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Italian Court of Auditors**

Case study of an environmental audit regarding forecasting, preventing and actively combating forest fires

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Abstract

This paper analyses a specific case of an environmental audit of forecasting, preventing and combating forest fires.

It sets out the objectives, scope and audit procedures.

The audit conducted by the Court of Auditors is essentially financial, comprising an assessment in terms of the effectiveness, efficiency and cost-effectiveness of the management of resources allocated since 2000 from the central government budget for this specific function.

The audit covered the implementation of measures designed to deal with forest fires throughout the whole country.

It focused in particular on issues of relevance to the implementation of Law No 353 of 21 November 2000.

1. Preliminary remarks

The investigation into the management of measures to forecast, prevent and combat forest fires launched on 16 December 2003 under Resolution No 26/2006 adopted by the Central Audit Division of the Court of Auditors, was designed to take stock of progress with implementing Framework Law No 353 and 21 November 2000 on forest fires.

The scope of the investigation were the measures adopted and the related results achieved in terms of environmental education on all the aspects provided by Italian legislation; procedures for procuring firefighting aircraft, bearing in mind the initiative taken by the European Commission against the Administration regarding helicopter procurement; supervising and re-using central government budgetary allocations to assignees remaining unspent; monitoring statutory formalities by the Civil Protection Department.

2. The forest fire phenomenon

During the past 10 years, Italy has seen a steady rise in the number of forest fires, despite greater financial and organisational commitments to addressing them.

The largest number of fires take place in the southern regions and on the islands.

The fact that fires destroy ever-smaller areas of woodland shows that more timely and effective measures are now being adopted.

Forest fires have numerous repercussions, but when one considers that the woodlands are a fundamental element in the natural heritage for biodiversity conservation, hydrogeological protection, climate stability, the water and air cycle, the beauty of our landscapes and enhancing the quality of life.

Forest fires have also caused huge economic loss and damage to both property and business, particularly in the country=s tourism areas.

Not to mention the threat to the safety of the public and the personnel operating in this sector.

Forest fires have many causes, which the State Forest Rangers Corps group together into five categories: natural, accidental, negligent, malicious, and other unknown reasons.

In recent years, malicious fire-raising has been by far the most common cause of forest fires.

Confirmation of the need for particular care to be taken when managing funding for combating forest fires comes from the fact that the European Community has classified numerous areas in the Italian regions as high fire-prone zones.

The European Community has acted to combat forest fires by adopting measures under annual woodlands fire-protection programmes, and instituting a monitoring system throughout the Community.

3. Authorities responsible for implementation

Article 117 of the Italian Constitution vests the Ordinary Statute Regions with lawmaking powers to combat forest fires, which was essentially confirmed by Law No 3 of 18 October 2001.

Given the variety of authorities responsible for forest fire prevention, and considering that the statutory provisions are fragmentary and not organically organised, the Constitutional Court advocated the passage of legislation to bring together all the various powers into an organic and co-ordinated system.

This system was implemented by Law No 353/2000, which gave central government not only guideline-setting, coordination and deputising functions, but also a number of technical/operational tasks. This law vests the regions with primary authority for the conservation of the woodland heritage, and defending it from fire.

Activities to combat forest fires comprise forecasting, prevention and ground-based and aerial active firefighting measures, together with environmental education, training and information measures.

All these measures require a regional plan to be adopted beforehand, implementing the guidelines issued by the Council of Ministers.

The regional governments may combat forest fires availing themselves of the resources, facilities, assets and personnel of the National Fire Service and the State Forest Rangers Corps, together with personnel belonging to voluntary organisations.

At central government level, the Civil Protection Department guarantees and coordinates nationwide aerial firefighting operations, ensuring the functional efficiency of the state-owned fleet of firefighting planes and guaranteeing their upgrading and modernisation.

The State Forest Rangers Corps co-operates with the regional governments for ground-based firefighting operations, undertaking activities nationwide to combat fires using aircraft, and providing training for specialised personnel, and running forest fire prevention information campaigns.

The National Fire Service operates in conjunction with the regional authorities, on the basis of jointly agreed programmes.

Other parties involved in combating forest fires on the ground are the local authorities who place teams of workers at the disposal of the firefighters, when necessary.

ASocially useful workers@ and members of voluntary associations are also engaged in fire-fighting activities.

