

AUDIT REPORT

on the adaptation measures undertaken by the Government of the Republic of Bulgaria in relation to climate change in the period January 1, 2006 – December 31, 2010 in the Ministry of Environment and Water, the Ministry of Agriculture and Food and the Ministry of Interior

Summary

1. This report was prepared as a result of a performance audit on the adaptation measures undertaken by the Government of the Republic of Bulgaria in relation to climate change, carried out in the Ministry of Environment and Water, the Ministry of Agriculture and Food and the Ministry of Interior.

1.1. The subject of the audit is the performance of adaptation measures and activities in relation to climate change undertaken by the Government especially in the fields of water management, forestry and agriculture – sectors identified by the European Parliament as vulnerable. In addition, the audit is focused on the measures and activities undertaken by the Government in the field of prevention of disasters and accidents and their impact with relevance to the National Early Warning and Alerting System including early monitoring.

The audited period is from 01.01.2006 until 31.12.2010.

1.2. The institutions responsible for the performance of the measures and activities under the audit scope are:

a) The Ministry of Environment and Water (MEW) – in relation to the administration's activity to support the Minister of Environment and Water in conducting the policy of the Republic of Bulgaria in the field of climate change, environment and water management.

b) The Ministry of Agriculture and Food (MAF) in relation to the administration's activity to support the Minister of Agriculture and Food in conducting the national policy in the field of agricultural and forestry management through the structures within the Ministry – Hydro Melioration Directorate, Forestry Executive Agency, Executive Agency "Hail Suppression", National Agricultural Advisory Service.

c) The Ministry of Interior (MI) – in relation to the management of the Early Warning and Alerting System for the Executive Bodies and the Population in cases of the risk of flooding and for locating forest fires and limiting their impact.

1.3. The audit objectives are: to provide the legislative and the executive authorities, the auditee and other interested parties with independent and objective information about the results from the performance of the measures and activities of the Government for adapting to climate change and/or increasing the country's adaptive capacity of some of the vulnerable sectors – water management, agriculture and forestry, and to support the Government in improving the planning, performance, reporting and assessment of the measures and activities for adapting these vulnerable sectors of the Bulgarian economy.

2. According to the analysis and the developed scenarios for the expected climate changes globally and in Bulgaria until the end of 21-st century the average annual temperature may increase by between 2 and 5°C, the overall precipitation and the duration of snow cover may generally decrease, while the extreme meteorological phenomena like storms, hail, etc. may become more frequent. These expectations are part of the reasons for the Government to plan and perform measures and activities for adaptation to the existing and expected climate changes.

During the period 1995 – 2010 the commitments of the Republic of Bulgaria related to the mitigation and the adaptation to climate changes arising from the European legislation

grew. After 2009 the focus was on adaptation measures and activities. In this regard, the analysis and the assessment of a part of the adaptation measures and activities of the government related to climate change arising from international commitments¹ is assessed as necessary.

3. In the period 01.01.2006 – 31.12.2010 no vulnerability assessment of all the socio-economic sectors with reference to climate change for identifying their adaptive capacity and for planning the necessary measures and activities for their adaptation to the expected climate changes, was carried out.

A vulnerability assessment of agriculture and forestry was carried out before 2005 for the purposes of drafting the Second National Action Plan on Climate Change (2005 - 2008). In drafting the vulnerability assessment and the proper action plan no financial assessment of the measures and activities envisaged for implementation was carried out including for adapting the agriculture and forestry to climate change.

In 2010 for the purposes of drafting the "Programme of Measures for Forest Adaptation in Bulgaria and for Mitigation of the Negative Impact of Climate Change" a vulnerability assessment of forestry by vulnerability zones of the forest eco-systems was carried out. This is assessed as a considerable progress in the process of adapting forestry to climate change.

Regardless of the existing tendencies towards drought, water management in Bulgaria is not explicitly identified as vulnerable to climate change sector and respectively no assessment of the vulnerability or the adaptive capacity of the water sector was carried out.

In light of the European Parliament Resolution of 06.05.2010 concerning the White Paper "Adapting to climate change: Towards a European framework for action", the Bulgarian Government still faces the challenge to carry out a vulnerability assessment of socio economic sectors following the expected climate change scenarios, including the sectors already announced by the European Parliament as vulnerable (waters, agriculture and forestry, soils, social policy and healthcare, infrastructure, transport, energy, biodiversity, urban environment, migration and cultural heritage).

4. Until the end of 2010 no national strategy for adapting the vulnerable economic sectors to climate change was drafted and approved in the Republic of Bulgaria. This entails the risk of non-fulfillment of Bulgaria's international commitments to formulate, publish, implement and periodically update national programmes containing measures for adaptation to climate change by 2012 or establishing national plans for adaptation to climate change.

