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Environmental Performance Review Programme:

First Environmental Performance Review of Turkmenistan

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First Environmental Performance Review of Turkmenistan: Recommendations

Note by the secretariat

Summary

The present document provides recommendations of the first Environmental Performance Review of Turkmenistan agreed upon by the Expert Group on Environmental Performance at its meeting held in Ashgabat on 13-15 March 2012.

The Committee is invited to adopt these recommendations.

I. Environmental policy and management

Chapter 1: Decision-making for environmental protection

Recommendation 1.1

The Cabinet of Ministers should improve:

- (a) The effectiveness of interdepartmental State commissions dealing with environment-related issues by strengthening their mandates;
- (b) The exchange of information between different ministries and committees by creating a uniform environmental information system at the governmental level.

Recommendation 1.2

The Cabinet of Ministers should adopt the draft national environmental programme for the period 2012-2016 with effective mechanisms of financing, control and monitoring over its implementation.

Recommendation 1.3

The Cabinet of Ministers should:

- (a) Facilitate drafting and adoption of new laws on nature protection, on flora and fauna, on nature protected areas, on waste, on renewable energy and energy efficiency, and on pastures;
- (b) Facilitate the introduction of provisions on access to environmental information to existing laws, and modifications of existing laws, such as those regulating biodiversity conservation, protection of atmospheric air and ecological expertise;
- (c) Develop and adopt secondary legislation that would strengthen the system of environmental, land and water legislation.

Recommendation 1.4

The Cabinet of Ministers should:

- (a) Develop a functional legal definition for sustainable development that will allow its integration in policy documents;
- (b) Improve policies that promote sustainable development;
- (c) Develop a national sustainable development strategy, including a coherent set of targets.
- (d) Strengthen institutional mechanisms of intersectoral cooperation by creating a body that will promote the development and implementation of sustainable development programmes and plans.

Chapter 2: Regulatory instruments for environmental protection

Recommendation 2.1

The Ministry of Nature Protection should:

- (a) Improve its current approach to the performance appraisal of environmental enforcement activities of its subordinated structures;
- (b) Review, by taking into account international practices, performance indicators allowing measurement of progress achieved through the inspection and enforcement activities.

Recommendation 2.2

The Ministry of Nature Protection should undertake necessary practical measures for the implementation of the requirements on public participation of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters and the national environmental impact assessment (EIA) legislation through the involvement of the public in the EIA procedures and State ecological expertise process as well as into decision-making on programmes, plans and policies relating to the environment.

Recommendation 2.3

The Ministry of Nature Protection should ensure the availability to the general public of information and data on environmental inspections and enforcement, and on environmental regulations and requirements.

Recommendation 2.4

The Ministry of Nature Protection should develop an environmental enforcement strategy with a focus on environmental performance of operators of industrial activities and measures taken by operators for the achievement of better compliance with environmental requirements.

Recommendation 2.5

The Ministry of Nature Protection, in cooperation with other relevant ministries, should:

- (a) Consider, in the medium-term, preparing new legislation setting rules for environmental permit issuing, taking into account the concept of integrated pollution prevention and control (IPPC);
- (b) Define guidance for national best available techniques (BAT) taking into account country-specific conditions; these national BAT should be taken as a background for setting technology-based emission limit values and for permit issuing;
- (c) Introduce technology-based emission limit values and other generally binding quantified requirements to reduce, step-by-step, air and water pollution for selected major polluting sectors/industries (including technically and economically achievable compliance deadlines).

Chapter 3: Economic instruments and financing of environmental protection

Recommendation 3.1

The Ministry of Nature Protection, in cooperation with relevant authorities, should:

- (a) Strengthen the effectiveness of pollution charges in creating adequate incentives for pollution abatement and control. It is also important to create a legal provision that ensures a timely adjustment of charge rates and fees for use of flora and fauna to compensate for inflation;
- (b) Review existing charges for air emissions and wastewater discharges in order to introduce an optimal and effective set of charges based on a limited number of specific pollutants;
- (c) Abolish existing exemptions from payment of air pollution charges by oil companies working on the basis of production sharing agreements.

Recommendation 3.2

The Cabinet of Ministers should develop and implement a strategy for the introduction of effective mechanisms and instruments for rational use of water resources. This involves notably:

- (a) The universal installation of water measuring meters in households and water user associations and provision of appropriate financial support for that purpose;
- (b) Gradually raise water tariffs to a level that allows full recovery of operating and investment costs and therefore ensures the financial sustainability of the water sector.

