



Focus on Water and Solid Waste

Government of Sindh at Work



Domestic water supply policy for Sindh

PREAMBLE: The Sindh Domestic Water Supply Policy is intended to support and guide the Sindh City District Government and Taluka Municipal Administrations (TMA) to frame their own domestic water strategies, plans and programmes and is the result of stakeholder consultations held at the Taluka and provincial levels.

The Government of Pakistan has recently finalized, after stakeholder consultations held at the provincial level and in Azad Jammu and Kashmir and the Northern Areas, the draft National Drinking Water Policy to guide and support the provincial and district governments in framing their own drinking water strategies, plans and programmes. The draft Policy for Sindh, while reflecting the ground realities in Sindh, has been drawn up within the broad framework of the draft National Policy.

The Sindh Policy has been prepared after extensive consultations, detailed technical assessment in selected urban and rural areas and a process of consensus building. The objective of the process was to ensure participation of stakeholder groups both in (i) identification of issues, and (ii) together with the technical, fiscal and financial assessment carried out by the TA Team, build a consensus on policy response to the identified issues. (See Annex 10 of interim

and coverage is poor. According to one survey, sixty seven percent of households has access to water inside their houses i.e., 26% have taps, 6% have motorized pumps and 35% have hand pumps. In rural areas 57% of the households has access to water inside their houses i.e. 3% have taps, 3% have motorized pumps and 51% have hand-pumps. In urban areas 80% of the households has access to water inside their houses i.e. 59% have taps, 9% have motorized pumps and 12% have hand-pumps. Between 1996 and 2002, there has been a decrease in the percentage of houses with access to water inside their house through tap water from 39% to 26%. In urban areas the tap water decreased from 71% to 59%. However there has been an increase in hand-pumps usage from 26% to 35%.

*Overall 50% of the households are paying for tap water. In rural areas 58% and in urban areas 49% are paying for tap water. However, there is virtually no data regarding water quality.

*Most cities have invested in piped water systems. The old systems have collapsed due to a lack of maintenance and poor design.

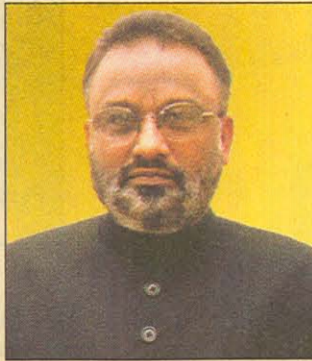
*The water is supplied intermittently. As the water lines are laid adjacent to the sewers/ drains the wastewater is sucked into the water lines. Often water



Dr. Ishratul Ibad Khan,
Governor of Sindh

lements and the infrastructure that they contain do not exist for the urban and/or rural areas of Sindh. Institutional capacity and capability for such documentation is almost non-existent. In the absence of such documentation, realistic and cost effective planning cannot take place.

*There is also inadequate technical capacity and capability in government agencies to plan and implement and an absence of management information systems.



Dr. Arbab Ghulam Rahim,
Chief Minister of Sindh

its functions as a service provider and the authority it must exercise as a regulator.

*To ensure that the existing inequities in the provision of safe drinking water are removed and the needs of the more vulnerable and poor are effectively addressed through adequate financial allocations and provisions of suitable technological options.

*To recognize the key role that women play in the drinking water sector and ensure their participation in decision making for small scale

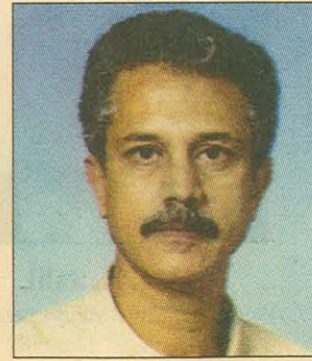


M.A. Jalil
Advisor to Chief Minister on Finance

*To ensure that water quality standards are approved and a system of surveillance, testing, monitoring and disseminating information regarding water quality is in place by 2007.

KEY POLICY INSTRUMENTS AND STRATEGIES: A host of policy instruments and strategies will be used to achieve the objectives of the Domestic Water Supply Policy. The key strategic thrusts of the policy will be as follows;

TARGETING STRATEGY
*All municipalities will adopt a demand led approach in providing



Wasim Akhtar
Advisor to Chief Minister on local govt

*There will be a regular review and updating of the legislative framework after every five years or when required 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.

PROTECTION OF WATER SOURCES
*Regular monitoring of water sources to ensure the protection of water sources Sindh.

