# NATIONAL DRINKING WATER POLICY



# GOVERNMENT OF PAKISTAN MINISTRY OF ENVIRONMENT

September, 2009

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#### **FOREWARD**

The Government of Pakistan recognizes provision of safe drinking water as a fundamental human right. In this context, the Ministry of Environment has formulated National Drinking Water Policy to provide adequate quantity of safe drinking water to the entire population at an affordable cost and in an equitable, efficient and sustainable manner. The formulation of the Policy involved extensive consultation with the line Ministries, AJK, FATA and Gilgit-Baltistan governments, NGOs, communities and other stakeholders.

The Policy aims to improve the quality of life of the people of Pakistan by reducing the incidence of death and illness caused by water-borne diseases. Toward this end, the Policy provides specific guidelines for increasing access to safe drinking water, protection and conservation of surface and groundwater resources, water treatment and safety, appropriate technologies and standardization, community participation, public awareness, capacity development, public-private partnership, research and development, emergency preparedness and response and coordinated planning and implementation.

The Policy places special emphasis on establishment of new drinking water systems, rehabilitation and up-gradation of existing water supply systems, sustainability of water supply infrastructure, water conservation, water quality improvement, water treatment and drinking water sector management information system. The Policy also suggests various legislative measures to ensure its effective implementation, including enforcement of the National Drinking Water Quality Standards. It stipulates that the respective tiers of the government will devise strategies and action plans in pursuit of the Policy.

The National Drinking Water Policy was placed before the Cabinet as a landmark achievement of National Year of Environment 2009, which was accorded approval on 28th September 2009, making Pakistan one of the few countries of the world having a national level Policy on the issue.

I am confident that our efforts will ensure renewed commitment of the Government of Pakistan to the aims and objectives of the National Drinking Water Policy as well as to raise its profile by developing concrete plans, programmes and actions at all levels.

I take this opportunity to thank UNICEF and other agencies as well as line Federal Ministries, Provincial, AJK, FATA and Gilgit-Baltistan governments and the staff of my Ministry for their support and contribution in accomplishing this important task. I also thank media, NGOs, numerous experts and other stakeholders who provide useful inputs in finalization of policy.

Hameed Ullah Jan Afridi Federal Minister for Environment

#### 1. PREAMBLE

The Government of Pakistan, while recognizing that access to safe drinking water is the basic human right of every citizen and that it is the responsibility of the state to ensure its provision to all citizens, is committed to provision of adequate quantity of safe drinking water to the entire population at an affordable cost and in an equitable, efficient and sustainable manner.

In order to fulfill this commitment of the Government, the Ministry of Environment, in line with provisions of the National Environment Policy and Vision 2030, has formulated the National Drinking Water Policy through a countrywide consultation process.

The Policy aims to provide a guiding framework to the Federal Government, Provincial Governments, State of the Azad Jammu and Kashmir (AJK), Gilgit-Baltistan, Federally Administered Tribal Areas (FATA), Local Governments, development authorities and other organizations to address the key issues and challenges facing Pakistan in the provision of sustainable access to safe drinking water.

The Policy complements, and will be implemented in coordination with, the National Environment Policy, National Sanitation Policy, National Water Policy and other related policies of the Government of Pakistan for protection and improvement of public health and quality of life. The Federal Government, Provincial Governments, AJK and Federally Administered Territories will devise their own strategies, plans and programmes in pursuit of this Policy.

#### 2. DEFINITIONS

Drinking water, as referred to in the Policy, means that the water used for domestic purposes including drinking, cooking, hygiene and other domestic uses. The term "safe water" refers to the water complying with National Drinking Water Quality Standards. Access means that at least 45 and 120 liter per capita per day<sup>1</sup> of drinking water is

<sup>&</sup>lt;sup>1</sup> These are the guidelines values. The Provincial, AJK, Gilgit-Baltistan and FATA Governments, however, may specify the minimum threshold quantity of water to be supplied per capita per day for urban as well as rural areas. According to WHO/UNICEF Joint Monitoring Report, access to water-supply services is defined as the availability of at least 20 liters per person per day from an "improved" source within 1 kilometer of the user's dwelling. Improved drinking water supply is defined as access to household water connections, public standpipes, boreholes, protected dug wells, protected springs, and rainwater collections. Unimproved water supply sources include unprotected wells, unprotected springs, vendor-

available for rural and urban areas, respectively, within the house or at such a distance that the total time required for reaching the water source, collecting water and returning to home is not more than 30 minutes.

