



## Forest and Steppe Fires in Mongolia: An Inter-Agency Meeting to Define the Way Ahead

Ulaanbaatar, 11 September 2008

### 1. Rationale

Mongolia for the last two decades has experienced an increase in occurrence, area burnt and environmental impacts caused by wildland fires, including their influence on human health and wellbeing. The scale of wildland fire sometimes has transboundary effects, e.g., fires and fire-smoke pollution crossing the borders with Russia and China, demanding regional / international and cooperative efforts to address the problem. Reasons for the escalation of destructive wildfires are, among other, result of the rapidly changing socio-economic conditions, a limited public budget for forest and fire management, and side effects of illegal logging. Projected trends of climate change impacts on vegetation cover and fire regimes, as well as observed demographic and socio-economic trends suggest that wildland fire may continue to play a major role in the destruction of vegetation cover in Mongolia, resulting, among other, in accelerating steppization, permafrost thawing and desiccation of peatlands / wetlands. There is no international operational mechanism in the region allowing rapid response to large-scale, catastrophic fires.

The First International Central Asian Wildland Fire Conference "Wildland Fires in Natural Ecosystems of the Central Asian Region: Ecology and Management Implications" (2-6 June 2008, Ulaanbaatar / Mandal Soum, Selenge Aimag, Mongolia) addressed the most pressing issues in Mongolia and neighbouring countries. A second component was a consultation of the agencies and other stakeholders involved in fire management in Mongolia. The third element of the conference was devoted to demonstrate advanced techniques in fire management. The conference, demonstration experiment and equipment for the Mongolian partners was funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and commissioned by the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH - Advisory Project "Disaster Risk Management in Development Cooperation" on behalf of the BMZ.

### 2. Main Recommendations of the Round Table Consultation

The participants of the Round Table Consultation held on 3 June 2008 elaborated proposals, conclusions and recommendations.

#### 2.1 Human Resource Development

The issues addressed included human resource development for forest fire prevention and suppression (capacity building of professional staff; community participation and public awareness).

##### Problems defined

- Insufficient professional firefighter capacity
- Limited public initiatives
- Insufficient budgets
- Lack of professional staff on forest and steppe fire in the Administration Units
- Insufficient training and awareness activities

## **Conclusions and Recommendations**

### Parliament

- Increase budget of fire prevention and fire suppression activities in aimags and soums where fire risk is high (Aimag Khural)

### Local Government

- Expand professional classes at the Police Academy
- Translate the manual on Forest Fire Management developed by the FAO, UNDP into Mongolian and use it for training
- Organize training on forest fire prevention, suppression, and forest restoration techniques for local people, user groups, economic entities, rangers and the people of military age who do not serve for military with compensation

### Government of Local Administrations

- Ensure the common use of professional terminologies used by fire fighters and professionals
- Make assessments on human resource capacity and set standards
- Develop manuals, awareness materials and books and disseminate
- Exchange / study experiences nationally and internationally
- Enhance cooperation with international organizations
- Prepare professional staff abroad
- Establish integrated training center under the NEMA
- Improve higher institution programs on forest fire combat; and increase classes /hours/

### International organizations/ Projects

- Involve NEMA officials in prescribed fire training (GFMC)
- Organize training on forest fire prevention, suppression, and forest restoration techniques for local people, user groups, economic entities, rangers and the people of military age who do not serve for military with compensation
- Develop manuals, awareness materials and books
- Study experiences
- Prepare professional staff abroad

## **2.2 Legal, Institutional and Policy Framework**

Issues addressed included the definition of necessary changes of or additions to legal, institutional and policy frameworks.

### Priority measures to be taken

- Elaborate a national program on fire prevention and combat
- Renew Mongolian Law on Forest and Steppe Fire Protection
- Modify the regulation on reimbursement of losses of forest and steppe fires
- Clarify the tasks and responsibilities between the MNE and the NEMA
- Elaborate a regulation to increase the budget on fire prevention and suppression
- Elaborate a prevention plan with participation of all stakeholders
- Establish a fund to combat against fire
- Set indexes for fines and reimbursements
- Enact organization of forest and steppe fire prevention activities
- Incorporate information databases of the MNE and the NEMA
- Give rewards/incentives to the person who found the faulty and the community where there were no fire
- Cooperate with international programs and projects and get support from them
- Provide forest fuel free and release them from licenses
- Wastes time to find the person who set the fire
- Provide with handouts and materials on forest and steppe fire prevention

This can be achieved by setting up a **National Inter-Agency Fire Management Council** (or board), in which the main stakeholders in fire management, notably MNE and NMA, but also representatives of local governments, will continuously cooperate and coordinate the necessary measures to be taken.

## **2.3 International Transboundary Cooperation**

Issues addressed included the development of proposals to improve international cooperation on prevention and combating of transboundary forest and steppe fires as many wildfires occurring on the territory of Mongolia are spreading across the border from Russia. Vice-versa, wildfires are also spreading from Mongolia to Russia.

