

SANITATION COUNTRY PROFILE

SLOVAK REPUBLIC

Decision-Making

- A. Basic Sanitation
- B. Solid Wastes
- C. Hazardous Wastes
- D. Radioactive Wastes

Programmes and Projects

- A. Basic Sanitation
- B. Solid Wastes
- C. Hazardous Wastes
- D. Radioactive Wastes

Status

- A. Basic Sanitation
- B. Solid Wastes
- C. Hazardous Wastes
- D. Radioactive Wastes

Capacity-Building, Education, Training and Awareness-Raising

- A. Basic Sanitation
- B. Solid Wastes
- C. Hazardous Wastes
- D. Radioactive Wastes

Information

- A. Basic Sanitation
- B. Solid Wastes
- C. Hazardous Wastes
- D. Radioactive Wastes

Research and Technologies

- A. Basic Sanitation
- B. Solid Wastes
- C. Hazardous Wastes
- D. Radioactive Wastes

Financing

- A. Basic Sanitation
- B. Solid Wastes
- C. Hazardous Wastes
- D. Radioactive Wastes

Cooperation

- A. Basic Sanitation
- B. Solid Wastes
- C. Hazardous Wastes
- D. Radioactive Wastes

Decision-Making: The Government of the Slovak Republic is the resulting decisive body. MF SR is a body responsible for this area. MŽP SR and ŠÚ SR are the cooperating bodies. The Government of the Slovak Republic, NR SR, sectors, state administration authorities, organisations, municipalities, production enterprises. Changes in the political orientation of society after 1989 brought about modifications in sustainable development approaches. The Ministry of the Environment was created to protect the environment, establish zoning and construction procedures, conduct geological research, and provide an integrated information and monitoring system on the environment for the entire Slovak Republic. State administrative bodies established agencies to address environmental concerns at the local level. The Ministry acts as the principal state supervisory body and identifies conservation strategies in collaboration with other state administrative and legislative bodies. According to the Government, the greatest contribution to the work of state administrative bodies responsible for the environment was the establishment of the Slovak Ministry of the Environment, the Slovak Environmental Inspection, and the eight regional and 79 district administration offices with their environmental branches. The Ministry of the Environment has the mandate to analyze the conclusions of the United Nations Conference on Environment and Development (UNCED) and incorporating the principles into the environmental policy of the Slovak Government. The Ministers and Directors of other central administrative authorities were likewise entrusted with employing and incorporating the conference conclusions within the environmental programmes of their respective ministries. Progressive transformation of the political system in Slovakia has been reflected in the Constitution of the Slovak Republic adopted by the Slovak National Council on September 1, 1992. The Constitution guarantees all civil rights and freedoms, including the right to environmental and cultural heritage protection. Significant success has also been achieved recently in the establishment of environmental laws.

The past and present negative consequences of social and economic influences on the environment are mitigated by approximately 752 regulations of varying legal force. Air, water, and forest protection regulations have been extensively revised and new regulations concerning waste management, the state administrative system for the environment, and the State Fund for the Environment of the Slovak Republic have been implemented. Some regulations that were difficult to implement and enforce have been already incorporated within legal norms by replacing outdated laws with new ones. These cover a number of areas that have not been addressed before and are currently being used effectively. Slovak National environmental policy is based on an analysis of the state of the environment and an evaluation of the overall framework for environmental issues. National policy determines areas of National environmental priorities, which are subsequently divided into long-, medium-, and short-term sustainable development objectives. The time required to accomplish the long-term objectives to ameliorate environmental conditions and achieve sustainable development in Slovakia may be 20-50 years or possibly longer. Medium-term objectives, obtainable by the period 2000-2010, focus on slowing the processes of environmental deterioration and mitigating the impact of the damaged and polluted environment on life expectancy and public health, as well as eliminating activities that place a burden on the environment. The implementation of a National environmental policy is expected to fulfill the pre-conditions for Slovak convergence with European environmental standards and facilitate admission to European organizations. However, the Government has noted that environmental issues are too complex and responsibilities too divided for the strategy to remain the mandate of a single ministry at the National level. The strategy must be incorporated and defined in the environmental policy provisions of individual ministries and further developed at the regional level with the participation of local governments and citizen groups. This has to be provided through the implementation of the recently developed National Environmental Action Programme (NEAP) approved by the Governmental Resolution No. 350/1996. The Programme defines the concrete conceptual, legislation, organizational, educational, training, and especially the investment measures behind the activities of various legal bodies that aim to reach objectives of the adopted National environmental policy.