*Preserve and protect surface (rivers, lakes, wetlands) and groundwater

recipients of development;

*To ensure that community organizations the planning, implementation technological choices and supply specifications are determined through close participation with the users, especially in rural areas where the participation of women is critical to ensure effective use and sustainability of water supply systems.

*High performing municipalities will be given special acknowledgement by instituting a system of performance grants and rewards for the institutions and the individuals.

TECHNICAL STRATEGY

*Promote effective rehabilitation and efficiency improvements in existing water supply systems, through justifiable investments, significant reductions in non-revenue water, increased water metering and other initiatives.

*Technical assistance will be provided to the provincial and area governments for the preparation of appropriate technical guidelines which can be subsequently disseminated to all TMAs and other water sector agencies.

*Standard operating procedures (SOPs) will be developed for planning, design, implementation and operations and maintenance for the various categories of water supply schemes. This will ensure adherence to technical stan-

are able to respond in a sensitive manner to the gender differentiated needs in the drinking water sector.

*Special efforts will be made to recruit and induct women in TMAs, EPA and other relevant agencies to ensure that the needs of women clients are addressed.

*To ensure the representation of female councillors in all review and decision making forums regarding drinking water supply at the district, Taluka and tiers.

COMMUNICATION AND DISSEMINATION STRATEGY

*The Environment Protection Agency will be responsible for disseminating information on drinking water quality standards through articles in the press, leaflets, newsletters and dissemination of information to schools, through NGOs, civil society organizations, Community Citizens Boards and community organizations, etc.

*The approved Domestic Water Supply Policy will be widely disseminated to municipal institutions, civil society, community organizations and users. In order to undertake this effectively, consider may be given to putting in place a coordinating and steering mechanism with the participation of key stakeholders.

*Regular policy dialogue will be conducted between all tiers of govern-

...The main source of water for many settlements is the irrigation canal and during canal closures or supply shortages, there is no water available in the canal. The canals are also used as the outflow for untreated sewage. Thus the dumping of sewage by one settlement contaminates the water of others downstream who undertake little or no treatment before supplying it to the households.

*Household Surveys show that the majority of the population do not have a clear understanding of the relationship between unsafe water and health. As a result, water-borne diseases impoverish them.

*Government spending for the water and drinking water sector has been poor (0.08 per cent of the GDP for the year 2002-03, and 0.09 and 0.10 per cent for the years 2003-04 and 2004-05 respectively). These allocations are insufficient to meet the Millennium Development Goals and other targets for the sector and most of them are utilised for the water sector rather than drinking water.

*Vertical programmes (such as the Khushal Pakistan Programme) are organised and implemented in ways that adversely affect the autonomy of the Taluka Municipal Administration (TMA) in preparing the development budget and also undermine local government accountability and operational efficiency.

*There is considerable evidence to show that in the absence of government and/or NGO support and investments, communities organise to build their drinking water systems on self-help. If this process is supported then the huge investments communities make into this effort would be better utilised and would help to overcome resource constraints.

*There are a number of Pakistani NGO and government agency programmes and projects that have successfully supported communities in financing and managing the construction of their neighbourhood drinking water infrastructure through self-help. Government-NGO/CBO partnerships have emerged as a result where local government has complimented this work by providing bulk water.

*In most urban areas and in all rural areas drinking water is not priced and as such O&M cost for drinking water have to be subsidised from other sources.

*Land-use and topographic Maps and development plans of existing set-

...ive government programmes have overcome these constraints and are being increasingly applied as solutions.

*So far there has been an absence of a drinking water policy and an absence of a clear definition of drinking water itself. In addition, roles of the different government agencies responsible for planning and implementation are not clearly defined. There are also a large number of actors involved in drinking water provision and a large number of parallel drinking water related investments and programmes between which there is no coordination and many of which do not come under the preview of local government institutions. Local government and development agencies also lack managerial, administrative and monitoring capacity due to which a lot of ad-hoc decisions and programmes take place.

OBJECTIVES: The primary objective of the Sindh Domestic Water Supply Policy is to improve the quality of life of the people of Sindh. To achieve this, the policy has the following sub objectives:

- *To ensure access to safe drinking water, and the promotion of health and hygiene practices to compliment the primary objectives.
- *To develop guidelines for the evolution of an effective institutional and financial framework to implement the primary objectives.
- *To link drinking water programmes with environment, housing, sanitation and city and regional planning policies and programmes.