Notwithstanding the above mentioned the Bulgarian governments have planned and performed measures and activities contributing to the adaptation of agriculture, forestry and water management sectors both to the specific climatic conditions in the country and to the generally existing tendencies of climate change in global aspect. During the audited period mid and long term planning and programming documents were drafted and approved on national and sector levels envisaging measures and activities aimed at adapting these sectors to climate change. But these planning and programming documents have certain deficiencies:

a) not all strategic planning and programming documents envisaging the implementation of measures and activities by institutions of different competence and of different sectors are adopted and/or approved by the competent authority or in accordance with the legal procedure which involves the risk of insufficient coordination between institutions in the processes of their implementation, monitoring and control;

¹ United Nations Framework Convention on Climate Change, ratified 16.03.1995; the Kyoto Protocol to the United Nations Framework Convention on Climate Change, ratified on 17.07.2002 and in force since 16.02.2005; White Paper Adapting to climate change: Towards a European framework for action adopted by the European Parliament; Resolution of the European Parliament of 06.05.2010

b) not in all cases there exists compliance between the objectives and/or priorities set in all mid and long term planning and programming documents and the objectives and priorities of the approved for implementation policies and programmes within the framework of the programme budgets of the ministries responsible for the implementation.

c) not all programming and planning documents define indicators for measuring and assessing the level of performance the envisaged measures and activities which increases the risk of improper planning of measures and activities for achieving the identified objectives;

d) not always the institutions responsible for the implementation and/or coordination of the measures and activities are clearly identified and not always the time limits for implementation of specific measures are defined;

e) some of the programming and planning documents lack time limits for reporting and assessing the effect of the overall performance which entails the risk of insufficient monitoring and control.

The Bulgarian Government faces the challenge to develop and approve a national strategy/programme for the adaptation of the vulnerable sectors to climate change which: complies with the general European framework; encompasses all vulnerable socio-economic sectors; covers all identified risk factors assessed as significant for the sectors' sustainable development; has an established performance time framework to the priority of the measures and activities envisaged; has clearly defined measurable objectives and performance assessment indicators; has clearly defined responsibility and coordinating body at the appropriate management level; guarantees the current monitoring, control and assessment of the degree of achievement of the objectives and priorities set; provides transparency, publicity and information for the interested parties and the public about the effect of the implementation of the measures and activities planned.

5. The performance of the adaptation measures and activities within the competences of the executive authorities conducting the state policy in water management, agriculture and forestry sectors for the period 2006 – 2010 has been analyzed.

5.1. The Second National Action Plan on Climate Change (NAPCC) 2005 - 2008 and the Programme Concerning the Necessary Measures in the Circumstances of Trend to Drought (2001 - 2010) have been analyzed in order to assess the performance of adaptation measures and activities the term of which expires in the audited period and the following has been found:

a) The envisaged annual reporting of the MEW to the Interdepartmental Commission on Climate Change about the results of the performance assessment of the Second NAPCC and about the need of adoption of additional policies and measures has not been carried out.

The assessment report of the Second NAPCC 2005 – 2008 does not included reporting and assessment of the measures and activities performed in forestry aimed at forest adaptation.

The policies and measures reported for agriculture and related to manure management, fertilization and irrigation have not achieved their objectives to the sufficient level.

In relation to its international commitments for reporting Bulgaria has sent 5 national reports on climate change from which it can be understood that for the period 1996 – 2011 the Government hasn't assessed as vulnerable to climate change other socio-economic sectors than agriculture and forestry.

b) The Programme Concerning the Necessary Measures in the Circumstances of Trend to Drought (2001 - 2010) includes a set of legal, organizational and investment measures for the implementation of which an action plan and a schedule had to be developed. The institutions responsible for the coordination, monitoring and performance control are the MEW and the Ministry of Regional Development and Public Works.

The Programme was effectively fulfilled by all institutions only in 2001. The action plan, the schedule for implementation and the system of indicators for monitoring and assessment of the level of objectives achievement have not been developed.

After 2006 the MEW starts working on the unification of approaches and the development of indicators for assessing the water shortages and droughts on the basis of which the River Basin Management Plans should incorporate strategy and measures for resolving these problems.

No report for the overall implementation of the Programme has been developed.

The Programme hasn't achieved its objectives and part of the problems identified at its drafting remains for solution for the period 2010 – 2015.

5.2. Because of the existing problems in the processes of monitoring and carrying out ongoing control over the implementation of the strategic planning and programming documents, the audit was focused on the analysis and assessment of the implementation of the adaptation measures and activities performed by the MAF and the MEW according to their competencies in the agriculture, forestry and water management sectors.

a) The activities related to irrigation in Bulgaria have not achieved the expected results during the audited period.