A. Basic Sanitation: The State Water Management Policy is aimed at providing the citizens with drinking and supply water, transfer of municipal waste water, among others, and it is legislatively regulated in legal and policy documents.

B. Solid wastes: The NR SR and the Slovak Government are the resulting decisive bodies. MŽP SR is the body responsible for this area. Other cooperating bodies are MH SR, MP SR, MZ SR. Legislative regulations in force in the area of waste management in the Slovak Republic generally deals with management of all kinds of wastes in order to provide a state control in this area.

C. Hazardous wastes: The Slovak Government and the National Council of the Slovak Republic (NR SR) are the resulting decisive bodies. The Ministry of Environment (MŽP SR) is the body responsible for this area. Other cooperating bodies are the Ministry of Economy (MH SR), the Ministry of Soil Management (MP SR), and the Ministry of Health (MZ SR).

D. Radioactive wastes: The NR SR and the Slovak Government are the resulting decisive body. MH SR and Office of Nuclear Control of the Slovak Republic (ÚJD SR) are the bodies responsible for this area. The cooperating bodies are MZ SR, Ministry of Interior (MV SR), Ministry of Transport, Post, and Telecommunication (MDPT SR), Office of Labour Safety of the Slovak Republic (ÚBP SR).

Programmes and Projects:

A. Basic Sanitation: The Government's medium-term objectives include: a 50% reduction in the amount of pollutants in discharged waste water; boosting the proportion of total waste water purified with high-efficiency (biological, chemical) methods and by small waste-water treatment plants by 20%; assigning priority to the completion of waste water treatment plants under construction, and the construction of treatment plants near sources of enormous water pollution; obtaining a 60% increase in the volume of waste-water purified; resolving the deficit of drinking water in 16 districts, with priority for Kosice County, Velky Krtis, Lecenec, Rimavska Sobota, Prievidza, Spisska Nova Ves, and Roznava districts.

B. Solid wastes: The Programme of Waste Management of the Slovak Republic up till 2000 taking into account environmental needs and economic needs proposed the process of recovery of the old environmental burdens in three phases which were reflected in programmes of districts and municipalities. The most urgent waste landfills are being solved in the first phase. This process of recovery is being fulfilled and evaluated step by step.

C. Hazardous wastes: No information available.

D. Radioactive wastes: The nuclear power plants in Jaslovské Bohunice and Mochovce are able to process almost all kinds of waste from nuclear power plants and technologies are being developed to process any radioactive waste from other originators into a form suitable for final storage. For the final storage of the processed low- and medium-active waste, a storage facility has been built in Mochovce. However, the long-term safe storage of radioactive waste that will not be accepted for the storage in Mochovce has not yet been resolved. Radioactive waste from nuclear facilities is currently stored at nuclear power plants and in the disposal facility in Mochovce.

Status: *Socio-economic aspects*: The existence of poor population in the Slovak Republic was neither admitted for a long time, nor it was a subject of broad discussion. Changes of socio-economic situation of citizens due to price liberalization, inflation, growth of living costs and unemployment caused an increase of number of people who were not able to tackle the negative changes of their living conditions immediately without assistance. This required enhanced attention and care from side of the state devoted to these groups of citizens. The most attacked groups were households with four and more children, incomplete households with children and households with unemployed members of family. As far as perceiving the troubles is

concerned, housing is the most problematic area for households. It is estimated that Slovakia has a deficit of 180,000 flat units and current support programmes are insufficient and if concrete effective measures are not adopted this deficit will be growing. It will be necessary to support special forms of housing dedicated to low income households and to groups with specific needs (e.g. people in social need and seriously handicapped people), taking into account their material and financial conditions.