POLICY PRINCIPLES: The following key policy principles will be pursued:

- *To recognize 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.
- *The right to water for drinking takes precedence over rights for water for all other uses such as environment, agriculture, industry etc.
- *To recognize the role of the broad range of providers in the sector and provide a supportive policy framework that encourages alternate options through private provision, public-private partnerships, the role of NGOs and community organizations.
- *To fashion the role of the state in a manner which allows balance between

...approach is given a key role.

MINIMUM ACCEPTABLE DRINKING/DOMESTIC WATER OPTIONS: The definition of minimum acceptable drinking water in the context of this policy is given below.

- *In urban areas and/or rural settlements: communal water points will be established within a radius of 0.5 km where safe drinking water will be made available. Water should be provided 2 litres per person per day for the settlement. The water quality will be as per the WHO Guidelines.
- The definition of minimum acceptable domestic water in the context of this policy is given below.
- *In urban areas and/or rural settlements: water will be provided inside the house, through piped system, to meet the minimum requirement of 50 litres per person per day.
- *In rural settlements: water will be provided through communal points to meet the minimum requirement of 25 litres per person per day.

TARGETS: While each city district government and TMA will pursue its own targets, the overall aim of the Sindh Provincial Government is to facilitate the attainment of the targets specified in the Medium Term Framework and the Millennium Development Goals for the country as a whole. The specific targets entail the following:

- *To provide safe drinking water to 93% of the population by 2015 thereby raising the current coverage by almost 30% (from 67% at present to 93% in 2015) for the existing population and ensuring that the additional population is also provided access.
- *To provide at least one hand pump or spot source for every 250 persons.
- *To establish water treatment plants in all urban areas by the year 2015

PUBLIC OPINION

Pursuing the resolve of the Government of Sindh for eradicating poverty, improving living conditions and providing basic facilities in water supply, sanitation and solid waste management sectors, the Local Government Department, Government of Sindh, with the assistance of Asian Development Bank, has undertaken the process of preparation of two policies for Sindh: 1) Water Supply Policy and 2) Solid Waste & Sanitation Policy through international consultants Halcrow Pakistan (Pvt.) Limited. The policies have been framed in consultation with all stakeholders. Through publication in newspapers and to achieve the objectives of transparency and public participation, the public opinion / suggestions are invited to further improve these policies before their approval and implementation

...Encourage and support rainfall harvesting schemes (including 'tankas', Veer dams) for augmenting municipal water supply.

INSTITUTIONAL STRATEGY

- *To focus on the role of the Government as both a service provider and regulator to ensure that water quality standards are properly articulated, maintained and enforced.
- *The Sindh Provincial and Local Governments will be responsible for establishing policy guidelines and legislation for the drinking water sector at the provincial level and be responsible for special initiatives and allocation of special funds to ensure coverage in underserved and disadvantaged areas.
- *Sindh Provincial and Local Governments will develop medium term plans for the drinking water sector in keeping with the Medium-Term Development Framework, and the Millennium Development Goals in conjunction with relevant municipal authorities to guide and steer the future developments in the sector.
- *The TMAs will be encouraged to make use of the SLGO (2001) provision that allows for a variety of "contracting in" and "contracting out" arrangements for more effective service provision through the civil society and private sector organizations using performance-based contracts. These arrangements can potentially be used for design and implementation, water testing, operation and maintenance, collection of water charges, awareness building, etc.
- *The TMAs will be encouraged to adopt a service provider orientation to its clientele. It will develop an approach which integrates community engagement, demand assessment and service provision and marketing in order to effectively enhance its professional credibility and meet the needs of the people within its jurisdiction.
- *Capacity Building programmes will be designed to strengthen institutions which are lacking in capacity such as the Town and Taluka Municipal Administrations, the Sindh Environmental Protection Agency, the Local Government and Rural Development Departments, etc.
- *The planning, design, implementation and operations of water systems will ensure a decision making role of the intended beneficiaries, who should be treated as partners rather than passive

...ology will be used to ensure that the local government resources are used optimally and that the systems are easy to design and build and easy to maintain by the local communities and/or the concerned local governments.

- *Special care should be taken to use materials and parts of good quality in constructing drinking water schemes. Special attention will be made to ensure that pipes with standard specification will be used and rusted pipes will be replaced.
- *Wherever possible, preference should be given to rehabilitate existing schemes (functioning or not) over the construction of new schemes, unless there are special reasons to justify otherwise.
- *The design and layout of water supply pipes, storage tanks etc should ensure that there is no contamination by sewerage systems, for example by maintaining a minimum distance between the two systems.
- *Low cost technological options should be developed and promoted to provide affordable water treatment options, in both urban and rural areas.