#### 3. PRESENT SITUATION

Currently over 65 percent of Pakistan's population is considered to have access to safe drinking water<sup>2</sup>. Huge disparities, however, exist with regard to drinking water coverage between urban and rural areas and provinces/regions. The quality of the drinking water supply is also poor, with bacterial contamination, arsenic, fluoride and nitrate being the parameters of major concern. Sustainability of the existing water supply systems is also a major issue in the sector.

Inadequate water supply, sanitation and hygiene result in high incidence of water and sanitation related diseases in Pakistan, which in turn increase morbidity and mortality rates and pose a major threat to the survival and development of Pakistani children. It has been estimated that water, sanitation and hygiene related diseases cost Pakistan economy about Rs.112 billion per year, over Rs.300 million a day, in terms of health costs and lost earning<sup>3</sup>. Out of this, the cost associated with dirrhoeal diseases alone is estimated to range from Rs.55 to Rs.80 billion per year. Lack of adequate drinking water facilities in schools is one of the contributing factors for low enrollment and high drop out of children from schools.

#### 4. GOAL AND OBJECTIVES

The overall goal of the National Drinking Water Policy is to improve the quality of life of people of Pakistan by reducing incidence of death and illness caused by water-borne diseases through ensuring provision of adequate quantity of safe drinking water to the entire population at an affordable cost and in an equitable, efficient and sustainable manner. The objectives of the Policy are to:

(i) Provide access to safe and sustainable drinking water supply to the entire population of Pakistan by 2025;

provided water, bottled water (unless water for other uses is available from an improved source) and tanker truck-provided water.

<sup>&</sup>lt;sup>2</sup> Government of Pakistan, MTDF-2005/10, Planning Commission

<sup>&</sup>lt;sup>3</sup> Pakistan Strategic Country Environmental Assessment (2006), The World Bank

- (ii) Ensure protection and conservation of water resources;
- (iii) Promote measures for treatment and safety of drinking water;
- (iv) Encourage community participation and empowerment in planning, implementation, monitoring and operations and maintenance of water supply systems;
- (v) Promote cost effective and appropriate technological options for water supply systems;
- (vi) Increase public awareness about water safety, safe hygiene practices and water conservation;
- (vii) Enhance capacity of line ministries, departments, agencies and organizations at all levels in planning, implementation and monitoring of water supply programmes and sustainable operation & maintenance of water supply systems;
- (viii) Promote public-private-partnership for enhancing access of safe drinking water and sustainable operation & maintenance of water supply systems; and
- (ix) Promote research and development for enhancing access, effectiveness and sustainability of water supply interventions; and
- (x) Promote Inter-sectoral collaboration to maximize the impacts of water supply interventions.

#### 5. POLICY PRINCIPLES

The key Policy principles that will be pursued for implementation of the Policy are as follows:

- Access to safe drinking water is the basic human right of every citizen and that it is the responsibility of the Government to ensure its provision to all citizens;
- (ii) Water allocation for drinking purposes (as defined under Section 2) will be given priority over other uses;
- (iii) In order to ensure equitable access, special attention will be given to removing the existing disparities in coverage of safe drinking and for addressing the needs of the poor and the vulnerable;
- (iv) Recognizing the fact that women are the main providers of domestic water supply and maintainers of hygienic household environment, their participation in planning, implementation, monitoring and operation & maintenance of water supply systems will be ensured; and

(v) Responsibilities and resources will be delegated to local authorities to enable them discharge their assigned functions with regard to provision of safe water supply in accordance with Local Bodies Legislation.

#### 6. POLICY GUIDELINES

# 6.1. Increasing Access

- (i) New drinking water supply systems will be established and existing systems will be rehabilitated and upgraded in urban as well as rural areas to ensure sustainable access (as defined under Section 2 of the Policy) of safe drinking water to the entire population of Pakistan. In this regard, the Federal, Provincial and AJK Governments will provide and mobilize additional financial resources;
- (ii) With regard to enhancing the access to safe drinking water, priority will be accorded to un-served and under-served areas, both urban and rural, including *Katchi Abadis* and slums, disadvantaged areas, brackish water zones and those areas where there is shortage of sweet water in underground aquifers;
- (iii) All public "intermittent" water distribution systems will be upgraded phase-wise through supply and demand management and rehabilitation to "continuous water" supply mode;
- (iv) Sustainability of drinking water supply systems, including sustainability of the sources (Section 6.2) and infrastructure, will be promoted;
- (v) Adequate provisions for operation & maintenance of water supply systems will be ensured while allocating funds for new projects; and
- (vi) Drinking water availability plans would be formulated for rural and urban areas, especially for mega cities, on the basis of detailed assessment and analysis.

