

SANITATION COUNTRY PROFILE

RUSSIAN FEDERATION

In accordance with the main provisions and initiatives relating to water, sanitation and human settlements in the Plan of Implementation of the World Summit on Sustainable Development, drawn up in September 2002 in Johannesburg, South Africa, a national Programme is being carried out in the Russian Federation on the development of Russia's water resources (Russian water — twenty-first century). This Programme provides for a significant reduction by 2015 in the number of people without access to water supply services and sanitation, in line with the Millennium Development Goals.

This Programme provides for the coordination of all ongoing federal programmes and programmes for the development of branches of the economy with regard to the rational use and conservation of water resources. The following are the main priorities under the Programme:

- To provide for the needs of the population and the economy in terms of water resources;
- To prevent and eliminate floods and other harmful effects of water;
- To ensure the security of hydroelectrical installations;
- To protect bodies of water from pollution;
- To develop a system for monitoring and forecasting the state of water resources and to provide information on water resources;
- To improve the system of State management and conservation of water resources;
- To provide a regulatory and scientific and technical basis.

An important international component of the implementation of the aforementioned Programme is the participation of Russia in the strategic partnership "Water for sustainable development". The practical plan for the implementation of the recommendations of the World Summit on Sustainable Development included the implementation of the global water initiative "Water for life, health, well-being, economic development and security", which has been reflected in the national Programme of the Russian Federation "Russian water — twenty-first century".

With regard to the provision of clean drinking water to settlements and the assessment of the quality of water resources, the central water supply systems in Russia cover 1,085 towns (or 99.3 per cent of the total), 1,727 urban type villages (92.3 per cent) and approximately 43,000 rural settlements. The total length of the water supply network is 463,000 km. The system has a water supply capacity of 90 million cubic metres a day. Since 2002, 2,200 million cubic metres has been supplied. The average level of specific water supply for drinking water and domestic needs is 248 litres per inhabitant per day. Approximately 70 per cent of water supply points are used to treat surface water which is virtually unprotected from external pollution and only 30 per cent to treat groundwater, which is of a more stable quality.

In a number of cases a crisis situation has been noted in water supply sources and in water supply and treatment systems. The level of natural additives increasingly reveals the presence of toxic micro-additives of human induced origin. Typical of the majority of surface waters is the increase in the intensity of the bacterial and viral load, the limited

state of sewage treatment installations, the virtual absence of purified wastewater, and infringements of the rules governing the use of water in water protection zones.

In view of the general trend towards a deterioration in the quality of water at water supply points, the requirements regarding the quality of drinking water have been made stricter. The relevant recommendations of the World Health Organization have been put into effect, including indicators showing the degree of parasitic and viral contamination of water. New standards determine the water treatment technology and the policy of organizations monitoring the quality of water at all stages from the time it leaves the water supply point until it reaches the consumer. The introduction of a broader list of indicators will make it possible to establish the degree of pollution of water supply points.

In order to enhance the sanitary reliability of water treatment, the projected new solutions pay special attention to the optimization of conditions governing the coagulative processing of water, sedimentation and filtration which will guarantee the maximum reduction in turbidity to the point that it will be less than one turbidimeter unit.

In 2002, the capacity of the waste plants was 56.1 million cubic metres a day, which is 102.7 per cent of the 1995 level. The extent of the sewerage network is 118,000 km. The amount of wastewater passing through the waste plants has remained at the 2002 level — 14,000 million cubic metres, which represents 86.4 per cent of wastewater emitted in towns and other settlements. Of this, 28 per cent is treated in accordance with the established regulations, while the remainder is emitted, insufficiently treated, into bodies of water.

It should be noted that 60 per cent of the waste plants used are overloaded and 38 per cent have been in operation for 25 to 30 years and need to be reconstructed. The deficit in the capacity of sewerage systems at present is more than 9 million cubic metres a day. In the towns and settlements, 9,616 sewerage systems are in operation, but 44 towns (4 per cent) and 582 urban type settlements (27 per cent) have no central sewerage system.

The Federal Act on industrial waste and consumption was adopted by the State Duma of the Russian Federation in June 1996. This Act, which is a further development of the Act on environmental protection, sets out the State policy concerning the treatment of industrial waste and consumption. With a view to preventing environmental pollution and enhancing the effectiveness of the use of domestic and industrial waste, the Government of the Russian Federation, in decision No. 1098 of 13 September 1996, confirmed the special Federal Programme on waste.

The main aims and goals of the Programme are to concentrate the financial, material and technical and other resources, integrate the industrial and scientific potential to solve problems relating to the treatment of waste, the saving of natural resources at the expense of the maximum involvement of waste in economic turnover, reducing the area of alienated land near testing areas, the dumping and storage of waste, the establishment of a market for resource-saving and low-waste technology and equipment, and technology and equipment for the treatment and processing of waste.

The implementation of the Programme will help to resolve the social problems as a result of a substantial reduction in the adverse effects of waste on the environment in areas where it is produced and stored. This will make it possible to reduce the morbidity and mortality rates among the population, prevent the elimination of the biota, increase agricultural productivity, release tens

of thousands of hectares of land for economic needs, and increase the employment level of the population. It will reduce social tensions in environmentally unfavourable areas, as well as the migration of the population from environmentally unfavourable areas to areas with better living conditions.

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