OPERATION AND MAINTENANCE STRATEGY

- *The responsibility for the operations and maintenance of all drinking water schemes will be with the Taluka Municipal Administrations except in the case of large urban areas, where a specialised Water and Sanitation Agency may be established.
- *However, the community should be given responsibility for monitoring and surveillance of the schemes, especially in the rural areas and small settlements. Where appropriate, the responsibility for the operations and maintenance of small schemes may be devolved to the intended beneficiaries. These communities will be responsible for routine maintenance and operations. However, in case of a major breakdown of the scheme, the TMA will be responsible for scheme rehabilitation.
- *Women will be especially consulted when determining the operations and management arrangements for schemes.
- *Capacity building programs for community organizations will be implemented (in collaboration with NGOs where appropriate) for improving the local level capacity for operation and maintenance of schemes.

DRINKING WATER QUALITY STANDARDS

- *The Pakistan Drinking Water Quality Standards will come into immediate force in both urban and rural areas and the agencies responsible for the provision of water supply will ensure that the quality of water supplied through government financed schemes does not fall below the standards at any given time.
- *Appropriate action will be undertaken to penalize any vendor or supplier found to be providing water quality lower than the standard prescribed in accordance with the existing legislation.

WATER QUALITY MONITORING AND SURVEILLANCE

- *The responsibility for monitoring and surveillance of water quality for water at the source will rest primarily

...tion of good practices.

- *A proper system of dissemination of the information of the water quality of all sources will be developed by the providing agency. The provincial government and EPA will be responsible for coordinating and developing a system of information dissemination.
- *Each water source and water facility from which people are drawing water for drinking purposes will be marked to indicate whether its water quality conforms to the physical, chemical and bacteriological standards prescribed for drinking.
- *A system of colour coding will be devised and indicating clearly through a colour code if it is fit for human or animal consumption or not. The green code will indicate water which is fit for drinking and the red code will indicate its unsuitability for human consumption.
- *Civil society organizations and community activists will participate in information dissemination and raising awareness about water sector issues, water testing and quality issues.
- *Best Practices regarding successful initiatives in the drinking water sector will be widely disseminated and shared and will be used to enhance the performance in the sector.

FINANCIAL STRATEGY

- *The government will follow an approach of full cost recovery in the sector as a whole but will consider a differentiation approach which will include full cost recovery, partial cost recovery, subsidization and cross-subsidization to achieve financial sustainability in the sector. The tariff system should ensure appropriate subsidies to poorer communities.
- *The TMAs will ensure that drinking water schemes will be given the highest priority in the allocation of funds to the Citizen Community Boards at the local level.
- *The TMAs will introduce a system for operations and maintenance on full-cost recovery to maintain the water supply system in a sustainable way. However the cost for major breakdown will be paid by the providing public sector authority. The current tariff for both residential and commercial users will be revised to ensure that the operational costs of the municipal entities are fully met.
- *The providers will be encouraged to promote metering of water consumption to discourage the indiscriminate use of water.
- *The implementation of professional system for billing and collection will be encouraged through a options such as through strengthening the TMAs, outsourcing to the private sector, community-based system of collection, etc.
- *Systems of performance grants will be encouraged to reward those institutions and individuals who have been able to meet performance milestones and achieve the specified targets.
- *The capacity of service providers in the area of financial management, budgeting, audit and accounting, revenue collections will be strengthened.

MONITORING AND EVALUATION STRATEGY

- *The Local Government Department

...The main source of water for many settlements is the irrigation canal and during canal closures or supply shortages, there is no water available in the canal. The canals are also used as the outflow for untreated sewage. Thus the dumping of sewage by one settlement contaminates the water of others downstream who undertake little or no treatment before supplying it to the households.

*Household Surveys show that the majority of the population do not have a clear understanding of the relationship between unsafe water and health. As a result, water-borne diseases impoverish them.

*Government spending for the water and drinking water sector has been poor (0.08 per cent of the GDP for the year 2002-03, and 0.09 and 0.10 per cent for the years 2003-04 and 2004-05 respectively). These allocations are insufficient to meet the Millennium Development Goals and other targets for the sector and most of them are utilised for the water sector rather than drinking water.

*Vertical programmes (such as the Khushal Pakistan Programme) are organised and implemented in ways that adversely affect the autonomy of the Taluka Municipal Administration (TMA) in preparing the development budget and also undermine local government accountability and operational efficiency.

*There is considerable evidence to show that in the absence of government and/or NGO support and investments, communities organise to build their drinking water systems on self-help. If this process is supported then the huge investments communities make into this effort would be better utilised and would help to overcome resource constraints.