#### 6.2. Protection and Conservation of Water Resources

- (i) Measures will be taken to protect and conserve surface and groundwater resources as well as coastal waters in line with the provisions of the National Environment Policy and Pakistan Environmental Protection Act-1997;
- (ii) Ambient water quality standards will be developed and enforced for classification of water resources on the basis of their uses and detailed assessments. Phased programmes for clean-up and protection of water resources used for drinking purposes will also be implemented in line with the standards;

- (iii) Rain-water-harvesting at household and local levels will be promoted to augment the municipal water supplies as well as for ground water recharge so as to promote sustainability of water sources;
- (iv) Community management of local water resources and integrated management of water resources will be promoted;
- (v) Due consideration will be given to the adverse impacts of climate change in planning and development of drinking water supply systems;
- (vi) Abstraction of groundwater for various uses will be regulated;
- (vii) Environmental impact assessment will be undertaken for all water sector projects to ensure that they do not adversely impact the environment;
- (viii) Recycling and re-use of water will be encouraged;
- (ix) Existing water supply systems will be rehabilitated to reduce water losses and wastage;
- (x) Water metering will be encouraged to check the indiscriminate use of drinking water supplies; and
- (xi) Water-saving plumbing equipment and water efficient techniques, devices and appliances will be promoted.

# 6.3. Water Treatment and Safety

- (i) The drinking water will be treated so as to ensure that it complies with the National Drinking Water Quality Standards. To this end, water treatment will be made an integral component of all the drinking water supply systems, both public and private, depending on the quality of source;
- (ii) Water quality monitoring and surveillance framework and guidelines will be established to ensure that quality of all public and private water supplies conforms to the required standards. In this context, water quality laboratories will be established at Provincial, District and local levels and the quality of drinking water sources and supplies will be regularly monitored;
- (iii) Water safety planning will be promoted for urban as well as rural water supply systems;
- (iv) National Action Plan for promotion of household water treatment options will be developed and implemented;
- (v) Federal, Provincial, AJK, Gilgit-Baltistan and FATA Governments will assign the role of "Surveillance Agency" to an appropriate organization to undertake independent assessment of the quality of water being supplied by the water supply

agencies in their respective jurisdiction. The "Surveillance Agencies" will immediately intimate the non-compliance of the National Drinking Water Quality Standards to the "Water Regulatory Agencies", to be designated by the Federal, Provincial, AJK, Gilgit-Baltistan and FATA Governments for taking appropriate actions. The "Surveillance Agencies" will also prepare annual reports on the state of the drinking water in the respective areas of their jurisdiction. These reports will be consolidated into the national report by the Federal level "Surveillance Agency".

# 6.4. Appropriate Technologies and Standardization

- (i) Cost-effective and appropriate technological options to suit local conditions and social and cultural practices will be used. Operation and maintenance and availability of spare parts and supplies will also be given due consideration in the selection of the technological options to ensure sustainability; and
- (ii) Federal, Provincial, AJK, Gilgit-Baltistan and FATA Governments will develop standard operating procedures for planning, designing, construction, monitoring and operations and maintenance for various categories of water supply schemes. This will ensure adherence to the technical standards and specifications and quality construction and sustainable service.

# 6.5. Community Participation and Empowerment

- (i) Participation of communities, especially women and children, in planning, implementation, monitoring and operations and maintenance of water supply systems will be encouraged to promote community ownership and empowerment as well as sustainability;
- (ii) Every public sector project will have special allocation for community mobilization;
- (iii) Community mobilization units will be established in water supply related institutions;
- (iv) Special focus will be placed on gender training programs for the staff of water supply related institutions at all levels so that they are able to respond in a sensitive manner to the gender differentiated needs in the drinking water sector;
- (v) Special efforts will be made to recruit and induct women in water supply related institutions and other relevant agencies to ensure that the needs of women are adequately addressed in design and operation & maintenance of water supply systems; and

(vi) Representation of women councilors in all review and decision making forums regarding drinking water supply at the District, Tehsil and Union Council levels will be ensured.

#### 6.6. Public Awareness

- (i) Intensive information, education and communication campaigns will be developed and implemented to promote water safety, water conservation and safe hygiene practices. To this effect, a National Behavioral Change Communication Strategy will be formulated and implemented; and
- (ii) Hygiene promotion will be made an integral component of all water supply programmes.