Number of inhabitants of Slovakia increased from 2.5 millions in 1869 up to 5.4 millions in 1997, which means that during this relatively short period the number of inhabitants doubled. Intensification of agriculture, development of industry and transport, extensive urbanization and irrational economic objectives with significant adverse impacts on the environment of Slovakia and mainly on biodiversity are connected with this fact. The average density of population is 109.9 inhabitants per km². This fact is, however, determined by a factor that settlements in Slovakia are primarily concentrated in flats and depressions while mountain areas are populated very sparsely. That means that in the main areas of settlements the density of population is many times higher (in average ca 1,800 inhabitants per km².) The average age of inhabitants of Slovakia was 35.4 in 1998 (33.8 males and 36.9 females) and it has moderately growing tendency. Population is slowly getting old and natural growth rate is gradually lowering. Medium life span at birth is 72.8 years (68.63 males and 76.74 females). The average life expectancy at birth for men (66.5 years) is 6-7 years less than for women (75.3 years), and 5-7 years less than in developed countries. Mortality rates, which increased by 2.2 per thousand in the years 1860-1980, have since stagnated.

A. Basic Sanitation: The Government's medium-term objectives include: a 50% reduction in the amount of pollutants in discharged waste water; bridging the gap between the volume of water extracted and discharged; boosting the proportion of total waste water purified with high-efficiency (biological, chemical) methods and by small waste-water treatment plants by 20%; assigning priority to the completion of waste water treatment plants under construction, and the construction of treatment plants near sources of enormous water pollution; obtaining a 60% increase in the volume of waste -water purified; etc.

B. Solid wastes: In the Slovak Republic the wastes are liquidated via incineration and dumping. In 1998 358,094.3 tones of special and hazardous wastes were incinerated. At present 92 incinerators are in operation, out of which 24 incinerators comply with emission limits laid down by national legislation and 9 incinerators comply with requirements of the European Union. Besides the mentioned incinerators the waste is incinerated in one cement kiln as an alternative fuel. 2,468,477.6 tones of special and hazardous wastes were disposed at landfills in 1998. 568 landfills were operated in 1998, out of which 139 complied with technical requirements laid down by legislation. The other landfills, operated under specific conditions, are being gradually closed down. Currently 226 landfills are operated under specific conditions. At the same time 62 new waste landfills are under construction.

C. Hazardous wastes: No information available.

D. Radioactive wastes: Safe and environmentally sound management of radioactive wastes is legally assured by compliance with provisions set by the act on state control over nuclear safety of nuclear facilities (Atomic Act) and by the regulation on the safety in management of radioactive wastes. Legislative support is represented by acts on the State fund for decommissioning of nuclear power plants and management of spent fuel and radioactive wastes and the act on environmental impact assessment. The Nuclear Regulatory Authority of the Slovak Republic within its competence set by relevant legislation supervises the production, processing, transport, treatment and disposal of radioactive wastes. Together with other authorities it controls release of radioactive nuclides into the environment.

Capacity-Building, Education, Training and Awareness-Raising:

A. Basic Sanitation: MZ SR is responsible for this area for health and hygienic aspects.

B. Solid and Hazardous wastes: MŽP SR - wastes, legislative framework, MP SR, MH SR - waste management (as the largest producers).

C. Radioactive wastes: MH SR - management of radioactive wastes, financing, MZ SR - Radiation protection, institutional radioactive wastes, MŽP SR - participation in licensing process, MV SR - physical protection, MDPT SR – transport, ÚJD SR - execution of state control over nuclear safety in peaceful use of nuclear energy

D. Radioactiv Waste: No information available

Information: Information is gathered and processed by the Statistic Office of the Slovak Republic. Business companies, which belong under the responsibility of the Ministry of Economy, submit data also to the Ministry of Economy. In the framework of establishment of systems of integrated environmental and economic accounting the introduction of assessment system of data and information collection and enforcement of national accounting systems are being planned.