*There are a number of Pakistani NGO and government agency programmes and projects that have successfully supported communities in financing and managing the construction of their neighbourhood drinking water infrastructure through self-help. Government-NGO/CBO partnerships have emerged as a result where local government has complimented this work by providing bulk water.

*In most urban areas and in all rural areas drinking water is not priced and as such O&M cost for drinking water have to be subsidised from other sources.

*Land-use and topographic Maps and development plans of existing set-

...ive government programmes have overcome these constraints and are being increasingly applied as solutions.

*So far there has been an absence of a drinking water policy and an absence of a clear definition of drinking water itself. In addition, roles of the different government agencies responsible for planning and implementation are not clearly defined. There are also a large number of actors involved in drinking water provision and a large number of parallel drinking water related investments and programmes between which there is no coordination and many of which do not come under the preview of local government institutions. Local government and development agencies also lack managerial, administrative and monitoring capacity due to which a lot of ad-hoc decisions and programmes take place.

OBJECTIVES: The primary objective of the Sindh Domestic Water Supply Policy is to improve the quality of life of the people of Sindh. To achieve this, the policy has the following sub objectives:

- *To ensure access to safe drinking water, and the promotion of health and hygiene practices to compliment the primary objectives.
- *To develop guidelines for the evolution of an effective institutional and financial framework to implement the primary objectives.
- *To link drinking water programmes with environment, housing, sanitation and city and regional planning policies and programmes.

POLICY PRINCIPLES: The following key policy principles will be pursued:

- *To recognize 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.
- *The right to water for drinking takes precedence over rights for water for all other uses such as environment, agriculture, industry etc.
- *To recognize the role of the broad range of providers in the sector and provide a supportive policy framework that encourages alternate options through private provision, public-private partnerships, the role of NGOs and community organizations.
- *To fashion the role of the state in a manner which allows balance between

PUBLIC OPINION

Pursuing the resolve of the Government of Sindh for eradicating poverty, improving living conditions and providing basic facilities in water supply, sanitation and solid waste management sectors, the Local Government Department, Government of Sindh, with the assistance of Asian Development Bank, has undertaken the process of preparation of two policies for Sindh: 1) Water Supply Policy and 2) Solid Waste & Sanitation Policy through international consultants Halcrow Pakistan (Pvt.) Limited. The policies have been framed in consultation with all stakeholders. Through publication in newspapers and to achieve the objectives of transparency and public participation, the public opinion / suggestions are invited to further improve these policies before their approval and implementation

...Encourage and support rainfall harvesting schemes (including 'tankas', Veer dams) for augmenting municipal water supply.

INSTITUTIONAL STRATEGY

- *To focus on the role of the Government as both a service provider and regulator to ensure that water quality standards are properly articulated, maintained and enforced.
- *The Sindh Provincial and Local Governments will be responsible for establishing policy guidelines and legislation for the drinking water sector at the provincial level and be responsible for special initiatives and allocation of special funds to ensure coverage in underserved and disadvantaged areas.
- *Sindh Provincial and Local Governments will develop medium term plans for the drinking water sector in keeping with the Medium-Term Development Framework, and the Millennium Development Goals in conjunction with relevant municipal authorities to guide and steer the future developments in the sector.
- *The TMAs will be encouraged to make use of the SLGO (2001) provision that allows for a variety of "contracting in" and "contracting out" arrangements for more effective service provision through the civil society and private sector organizations using performance-based contracts. These arrangements can potentially be used for design and implementation, water testing, operation and maintenance, collection of water charges, awareness building, etc.
- *The TMAs will be encouraged to adopt a service provider orientation to its clientele. It will develop an approach which integrates community engagement, demand assessment and service provision and marketing in order to effectively enhance its professional credibility and meet the needs of the people within its jurisdiction.
- *Capacity Building programmes will be designed to strengthen institutions which are lacking in capacity such as the Town and Taluka Municipal Administrations, the Sindh Environmental Protection Agency, the Local Government and Rural Development Departments, etc.
- *The planning, design, implementation and operations of water systems will ensure a decision making role of the intended beneficiaries, who should be treated as partners rather than passive

...ology will be used to ensure that the local government resources are used optimally and that the systems are easy to design and build and easy to maintain by the local communities and/or the concerned local governments.