Recommendation 3.3

The Cabinet of Ministers should

- (a) Ensure the installation of gas meters to all households and provide appropriate financial support for that purpose;
- (b) Consider reforming energy tariffs by gradually raising prices of electricity and gas to levels that ensure full cost recovery and create effective incentives for the efficient use of energy.

Recommendation 3.4

The Cabinet of Ministers should continue the process of gradually raising vehicle fuel prices to levels that limit the adverse environmental impacts of higher vehicle fuel consumption, while taking into account broader socio-economic implications of such measures, and supporting at the same time environmentally sustainable modes of transport.

Recommendation 3.5

The Cabinet of Ministers should:

- (a) Ensure that there is an adequate funding for the implementation of the country's international environmental commitments;
- (b) Increase transparency concerning the environmental expenditures made in the country by the State and the enterprise sector;
- (c) Increase the cooperation with multilateral institutions and bilateral donors, notably developed countries, to benefit more than in the past from targeted financial and technical assistance.

Recommendation 3.6

The Ministry of Nature Protection, in cooperation with other competent government bodies, should review to what extent the existing combination of regulatory and market-based (economic) environmental policy instruments should be changed in order to improve the effectiveness of environmental policy.

Chapter 4: International cooperation

Recommendation 4.1

The Cabinet of Ministers should:

- (a) Continue strengthening national actions in support of multilateral environmental agreements (MEAs) and programmes;
- (b) Utilize fully the technical and financial support available from the international community through these mechanisms by concluding the alignment of national legislation with international and regional obligations of MEAs to which the country is a party.

Recommendation 4.2

The Cabinet of Ministers should:

- (a) Improve the mechanism of work and the coordinating functions of the State Commission to Guarantee the Implementation of Commitments of Turkmenistan Arising from UN Environmental Conventions and Programmes;
- (b) Strengthen the capacity of focal institutions responsible for multilateral environmental agreements and programmes and expand their participation in international environmental networks.

Recommendation 4.3

The Ministry of Nature Protection, in cooperation with other relevant authorities, should take appropriate measures to fully comply with:

- (a) Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal;
- (b) Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice;
- (c) Cartagena Protocol on Biosafety to the Convention on Biological Diversity.

Recommendation 4.4

The Ministry of Nature Protection, in cooperation with other relevant authorities, should assess the costs and benefits of and promote accession to those MEAs to which it has not become a party yet, such as:

- Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- Convention on Persistent Organic Pollutants
- Convention on International Trade in Endangered Species of Wild Fauna and Flora;
- Convention on Migratory Species;
- African-Eurasian Migratory Waterbird Agreement;
- Convention on Long-range Transboundary Air Pollution and its protocols;
- Convention on Environmental Impact Assessment in a Transboundary Context and its Protocol on Strategic Environmental Assessment;
- Convention on the Transboundary Effects of Industrial Accidents
- Nagoya Protocol on Access to Genetic Resources to the Convention on Biological Diversity

Once ratified, the Cabinet of Ministers should take steps for the effective implementation of these MEAs.

Recommendation 4.5

The Ministry of Water Economy, in cooperation with other relevant authorities, should assess the costs and benefits of, and promote accession to, the following MEAs:

- United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses.
- Convention on the Protection and Use of Transboundary Watercourses and International Lakes and its Protocol on Water and Health;

Recommendation 4.6

The Cabinet of Ministers should extend the dialogue with neighbouring countries on issues related to transboundary rivers, with a view to ensuring sound management of water quality and quantity, and increasing cooperation among Central Asian countries.

Chapter 5: Environmental monitoring, information, public participation and education

Recommendation 5.1

The Ministry of Nature Protection should review the national environmental monitoring system to identify gaps, weaknesses and inconsistencies and to develop a strategy with an action plan for further modernization and upgrading the monitoring networks in line with international guidelines and best practices.

Recommendation 5.2

The Cabinet of Ministers should ensure that relevant ministries and other government bodies regularly upload on their websites environment-related data and information that they collect or produce.

Recommendation 5.3

The Ministry of Nature Protection should regularly upload on its website copies of national reports and communications submitted to governing bodies of MEAs in the national and, if available, other languages.

Recommendation 5.4

The Cabinet of Ministers should establish a system for periodically producing national indicator-based environmental assessment reports taking into account the internationally agreed guidelines. For this purpose, in particular:

- (a) The Cabinet of Ministers should establish an inter-agency expert group composed of all relevant State institutions and representatives of academia and NGOs;

- (b) The Ministry of Nature Protection should establish a dedicated supporting working unit.

