operation, must be developed. One of the important steps is the organisation of the follow-up work at national level in each country.

There are several other major factors in co-operation that must be carried out at a national level, including annual meetings of the Regional Wildland Fire Networks, and joint implementation projects. Network members must take advantage of the accumulated international expertise in fire management and international co-operation. They must also ensure that results from dedicated meetings, conferences and symposia reach the decision-makers and that these will be challenged to provide the necessary support.

Member countries should continue to strengthen their commitments to promote regional co-operation, including joint investigations, joint fire management demonstration projects, consultations, and conferences. They will also be holding national discussions on the Voluntary Fire Management Guidelines and make sure that the public and institutional stakeholders are involved.

Education and awareness campaigns related to forest fire prevention should be a continuing effort by governments, as is the development of a globally accepted fire management terminology and definitions in the most important languages, which must be a high priority. It is also important that financial support be provided to the UNISDR Global Wildland Fire Network and its secretariat, the GFMC, both by national authorities and international organisations.

Countries belonging to the UNISDR Regional Wildland Fire Networks must contribute to a Global Vegetation Fire Information System, which will include the application of new technologies, and advanced satellite systems for detecting and evaluating vegetation fires.

The Regional Northeast Asia Wildland Fire Network is going to implement a number of activities. These will include reinforcing the partnership between countries by exchanging and sharing information, as well as developing common studies and programmes for forest fire management. In addition, the network will work on the interchange of technology and resources for restoring areas damaged by forest fires. **CRJ**

### AUTHOR

**Dr Leonid Kondrashov** is President of the Non Governmental Agency Pacific Forest Forum and is serving as sub-regional representative of the UNISDR Regional North East Asia Wildland Fire Network ([www.fire.uni-freiburg.de/GlobalNetworks/Northeast-Asia/Northeastasia.html](http://www.fire.uni-freiburg.de/GlobalNetworks/Northeast-Asia/Northeastasia.html))