- *Special care should be taken to use materials and parts of good quality in constructing drinking water schemes. Special attention will be made to ensure that pipes with standard specification will be used and rusted pipes will be replaced.
- *Wherever possible, preference should be given to rehabilitate existing schemes (functioning or not) over the construction of new schemes, unless there are special reasons to justify otherwise.
- *The design and layout of water supply pipes, storage tanks etc should ensure that there is no contamination by sewerage systems, for example by maintaining a minimum distance between the two systems.
- *Low cost technological options should be developed and promoted to provide affordable water treatment options, in both urban and rural areas.

OPERATION AND MAINTENANCE STRATEGY

- *The responsibility for the operations and maintenance of all drinking water schemes will be with the Taluka Municipal Administrations except in the case of large urban areas, where a specialised Water and Sanitation Agency may be established.
- *However, the community should be given responsibility for monitoring and surveillance of the schemes, especially in the rural areas and small settlements. Where appropriate, the responsibility for the operations and maintenance of small schemes may be devolved to the intended beneficiaries. These communities will be responsible for routine maintenance and operations. However, in case of a major breakdown of the scheme, the TMA will be responsible for scheme rehabilitation.
- *Women will be especially consulted when determining the operations and management arrangements for schemes.
- *Capacity building programs for community organizations will be implemented (in collaboration with NGOs where appropriate) for improving the local level capacity for operation and maintenance of schemes.

...tion of good practices.

- *A proper system of dissemination of the information of the water quality of all sources will be developed by the providing agency. The provincial government and EPA will be responsible for coordinating and developing a system of information dissemination.
- *Each water source and water facility from which people are drawing water for drinking purposes will be marked to indicate whether its water quality conforms to the physical, chemical and bacteriological standards prescribed for drinking.
- *A system of colour coding will be devised and indicating clearly through a colour code if it is fit for human or animal consumption or not. The green code will indicate water which is fit for drinking and the red code will indicate its unsuitability for human consumption.
- *Civil society organizations and community activists will participate in information dissemination and raising awareness about water sector issues, water testing and quality issues.
- *Best Practices regarding successful initiatives in the drinking water sector will be widely disseminated and shared and will be used to enhance the performance in the sector.

FINANCIAL STRATEGY

- *The government will follow an approach of full cost recovery in the sector as a whole but will consider a differentiation approach which will include full cost recovery, partial cost recovery, subsidization and cross-subsidization to achieve financial sustainability in the sector. The tariff system should ensure appropriate subsidies to poorer communities.
- *The TMAs will ensure that drinking water schemes will be given the highest priority in the allocation of funds to the Citizen Community Boards at the local level.
- *The TMAs will introduce a system for operations and maintenance on full-cost recovery to maintain the water supply system in a sustainable way. However the cost for major breakdown will be paid by the providing public sector authority. The current tariff for both residential and commercial users will be revised to ensure that the operational costs of the municipal entities are fully met.
- *The providers will be encouraged to promote metering of water consumption to discourage the indiscriminate use of water.
- *The implementation of professional system for billing and collection will be encouraged through a options such as through strengthening the TMAs, outsourcing to the private sector, community-based system of collection, etc.
- *Systems of performance grants will be encouraged to reward those institutions and individuals who have been able to meet performance milestones and achieve the specified targets.
- *The capacity of service providers in the area of financial management, budgeting, audit and accounting, revenue collections will be strengthened.

MONITORING AND EVALUATION STRATEGY

- *The Local Government Department

...The main source of water for many settlements is the irrigation canal and during canal closures or supply shortages, there is no water available in the canal. The canals are also used as the outflow for untreated sewage. Thus the dumping of sewage by one settlement contaminates the water of others downstream who undertake little or no treatment before supplying it to the households.

*Household Surveys show that the majority of the population do not have a clear understanding of the relationship between unsafe water and health. As a result, water-borne diseases impoverish them.

*Government spending for the water and drinking water sector has been poor (0.08 per cent of the GDP for the year 2002-03, and 0.09 and 0.10 per cent for the years 2003-04 and 2004-05 respectively). These allocations are insufficient to meet the Millennium Development Goals and other targets for the sector and most of them are utilised for the water sector rather than drinking water.

*Vertical programmes (such as the Khushal Pakistan Programme) are organised and implemented in ways that adversely affect the autonomy of the Taluka Municipal Administration (TMA) in preparing the development budget and also undermine local government accountability and operational efficiency.

*There is considerable evidence to show that in the absence of government and/or NGO support and investments, communities organise to build their drinking water systems on self-help. If this process is supported then the huge investments communities make into this effort would be better utilised and would help to overcome resource constraints.