Recommendation 5.5

The Cabinet of Ministers should ensure that:

- (a) The land assessment of the country is carried out and the land cadastre is updated periodically, through modern technologies such as GIS technologies, remote sensing data and satellite images;
- (b) An information centre with data about all land users in the country is established;

Recommendation 5.6

The Cabinet of Ministers should consider revising the 2003 Law on Public Associations to encourage environmental initiatives and to facilitate the registration and operation of environment-related public associations.

Recommendation 5.7

The Cabinet of Ministers should:

- (a) Develop and adopt an action plan for the implementation of the UNECE Strategy on Education for Sustainable Development (ESD) and nominate focal points for ESD in the Ministry of Education and the Ministry of Nature Protection.
- (b) Strengthen the cooperation with UNECE and its Steering Committee on ESD to enhance the implementation of ESD and to exchange materials, experiences and good practices.

II. Management of natural resources and pollution

Chapter 6: Air quality management

Recommendation 6.1

The Ministry of Nature Protection and the Ministry of Health and Medical Industry, in cooperation with relevant institutions, should:

- (a) Develop methodology for calculations and measurements to assess the contribution of nature-originated dust to the total pollution by suspended particular matter (measurement of mass-size distribution of particles and analysis of chemical composition of particular size fractions);
- (b) Consider revision of existing air quality standards and introduction of additional standards (in the first stage for PM₁₀ and, in the second stage, for PM_{2.5}), taking into account the contribution of nature-originated dust, and to set realistic compliance deadlines;
- (c) Replace, gradually, existing manual stations by automated air monitoring stations;
- (d) Ensure coordination between their respective air quality monitoring programmes;
- (e) Introduce methodology of air quality assessment (interpretation of monitoring data by the dispersion model taking into account emissions and meteorological parameters);
- (f) Improve the existing national air quality information system and operate it in cooperation with the National Committee on Hydrometeorology (NCH)

Recommendation 6.2

The Ministry of Nature Protection, in cooperation with the State Statistics Committee, should:

- (a) Improve the methodology of national emission inventories (including emissions from mobile sources, small (not registered) stationary sources and diffused sources);
- (b) Strengthen reporting mechanism on emission data;
- (c) Incorporate emission data into the national air quality information system.

Recommendation 6.4

The Ministry of Nature Protection, in cooperation with other relevant ministries, should:

- (a) Introduce an integrated approach to measures related to air quality management and climate change mitigation (one measure – two effects approach);
- (b) Support non-combustion renewable sources of energy (hydro, solar, wind) as well as energy efficiency measures and energy savings.

Chapter 7: Water management and protection of the Caspian Sea environment

Recommendation 7.1

The Ministry of Water Economy should introduce legal acts on integrated water resource management (IWRM) in water basins, based on the results of analysis of the current water legislation to identify how to apply principles of IWRM, in cooperation with relevant authorities in water management.

Recommendation 7.2

The Ministry of Water Economy should:

- (a) Develop a national IWRM plan with involvement of relevant water users in the planning process
- (b) Establish basin management structures for Murgab, Tedjen and Atrek rivers and also for relevant canal systems and ensure the coordination of actions according to a developed plan.

Recommendation 7.3

The Ministry of Water Economy should:

- (a) Analyze water economy and environmental consequences, both on water delivery with open canals and pipelines;
- (b) Ensure saving water and optimal and environmentally sustainable water use, by effective and cost-efficient regulatory, economic and technical measures.

Recommendation 7.4

The Cabinet of Ministers should:

- (a) Develop further legislation facilitating the improvement of existing economic instruments, and the introduction of incentives and subsidiary mechanisms to support effective water use;
- (b) Develop a national water saving programme with concrete incentives for introducing efficient water saving methods;
- (c) Review the norms for household water consumption in order to promote water savings.

Recommendation 7.5

The Cabinet of Ministers should continue mobilizing new investments programmes by using more actively all possibilities, including the involvement of the private sector, in areas such as modern water-saving technologies for efficient irrigation practices and better water supply infrastructures.

Recommendation 7.6

The State Enterprise of Caspian Sea Issues under the President, together with other relevant institutions should:

- (a) Develop coastal zone management plans, with a focus to improve significantly control over water pollution, introduce environmentally sustainable aquaculture and increase of the marine area under protection ;
- (b) Develop further monitoring capacity, both offshore and on the coast;
- (c) Expand the capacity for pollution response to minimize the risks from the activities of the oil and gas sector;
- (d) Assist with the implementation of obligations under the signed protocols on the protection of the Caspian environment.