A. Basic Sanitation: No information available.

B. Solid wastes: No information available.

C. Hazardous wastes: No information available.

D. Radioactive wastes: No information available.

Research and Technologies: Currently, the institutions of the Slovak Academy of Sciences, as well as a number of sub-ministerial organizations contribute significantly to the development of the environmental field and addressing environmental problems in the country. These include for example, the Soil Productivity Research Institute, the Forestry Research Institute, the Institute for Preventive and Clinical Medicine, the Water Management Research Institute, the Slovak Institute for Preservation of Cultural Artifacts, various universities, and citizen's groups (SZOPK, Tree of Life, the Slovak Society for the Environment, the Association for Sustainable Life, etc.).

A. Basic Sanitation: The Water Management Research Institute conducts research on water management. Scientific and technical projects in water management are aimed at use of biotechnologies with the aim to increase the level and deal with possibilities of application of biotechnological processes in treatment of groundwater for drinking purposes and treatment of waste waters. Gasification of biomass is being developed in the area of wastewater treatment plans.

B. Solid wastes: No information available.

C. Hazardous wastes: No information available.

D. Radioactive wastes: In the 1996, the reconstruction of Interim spent fuel storage facility (ISFS) started with the goal of seismic upgrading and extension of storage capacity. Work currently continues with the implementation of an inspection stand, the manufacture and supply of compact containers KZ – 48 and the implementation of the programme for monitoring long-term service life of ISFS technologies and construction parts. Works are scheduled to be completed in 2007. Radioactive waste (RAW) treatment and conditioning technologies: Within safety improvement, the monitoring of personnel contamination is undergoing innovation. The work will be finished in 2003. The construction of a RAW integral storage facility is developed in the Jaslovské Bohunice site for RAW non-acceptable for the Mochovce NRR

(RAW not complying with the disposal acceptance criteria). The action is scheduled to be completed in 2008.

Financing:

A. Basic Sanitation: State budget of the Slovak Republic, State Fund for the Environment, State Water Management Fund of the Slovak Republic, finances of cities and towns, internal sources of water management enterprises, finances of industry, loans.

B. Solid and Hazardous wastes: State Fund for the Environment, state budget of the Slovak Republic, PHARE.

C. Radioactive wastes: State budget of the Slovak Republic, State fund for decommissioning of nuclear power plants and management of spent nuclear fuel and radioactive wastes, PHARE and other resources.

Cooperation:

A. Basic Sanitation: No information available.

B. Solid wastes: Regional and international cooperation on solid waste in Slovakia is obtained under the Basel Convention; and from the EU, the OECD, and bilateral contacts.

C. Hazardous wastes: The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal has been ratified by the Slovak Republic. The latest information was provided to the Basel Convention Secretariat in 1996. Regional and international cooperation on hazardous waste in Slovakia is obtained under the Basel Convention; and from the European Union (EU), the Organization for Economic Co-operation and Development (OECD), and bilateral contacts. The National Council of the Slovak Republic agreed with accession of the Slovak Republic to the Amendment to the Convention adopted at the third conference of the parties on ban of export of hazardous wastes from member states to non-member states of OECD in 1998. At the fourth conference of the parties in 1998 new amendments to the Convention were adopted. In 1998 the Slovak Government decided to adopt the new amendment without reservations and the amendment entered into force on 6 November 1998. Slovak Republic cooperates with prior informed consent procedure (PIC).

D. Radioactive wastes: A close cooperation is executed with the International Atomic Energy Agency in the area of the expert services and safety assessment. There is also a cooperation with neighboring and other (Japan) countries through exchange of information and experience. The European Union is also supporting activities related to the radioactive waste management through Phare instruments.

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