*There are a number of Pakistani NGO and government agency programmes and projects that have successfully supported communities in financing and managing the construction of their neighbourhood drinking water infrastructure through self-help. Government-NGO/CBO partnerships have emerged as a result where local government has complimented this work by providing bulk water.

*In most urban areas and in all rural areas drinking water is not priced and as such O&M cost for drinking water have to be subsidised from other sources.

*Land-use and topographic Maps and development plans of existing set-

...ive government programmes have overcome these constraints and are being increasingly applied as solutions.

*So far there has been an absence of a drinking water policy and an absence of a clear definition of drinking water itself. In addition, roles of the different government agencies responsible for planning and implementation are not clearly defined. There are also a large number of actors involved in drinking water provision and a large number of parallel drinking water related investments and programmes between which there is no coordination and many of which do not come under the preview of local government institutions. Local government and development agencies also lack managerial, administrative and monitoring capacity due to which a lot of ad-hoc decisions and programmes take place.

OBJECTIVES: The primary objective of the Sindh Domestic Water Supply Policy is to improve the quality of life of the people of Sindh. To achieve this, the policy has the following sub objectives:

- *To ensure access to safe drinking water, and the promotion of health and hygiene practices to compliment the primary objectives.
- *To develop guidelines for the evolution of an effective institutional and financial framework to implement the primary objectives.
- *To link drinking water programmes with environment, housing, sanitation and city and regional planning policies and programmes.

POLICY PRINCIPLES: The following key policy principles will be pursued:

- *To recognize 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.
- *The right to water for drinking takes precedence over rights for water for all other uses such as environment, agriculture, industry etc.
- *To recognize the role of the broad range of providers in the sector and provide a supportive policy framework that encourages alternate options through private provision, public-private partnerships, the role of NGOs and community organizations.
- *To fashion the role of the state in a manner which allows balance between

PUBLIC OPINION

Pursuing the resolve of the Government of Sindh for eradicating poverty, improving living conditions and providing basic facilities in water supply, sanitation and solid waste management sectors, the Local Government Department, Government of Sindh, with the assistance of Asian Development Bank, has undertaken the process of preparation of two policies for Sindh: 1) Water Supply Policy and 2) Solid Waste & Sanitation Policy through international consultants Halcrow Pakistan (Pvt.) Limited. The policies have been framed in consultation with all stakeholders. Through publication in newspapers and to achieve the objectives of transparency and public participation, the public opinion / suggestions are invited to further improve these policies before their approval and implementation

...Encourage and support rainfall harvesting schemes (including 'tankas', Veer dams) for augmenting municipal water supply.

INSTITUTIONAL STRATEGY

- *To focus on the role of the Government as both a service provider and regulator to ensure that water quality standards are properly articulated, maintained and enforced.
- *The Sindh Provincial and Local Governments will be responsible for establishing policy guidelines and legislation for the drinking water sector at the provincial level and be responsible for special initiatives and allocation of special funds to ensure coverage in underserved and disadvantaged areas.
- *Sindh Provincial and Local Governments will develop medium term plans for the drinking water sector in keeping with the Medium-Term Development Framework, and the Millennium Development Goals in conjunction with relevant municipal authorities to guide and steer the future developments in the sector.
- *The TMAs will be encouraged to make use of the SLGO (2001) provision that allows for a variety of "contracting in" and "contracting out" arrangements for more effective service provision through the civil society and private sector organizations using performance-based contracts. These arrangements can potentially be used for design and implementation, water testing, operation and maintenance, collection of water charges, awareness building, etc.
- *The TMAs will be encouraged to adopt a service provider orientation to its clientele. It will develop an approach which integrates community engagement, demand assessment and service provision and marketing in order to effectively enhance its professional credibility and meet the needs of the people within its jurisdiction.
- *Capacity Building programmes will be designed to strengthen institutions which are lacking in capacity such as the Town and Taluka Municipal Administrations, the Sindh Environmental Protection Agency, the Local Government and Rural Development Departments, etc.
- *The planning, design, implementation and operations of water systems will ensure a decision making role of the intended beneficiaries, who should be treated as partners rather than passive

...ology will be used to ensure that the local government resources are used optimally and that the systems are easy to design and build and easy to maintain by the local communities and/or the concerned local governments.

- *Special care should be taken to use materials and parts of good quality in constructing drinking water schemes. Special attention will be made to ensure that pipes with standard specification will be used and rusted pipes will be replaced.
- *Wherever possible, preference should be given to rehabilitate existing schemes (functioning or not) over the construction of new schemes, unless there are special reasons to justify otherwise.
- *The design and layout of water supply pipes, storage tanks etc should ensure that there is no contamination by sewerage systems, for example by maintaining a minimum distance between the two systems.
- *Low cost technological options should be developed and promoted to provide affordable water treatment options, in both urban and rural areas.