Chapter 8: Land management

Recommendation 8.1

The Cabinet of Ministers should:

- (a) Strengthen the cooperation between governmental authorities in charge of forestry, pastures, agriculture and water management to promote sustainable land management focusing on desertification monitoring and assessment, early warning systems, water resource use, combating soil deflation and salinization, and rangeland management;
- (b) Develop a sustainable land management strategy taking into account the National Framework Programme elaborated under the Central Asian Countries Initiative for Land Management.
- (c) Revise the National Action Plan to Combat Desertification, to strengthen actions for fixing sand dunes and other erosion control measures, including actions that could be delegated to farmers and other associations.

Recommendation 8.2

The Ministry of Agriculture and the Association Turkmenmellary should introduce extension services on the level of each district, in order to help the farmers' associations, private owners and shepherds to make animal production both more profitable and environmentally friendly.

Recommendation 8.3

The Ministry of Agriculture should:

- (a) Develop and implement market mechanisms conducive to improving land and water management in specific land and soil quality conditions of each district;
- (b) Revise guidelines on agricultural system and crop rotations for agricultural stockholding societies to promote the prevention of soil degradation and loss of fertility, among other purposes.

Recommendation 8.4

The Cabinet of Ministers should introduce rewards to farmers and farmers' associations using environmentally friendly agricultural and water-saving practices.

Recommendation 8.5

The Cabinet of Ministers should:

- (a) Establish a system of regular soil monitoring and assessments by the Ministry of Agriculture;
- (b) Reestablish agrochemical laboratories at the provincial level for soil analysis to be performed for the needs of both agricultural production and environmental protection.

Recommendation 8.6

The Ministry of Nature Protection, in cooperation with relevant institutions, should extend existing legislation on soil protection to cover damage to land cover caused by industrial activities.

Recommendation 8.7

The Ministry of Agriculture and the Ministry of Nature Protection should:

- (a) Ensure the updating of the pasture map with modern survey systems to account for the progression of the desertification;
- (b) Ensure that the results of State inspections of the land cover are used for updating the maps.

Chapter 9: Waste management

Recommendation 9.1

The Ministry of Nature Protection, in cooperation with the Ministry of Communal Services, the Ministry of Health and Medical Industry and other relevant bodies, taking into consideration international waste management practices, instruments and agreements, should develop:

- (a) Draft legislation on waste management and on a waste classification system;
- (b) A national waste management programme.

Recommendation 9.2

The Ministry of Oil and Gas Industry and Mineral Resources, the State Concern Turkmenneft and all relevant oil and gas sector agencies, together with the Ministry of Nature Protection, and preferably in cooperation with international companies active in Turkmenistan should prepare an action plan on management of waste from the oil and gas sector.

Recommendation 9.3

The Ministry of Nature Protection, on the basis of the national waste management programme to be developed and together with other relevant institutions, should:

- (a) Identify priorities where international expertise can be effectively utilized for the programme implementation and
- (b) Include waste management components in projects aimed at the development of municipal infrastructure, water protection and industry modernization.

Recommendation 9.4

The Ministry of Health and Medical Industry should continue implementing the Programme of Safe Management of Medical Waste in Health Facilities and monitor progress made in its implementation.

Recommendation 9.5

The Ministry of Nature Protection should:

- (a) Develop in cooperation with the State Statistics Committee, the municipalities of Ashgabat, and other main cities or provinces and relevant ministries and agencies, a register of disposal sites for municipal solid waste and for industrial solid waste;
- (b) Apply risk assessment methodology for the estimation of risks resulting from the use of industrial waste disposal to ensure development of safe disposal and replacement of old dumps by modern facilities.

Chapter 10: Biodiversity and protected areas

Recommendation 10.1

The Ministry of Nature Protection should:

- (a) Analyse the results of the implementation of the 2002 National Environmental Action Plan of Turkmenistan until 2010 and the Biodiversity Strategy and Action Plan (BSAP) for Turkmenistan for the period 2002-2010 including challenges and constraints;
- (b) Use lessons learned to develop a new, realistic and focused strategy and action plan in accordance with the Aichi Biodiversity Targets under the Convention on Biological Diversity and submit them to the Cabinet of Ministers for adoption.

Recommendation 10.2

The Ministry of Nature Protection should:

- (a) Strengthen the nature protected areas system, through the creation of new protected areas in identified high value areas and the introduction of internationally established protected areas categories;
- (b) Improve the protected areas' activities in order to attract additional financial resources;
- (c) Involve actively public, particularly local resource users, in nature protected areas governance.