The tendency for the last 20 years shows a decrease of the irrigable land and its ineffective use which prevents both the state, as well as the operating companies from investing in the sector.

A comprehensive analysis of the development of the irrigation activities during the recent years is needed in order to define a concept for restructuring the sector and optimizing the hydro melioration infrastructure. Apart from the analysis currently developed by the MAF for drafting such a concept it is necessary to outline the development of agriculture in the context of the EU Common Agricultural Policy.

A reassessment of the management and the sources for financing the activities in the field of hydro melioration is needed in order to decrease the public expenditure for operating and maintaining the objects of the HMS for irrigation, included in the companies' capital.

b) The protection from hail of the agricultural production is one of the most effectively performed activities aimed at increasing the adaptive capacity of agriculture in relation to climate change, but the problem of expanding the protected areas still remains unsolved;

c) The analysis of forest condition and the data about forest area, functional type and age prove the conclusion that the activities performed in the period for forest reproduction, management and protection ensure forests' sustainable development and guarantee achievement of the objectives of the state policy on forestry. At the same time, the decrease of funds in the budget of the FEA as a main source for financing such activities generates a risk for the achievement of the objectives laid down in the policies and programmes performed by the Agency.

The forestry sector is the only one in which a specific programme of measures for adapting Bulgarian forests to climate change was developed and approved;

d) The tendency of increasing the number of provided advice and consultation to farmers as well as the high percentage of approved projects for financing from EU funds proves the increased quality of the advice services rendered by the NAAS in the sector of agriculture. The activities increasing the awareness of farmers and forest owners about the importance, necessity and means of sustainable management of agricultural land and forests will become more and more important in light of the developed scenarios of climate change.

e) The MEW and the RBD in the framework of their competences perform mainly controlling and coordinating functions in the field of water management which indirectly contributes to the achievement of the objectives for sustainable use of water resources. The data about the measures and activities related to preservation of water resources through the

issue of the respective permissions and the control over compliance with the terms and conditions of these permissions is not sufficient for assessing the effect of the water management policy conducted by the MEW.

It is worth noting the lack of interrelations between the objectives, priorities and indicators for assessment provided in the long-term planning and programming documents in the sector and the monitored and reported by the MEW indicators in assessing the degree of implementation of the approved policies and programmes in the field of water management.

The non-performance of engagements in relation to coordination, monitoring, control and reporting the performance under a part of the strategic documents developed in the field of climate change and water management is assessed negatively.

6 A review and assessment of the management of the National System for Early Warning and Alerting the Executive Authorities and the Population in cases of risk of flooding and for locating forest fires under the competence of the MI was carried out in relation to the performance of activities in the field of prevention of disasters and accidents including such due to climate change.

The introduced new System for Early Warning and Alerting the Executive Authorities and the Population is extremely important for the country as far as the potential and the possibilities for collecting, processing and transferring data in real time is concerned. The operation of this system permits immediate and adequate reaction in cases of disaster.

a) The Centre for Space Monitoring disposes of significant potential for modeling various scenarios for climate change, for predicting the risk of flooding, for locating fires, etc. The Centre has a considerable potential that may be used not only by the Bulgarian authorities but also for performing cross border projects. At the same time the non provision of funds for subscribing to data from the Disaster Monitoring Constellation (DMC) limits the opportunities of the Centre to receive and process high quality information.

b) The System for Early Warning and Alerting the Population is still not completed since it does not cover the whole territory and population of the country.

7 The practice for monitoring, reporting and announcing the results from the performance of the strategic planning and programming documents does not ensure the effective implementation of the envisaged activities since the processes of ongoing monitoring, reporting and assessment of the performance of long term planning and programming documents is highly underestimated. Such an assessment is supported by the following:

a) lack of ongoing monitoring and annual reporting of the degree of implementation of the Second National Action Plan on Climate Change 2005 -2008;

b) lack of ongoing monitoring, annual reporting and final assessment of the degree of implementation of the Programme Concerning the Necessary Measures in the Circumstances of Trend to Drought (2001 - 2010);

c) lack of ongoing monitoring and annual reporting the implementation of nearly all long term planning and programming documents analyzed during the audit with the exception of programmes financed by EU funds

The adaptation measures and activities performed by the Ministry of Environment and Water, the Ministry of Agriculture and Food and the Ministry of Interior in the framework of their competences are assessed as effective with the exception of the measures and activities related to hydro melioration and the activities for monitoring, control and reporting the performance of the national water management policy.