There is a lack of international legal agreements to regulate issues related to the prevention and combating of transboundary fires. Although transboundary cooperation is currently in principle following protocols signed between the Head of the General Border Protection Agency and the Head of the Regional Border Authority, Siberia, Russia; and the Cooperation Agreement between the Government of Mongolia and China to cooperate against border region fires (signed in 1999), the efficiency of cooperation is still not satisfactory.

### Further steps and challenges

1. Encourage to establish international agreements and to join to international conventions to develop international / transborder cooperation on forest and steppe fires.
2. Establish an Inter-Government Cooperation Agreement with Russia to cooperate on transborder forest and steppe fire (clarify if any agreements have been done before between these countries).
3. Enhance the cooperation of similar disaster prevention organizations of the region; introduce advanced approaches, techniques and equipments and nourish the cooperation in the future.

## **2.4 Research and Development**

The issues addressed the identification of gaps and measures to be taken in fire research and development, including fire management technologies.

### Strengthening Fire Research

- Studies on forest fire risk and appropriate fire suppression methods
- Intensify dendro-pyrological studies to establish historic fire regimes
- Remote sensing studies using satellite data
- Forest fire behavior and ecology
- Regional forest monitoring and regional networking
- Forecasting / early warning of fire danger via fire weather and vegetation status
- Post-fire regeneration and restoration of forest ecosystems
- Development of a Mongolia glossary of forest fire management (i.a.w. GFMC glossary)
- Implementation of prescribed burning

### Technologies / Equipment

- Communication network based on GIS and GPS
- Fire suppression equipment
- Aerial systems (motorized parachutes)
- Establishment of observation points including automated systems, and telephone communication
- Improve availability and efficiency of transportation means (boat, horse, small helicopter, motorcycle)
- Introduction of methods and equipment to set prescribed or suppression fires necessary to prevent and control wildfires
- Provision of forest taxation tools & equipment
- Local production of fire suppression tools

Unanimously, all the Round table participants adopted the proposal of establishing a **National Fire Management Council**, which will ensure the cross-sectoral harmonization, coordination and cooperation of the roles of government agencies and civil society in sustainable fire management.

## **Objectives of the meeting**

The first meeting of key agencies involved in the National Fire Management Council will meet on 11 September 2008 to discuss the follow-up of the national consultation and discuss the draft of Fire Risk Assessment that is being developed by the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH - Advisory Project "Disaster Risk Management in Development Cooperation" on behalf of the BMZ, and implemented by the GFMC.

## **Meeting Agenda 11 September 2008**

10.00-10.10	Opening by MNE
10.10-11.30	Brief evaluation of the First International Central Asian Wildland Fire Joint Conference and Consultation "Wildland Fires in Natural Ecosystems of the Central Asian Region: Ecology and Management Implications", associated with the First Central Asian Forest Fire Experiment (2-6 June 2008, Ulaanbaatar / Mandal Soum, Selenge Aimag, Mongolia) by GFMC (Prof., Dr. Johann Goldammer)
11.30-13.00	<u>Discussion</u> <ul style="list-style-type: none"><li>- Problems, Goals and tasks on central and local levels</li><li>- Establishment of a National Fire Management Council: The Road Map ahead</li><li>- Development of a draft proposal to follow up and develop an efficient action-oriented policy and strategy based on the GTZ/GFMC Fire Risk Assessment, as a basis for bilateral Mongolia-Germany and other partners consultations / negotiations</li></ul>
13.00-13.30	Wrap-up: Conclusions of the meeting MNE and GFMC

Interpretation English – Mongolian will be available.

## **Annex: List of invited Institutions**

### **Ministry of Nature and Environment**

1. G. Shiilegdamba, Minister
2. T. Gantulga, State Secretary
3. A. Enkhbat, Director of Sustainable Development, Strategy Planning
4. Ts. Banzragch, Director of Environment, Natural Resources Agency
5. L. Dorjtseden, Chairman of National Forest Committee
6. Kh. Yahanbai, Director of Forest Policy Department
7. U. Bolor, Director, Forest and Water Research Center

### **National Emergency Management Agency**

1. Ts. Amgalanbayar, Chief
2. D. Namsrai, Deputy Chief

### **Forest Management Authority**

1. Head

### **Training and Research Institute of the Forestry and Wood Industry, Mongolian University of Science and Technology**

1. Ts. Enkhbaatar, Director

### **GTZ**

1. H.R. Hoffman, Principal Advisor
2. D. Enkhtur, Senior Expert, Forest Management
3. N. Bayartaa, Program Expert, Forest Management
4. L. Kondrashov, Pacific Forest Forum (PFF)
5. J.G. Goldammer, Global Fire Monitoring Center (GFMC)

### **Institute of Botany, MAS**

1. Ts. Chuluunbaatar, Researcher

### **State Specialized Inspection Agency**

1. Ts. Shiirevdamba, Director

**Institute of Geoecology, MAS**

1. J. Tsogtbaatar, Director

**National Agency of Meteorology, Hydrology and Environment Monitoring**

1. Director

**General authority for Border Protection**

1. Chief

**Mongolian State Agricultural University**

1. B. Byambaa, Rector