4. Financial aspects of forest fire management

Law No 353/2000 allocated about \pm 10 million a year to the regional governments.

The criterion for the break-down of the funding between the regions, based on the

proportion of woodlands within each region rather than on actual loss and damage caused by fires, has not produced positive results, and at the Conference of Central and Regional Authorities it was decided that account should also be taken of the effectiveness of the organisation to deal with forest fires using regional funding.

Priority is given to procuring aerial firefighting facilities using the funds allocated to the State Forest Rangers Corps, the remainder being spread between prevention, training, and the acquisition of vehicles, plant and equipment.

5. Audit findings

The Court of Auditors= investigation examine the audit programme decided upon when planning the audit activities for 2004.

The information, data and elements for evaluation acquired during the investigation revealed a number of critical managerial aspects, and failures on the part of certain authorities having responsibility under Framework Law No 353 of 21 November 2002 to participate in defending woodlands from fires.

One of the elements hampering effective firefighting is the plurality and convergence of central and regional government powers regarding the implementation of measures even though the Framework Law vested the local authorities with administrative functions in this regard, leaving the central authorities with specific and clearly-defined tasks.

Virtually none of the regions, five years after the entry into force of the State laws laying down the principles, have yet managed to adjust their regional legislation and adopted equipped themselves with appropriate facilities, demonstrating a lack of co-operation, which has been specifically denounced by the representatives of central government departments.

Law No 353/2000 is still only partially implemented, partly because of the failure of the central government authorities to exercise their powers, with the result that the whole system built up around the law has not yet come fully into force.

The Civil Protection Department has failed to carry out a thorough monitoring of the formalities required by Law No 353/2000, and has not provided parliament with the information it requires to make the necessary adjustments to the legislation.

Ignorance of the facts has also hampered the implementation of the law, because it has prevented the central government authorities from performing their coordination function.

There have been considerable delays in adopting regional plans for forecasting and preventing forest fires, which were supposed to be the prime instrument for programming all the measures required.

The failure and/or delay in adopting regional plans is yet another negative element, when one considers that firefighting can no longer be performed, as it was in the past, by adopting emergency measures alone, but requires the careful planning of resource-use.

Bearing in mind the fact that most of the fires are caused deliberately, and even with criminal intent, combating forest fires must be addressed focusing on the root of the problem, and not waiting for the effects before acting.

We are unable to know the overall official figures on the institution of municipal cadastral records of the woodland areas, also because the Civil Protection Department has failed to monitor this.

Neither is their any comprehensive information available on the survey of the use by regional governments of their transfers from the central government budget.

The Department has also failed to acquire prompt and reliable accounts of expenditures.

The training and information schemes designed to prevent and to combat forest fires also demand a coherent and organic plan at the general level, to be drawn up by experts in this sector.

The initiatives taken by the central government authorities responsible for this subject matter, and particularly the state Forest Rangers Corps, have been positive.

Due to the shortcomings, inadequacies, critical factors, and tardiness found in managing the forest fire-fighting programmes, an adequate assessment of the level of the efficiency, effectiveness and cost-effectiveness in actively combating forest fires has not been possible.

From the purely financial point of view, we have found that in order to make the operational procedures and structures more functional, resources must be better targeted and more resources must be allocated for this purpose, because the funds available for forest fire-fighting purposes appear to be inadequate for the purpose.

With regard to the assets required to combat forest fires, our analysis has revealed the need for more land vehicles for in order to enable both the State Forest Rangers Corps and the Fire Service to act more effectively and at a lower cost.

6. Conclusions

The environmental audit programme relating to forecasting, preventing and combating forest fires, focusing on specific performances relating to the matching budgetary of the Ministry for the Environment, was carried out accurately, as provided by Law No 20 of 14 January 1994.

The audit procedure and methodology were performed properly, and the criteria for assessment and coordination parameters used were the ones laid down by the Court of Auditors= Central Government Audit Division.

In short, the results of the audit have evidenced delays in drafting programmes, failures to implement the required measures, a fragmentation of powers and responsibilities, and inefficiencies and ineffectiveness in the form of delays in defining programmes, failure to comply with the statutory formalities required from all central, and regional and local government authorities, and a lack of control and monitoring by the political and administrative authorities.