Recommendation 10.3

The Ministry of Nature Protection, in cooperation with academia and NGOs, should:

- (a) Improve the national biodiversity monitoring system based on international best practices;
- (b) Use monitoring results to improve the system of quotas for key biodiversity resources that are currently used in Turkmenistan;
- (c) Use results of scientific research in decision making regarding biodiversity conservation;
- (d) Raise awareness over the value of ecosystems services in order to promote biodiversity conservation.

Recommendation 10.4

The Ministry of Nature Protection should

- (a) Continue implementing capacity building programmes at the institutional and systemic level to address the limitations of biodiversity and protected areas management;
- (b) Collaborate more intensively with academic institutions in order to improve academic training on biodiversity conservation and natural resources management.

Chapter 11: Forestry and forest management

Recommendation 11.1

The Cabinet of Ministers should

- (a) Carry out a countrywide comprehensive forest inventory, forest accounting and the State forest cadastre in order to:
 - (i) Facilitate the decision-making process;
 - (ii) Elaborate, on the basis of results, detailed forest management plans for all forest enterprises and a map of key forest ecosystems;
- (b) Prepare cartographic materials for various types of wooded lands.

Recommendation 11.2

The Cabinet of Ministers should:

- (a) Expand afforestation/reforestation activities to address country needs with regard to afforestation/reforestation, the fixation of moving sands, combating soil erosion and salinization, and the creation of agricultural shelter belts by adopting new and implementing existing local plans for sustainable forest management;
- (b) Explore funding opportunities with international and donor organizations.

Recommendation 11.3

The Ministry of Nature Protection, in cooperation with relevant stakeholders, should develop a national forest programme and action plan based on a new forest inventory, and submit them to the Cabinet of Ministers for adoption.

Recommendation 11.4

The Cabinet of Ministers should gradually reform and further develop the forestry funding system in order to promote sustainable forest management and protection.

Recommendation 11.5

The Ministry of Nature Protection, in cooperation with local authorities, should develop and implement local programmes or projects aimed at the restoration of degraded forest lands.

III. Sectoral integration

Chapter 12: Climate change

Recommendation 12.1

The Cabinet of Ministers should establish an operational structure on climate change issues to coordinate and monitor adaptation and mitigation measures.

Recommendation 12.2

The Ministry of Nature Protection, in cooperation with other ministries and State agencies, should develop:

- (a) A strategy on adaptation identifying priority areas and an action plan with a list of concrete activities;
- (b) A low carbon emission development strategy.

Recommendation 12.3

The Cabinet of Ministers should:

- (a) Strengthen the capacity of the National Committee for Hydrometeorology by expanding its observational network and types of observation in the area of climate change;
- (b) Improve the national statistical system with inclusion of indicators that are necessary to produce a greenhouse gas (GHG) inventory.

Recommendation 12.4

The Ministry of Nature Protection, in cooperation with the Ministry of Education and other relevant stakeholders, should:

- (a) Raise the awareness on climate change issues of local governments, mass media and school teachers;
- (b) Promote the inclusion of materials related to climate change problems into the educational plans and programmes of educational institutions.

Recommendation 12.5

When undertaking decisions on climate change, the Cabinet of Ministers, in cooperation with relevant stakeholders and academia, should expand afforestation programmes making use of the natural reforestation potential and indigenous tree species, and ensure grassland protection and recovery.

Chapter 13: Energy and environment

Recommendation 13.1

The Ministry of Nature Protection should:

- (a) Improve the procedure of environmental impact assessment by companies and State enterprises involved in the energy sector in accordance with international standards;
- (b) In cooperation with relevant agencies, introduce gradually environmental audits for these companies and State enterprises.

Recommendation 13.2

The Cabinet of Ministers should

- (a) Review the consistency of existing energy sector legislation with the requirements of the Aarhus Convention in terms of public access to environmental information and national environmental legislation;
- (b) Encourage companies and State enterprises involved in the energy sector to voluntarily make publicly available environmental information.

Recommendation 13.3

The Cabinet of Ministers should:

- (a) Prepare a draft law on energy efficiency;
- (b) Develop a strategy on development of renewable energy for the period until 2030 taking into account international practices;
- (c) Establish a State agency for energy efficiency and renewable energy, that will take a leading role in identification of energy efficiency and renewable energy potential, development of relevant policies, legislations, regulations and projects as well as in public awareness campaigns;
- (d) Seek international experience and assistance in developing of energy efficiency and renewable energy policies, measures and programmes.

Recommendation 13.4

The Cabinet of Ministers should strengthen compliance with existing legislation related to gas flaring.