# 6.7. Capacity Development

- (i) The role and responsibilities of various agencies regarding water sector at the Federal, Provincial and local levels will be streamlined to address fragmentation and overlapping of responsibilities;
- (ii) Technical, institutional and financial capacity of water service providers will be strengthened. The concerned governments will organize training for their staff on planning, implementation, monitoring and evaluation of drinking water supply programmes; effective and efficient operation & maintenance of water supply systems; water quality monitoring; community mobilization; hygiene promotion; financial management; budgeting; audit and accounting; contract management and revenue collection. To this effect, the concerned governments will establish specialized training academies for water and sanitation sector;
- (iii) Capacity of citizen's community boards and other community organizations will be strengthened to build the local level capacity for implementation of water supply programmes and operation & maintenance of water supply systems; and
- (iv) Performance criteria for service providers will be developed to promote performance-based service delivery approach. To this end, systems of performance grants will be established to reward institutions and individuals who are able to meet performance milestones and achieve the specific targets.

# 6.8. Public-Private Partnership

Private entrepreneurship and public-private partnerships for enhancing access of safe drinking water, operation & maintenance of water supply systems, resource mobilization and capacity development will be promoted. The role of civil society organizations to support the government's efforts in this context will also be encouraged.

# 6.9. Research and Development

Special efforts will be undertaken to pilot new approaches and innovative ideas and arrangements in the drinking water sector, especially those which help to improve access, quality, efficiency, effectiveness and sustainability. Where these pilots are successful, they will be widely disseminated and plans will be made to scale-up and replicate at the national level.

# 6.10. Emergency Preparedness and Response

- (i) National, Provincial, District and local level emergency preparedness and response plans will be developed for ensuring provision of safe water to the people affected by emergencies such as floods, earthquakes, droughts and conflicts, in line with the Sphere Standards;
- (ii) Water supply systems will be designed and constructed with due consideration to the natural disasters and emergencies; and
- (iii) Training programs on emergency preparedness and response will be arranged for the staff of line agencies, civil society organizations and communities.

# 6.11. Coordinated Planning and Implementation

- Sector-wide approach will be promoted for water and sanitation sector;
- (ii) Existing data collection systems such as Pakistan Social and Living Standards Measurement Survey, Multiple Indicator Cluster Survey, Demographic and Health Survey and Population Census will be streamlined and strengthened to ensure availability of authentic information for assessment of the progress with regard to enhancing access to safe water as well as for decision making purposes;
- (iii) Drinking water sector management information system will be established at the Federal, Provincial and local levels;

- (iv) In order to ensure effective utilization of resources and to maximize impacts, intersectoral approach will be promoted and implementation of the Policy will be coordinated and integrated with relevant national policies, especially Policies for sanitation, water, environment, health and education sectors;
- (v) Adequate allocations will be made for provision of drinking water supply facilities in educational institutions and health care facilities under the education and health sector programmes; and
- (vi) In order to ensure inter and intra-sectoral coordination, a multi-stakeholder Water and Sanitation Coordination Committee will be established. Similar committees will be set up at the Provincial, District and local levels.

# 6.12. Legislation

- Pakistan Safe Drinking Water Act will be enacted to ensure compliance with the National Drinking Water Quality Standards and hold the water supply institutions accountable to the general public;
- (ii) The Drinking Water Quality Standards will be enforced throughout the country and agencies responsible for the provision of water supply will ensure the quality of water supplied by them conforms to these standards;
- (iii) Water Conservation Act and relevant standards and guidelines will be enacted;
- (iv) Standards for water-saving plumbing equipment and appliances will be enacted;
   and
- (v) Legislation for regulation of groundwater exploitation will be enacted.

#### 7. IMPLEMENTATION AND MONITORING

The implementation and monitoring of this Policy will be coordinated by the Ministry of Environment in collaboration with Provincial, AJK, Gilgit-Baltistan and FATA Governments. Following the approval of the Policy, the Federal, Provincial, AJK, Gilgit-Baltistan and FATA Governments will develop comprehensive strategies and action plans for its implementation. Federal, Provincial, AJK, Gilgit-Baltistan and FATA Governments will allocate necessary funds for implementation of the Policy in line with the respective strategies and action plans. Reports on the progress of implementation of these strategies and plans will be submitted to the Ministry of Environment on bi-annual basis.

This Policy will be implemented and monitored in conjunction with the National Sanitation Policy which was approved by the Federal Cabinet in October 2006. The "National Sanitation Policy Implementation Committee" envisaged under the National Sanitation Policy will, therefore, be re-constituted as the "National Drinking Water and Sanitation Policy Implementation Committee". Accordingly, the Directorate of Environmental Health envisaged under the National Sanitation Policy will be renamed as "Directorate of Water and Sanitation" to serve as Secretariat for the Committee.

The Policy will be reviewed and updated after every five years by a committee constituted specially for the purpose of reviewing the implementation of its guidelines, their efficacy and continued relevance to the changing situation in the country.

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