

Reflection on rural fire-fighting and protection systems (March 2006)

Given the drastic effects of fires in rural areas nationwide and the impending promulgation of new legislative and planning instruments on this relevant matter, CNADS decided in its ordinary meeting of September 20th 2005 to establish a Working Group, coordinated by counsellor João Santos Pereira to develop reflections on rural fire-fighting and protection systems and subsequent recovery and reforestation actions of burnt areas. The resulting considerations should be understood as a **CNADS input to a more proactive and integrated fire-fighting policy, based on preventive actions and supported by assessment/revision mechanisms of instruments and results, which assumes their monitoring.**

In this context, **CNADS considers the following:**

1. The key issue for a strategy of protection of the territory against biomass fires in rural areas is the institutional stability and adoption of a culture of assessment and monitoring. It basically suggests the use of good practices of organization. The forest's perennial nature and the need for a long-lasting adaptative management go beyond political electoral cycles and require an institutional stability that would be most welcome.

The regulation of the various measures associated with the protection of forest areas against fires should take into account reasonability criteria. It is usual to enforce laws and regulations which auditing and penalties are difficult or even impossible to implement. In societies with a higher level of self-responsibility, the existence of a penalty *per se* would be enough for the enforcement and auditing authorities to play a deterring role. These authorities should be provided with the means to perform those tasks.

The programming of the rural development for the 2007-2013 periods should be seen as an opportunity to seek Community co-financing of forest fire protection measures. In order to make the most of this opportunity, the future PNDFCI (National Plan of Forest Fire Protection) should pinpoint eligible measures likely to be co-financed by the European Regional Development Fund (ERDF).

2. Protection of forest areas against fire in Portugal should take into account the following factors:

- i) There is a large amount of biomass in forest areas in our territory;
- ii) Weather conditions (and often its topography) are favourable to the occurrence and dissemination of fire; and
- iii) There is a large quantity of ignitions, mainly caused by humans.

In this context, since the complete eradication of "fires in rural areas" is an impossible task (Pyrne, 2006) it should be possible to reduce the number of ignitions and the extent of burnt areas to socially and ecologically acceptable levels. The current proposal for the PNDFCI sets the objectives for 2010 of reducing the burnt area to approximately 0.8% of the forest area (\cong 44,000 ha/year), eliminating fires covering over 1,000 ha of land, reducing the number of fires

covering areas of over one hectare and reducing the number of re-ignitions to less than 1 per cent.

A long-term strategy should be implemented to protect forest areas against fire, minimizing the damages and fire fighting costs. It could be a strategy based on concrete objectives/goals and establish an accurate definition of measures to be implemented to achieve the set goals. One of the most important elements of this strategy will be a stringent result assessment criterion to contribute to the system's improvement.

In order to improve the quality of the anticipated management it is vital to make a strong investment in education and training, namely in scientific training, which forms the basis of an informed decision-making. It is also recommended that conditions are developed to value activities associated with the forest and the rural area in general, namely by specializing some of them, such as preventive forestry, surveillance, first intervention and forest fire-fighting.

2. For the sustainable development of Portugal it is vital to take long-lasting measures to reduce the risk of fire and control burnt areas, as well as to reduce economic and environmental damages. However, this is a long-term objective and the burning and spreading conditions of fire remain in the near future. It is therefore essential to accept the need to improve fire prevention, detection and fighting conditions.

The detection of fires in rural areas, carried out by the National Network of Fire Spotter Stations (RNPV) and coordinated by the General Directorate of Forest Resources (DGRF) is one of the elements of the forest fire protection system. The latest conclusions of the "Initiative on Forest Fires" by COTEC Portugal show that the RNPV has a low to very low coverage level in approximately 34% of the territory. A restructuring proposal was put forward to increase the area covered by each fire spotting station.

The recent legislation assigns SEPNA (Nature and Environment Protection Service of the Police (GNR) "...the national coordination of forest fire prevention, surveillance and detection". Some of the experts heard by CNADS believe that the inclusion of RNPV into SEPNA should be subject to an effective monitoring by DGRF. Since most fire occurrences are associated with human activity, it is vital to invest in environmental awareness and education, as already established by decree law n. 156/2004 of June 30th. It is also urgent to develop a culture of citizenship responsibility and protection of our shared heritage, where the mass media has a main role to play in terms of the objectiveness and pedagogical content of information.

It is also consensual that a strong investment should be made to hinder arson-associated causes.

The establishment of a professional and highly qualified structure that is skilled in every field of protection of forest areas against fire is also a cornerstone measure of the current proposal for the PNDFCI, which is most welcome.

The need to coordinate short-term prevention with fire fighting should be reflected in the examined individual legislative instruments. Integration and coordination should be promoted and sectorial approaches should be avoided. Therefore, it is fundamental that the future PNDFCI considers these two elements, namely by putting forward integrate strategies for civil protection and forest protection, without forgetting upstream issues in terms of management of rural areas.

4. The provision of a structure to support forest areas, namely by developing a regional network of forest protection, aims at reducing the annual burnt area. Any such measure should be planned in an integrated manner and coordinated with the land use policy. The CNR itself anticipates this provision of infrastructures for burnt areas in 2003 and 2004. The proposed amendment of decree law n. 156/2004 of June 30th already determines some measures that are part of the strategic guidelines suggested by CNR. The National Plan of Forest Fire Protection should consider it one of the main cornerstone measures toward fire fighting and prevention. An adequate approach to Protected areas should be made, based on scientific knowledge and specific goals of qualification and concerned with a fair balance between the infrastructures to be developed and the relevant values to be protected.

In addition, CNADS would like to stress that the type of long-term measures that will be required to reverse the increasing trend of burnt areas in rural fires will only succeed if they are adopted by everyone, including the media, as a strategic issue for the country's overall development. The example of other countries with similar weather conditions shows that it is possible to reverse the trend of the last few years. In addition to good policy measures, the need to engage citizens and particularly the communities in this process "should not be wasted". This should be preceded by public awareness and mobilization efforts. CNADS also believes that the indispensable adoption of a National Plan of Forest Fire Protection might become an opportunity to integrate individual measures into a coherent strategy aimed at using good practices, appropriate and consequent organization principles and to promote a culture of responsibility and assessment.