OPERATION AND MAINTENANCE STRATEGY

- *The responsibility for the operations and maintenance of all drinking water schemes will be with the Taluka Municipal Administrations except in the case of large urban areas, where a specialised Water and Sanitation Agency may be established.
- *However, the community should be given responsibility for monitoring and surveillance of the schemes, especially in the rural areas and small settlements. Where appropriate, the responsibility for the operations and maintenance of small schemes may be devolved to the intended beneficiaries. These communities will be responsible for routine maintenance and operations. However, in case of a major breakdown of the scheme, the TMA will be responsible for scheme rehabilitation.
- *Women will be especially consulted when determining the operations and management arrangements for schemes.
- *Capacity building programs for community organizations will be implemented (in collaboration with NGOs where appropriate) for improving the local level capacity for operation and maintenance of schemes.

DRINKING WATER QUALITY STANDARDS

- *The Pakistan Drinking Water Quality Standards will come into immediate force in both urban and rural areas and the agencies responsible for the provision of water supply will ensure that the quality of water supplied through government financed schemes does not fall below the standards at any given time.
- *Appropriate action will be undertaken to penalize any vendor or supplier found to be providing water quality lower than the standard prescribed in accordance with the existing legislation.

WATER QUALITY MONITORING AND SURVEILLANCE

- *The responsibility for monitoring and surveillance of water quality for water at the source will rest primarily

...tion of good practices.

- *A proper system of dissemination of the information of the water quality of all sources will be developed by the providing agency. The provincial government and EPA will be responsible for coordinating and developing a system of information dissemination.
- *Each water source and water facility from which people are drawing water for drinking purposes will be marked to indicate whether its water quality conforms to the physical, chemical and bacteriological standards prescribed for drinking.
- *A system of colour coding will be devised and indicating clearly through a colour code if it is fit for human or animal consumption or not. The green code will indicate water which is fit for drinking and the red code will indicate its unsuitability for human consumption.
- *Civil society organizations and community activists will participate in information dissemination and raising awareness about water sector issues, water testing and quality issues.
- *Best Practices regarding successful initiatives in the drinking water sector will be widely disseminated and shared and will be used to enhance the performance in the sector.

FINANCIAL STRATEGY

- *The government will follow an approach of full cost recovery in the sector as a whole but will consider a differentiation approach which will include full cost recovery, partial cost recovery, subsidization and cross-subsidization to achieve financial sustainability in the sector. The tariff system should ensure appropriate subsidies to poorer communities.
- *The TMAs will ensure that drinking water schemes will be given the highest priority in the allocation of funds to the Citizen Community Boards at the local level.
- *The TMAs will introduce a system for operations and maintenance on full-cost recovery to maintain the water supply system in a sustainable way. However the cost for major breakdown will be paid by the providing public sector authority. The current tariff for both residential and commercial users will be revised to ensure that the operational costs of the municipal entities are fully met.
- *The providers will be encouraged to promote metering of water consumption to discourage the indiscriminate use of water.
- *The implementation of professional system for billing and collection will be encouraged through a options such as through strengthening the TMAs, outsourcing to the private sector, community-based system of collection, etc.
- *Systems of performance grants will be encouraged to reward those institutions and individuals who have been able to meet performance milestones and achieve the specified targets.
- *The capacity of service providers in the area of financial management, budgeting, audit and accounting, revenue collections will be strengthened.

MONITORING AND EVALUATION STRATEGY

- *The Local Government Department

PREAMBLE: The Sindh Sanitation Policy is intended to support and guide the Sindh City District Government and Taluka Municipal Administrations (TMA) to frame their own sanitation strategies, plans and programmes and is the result of stakeholder consultations held at the Taluka and provincial levels.

The Government of Pakistan has recently finalized, after stakeholder consultations held at the provincial level and in Azad Jammu and Kashmir and the Northern Areas, the draft National Sanitation Policy to guide and support the provincial and district governments in framing their own sanitation strategies, plans and programmes.

Solid waste and sanitation policy

interim report to a stakeholder group invited to a Consensus Building Meeting held on April 20, 2006. (2) Presentation of the issues assessment carried out in Sindh, the framework of the draft national policy, and the first draft of the Sindh Sanitation Policy. Discussions were held by the group, which included high-level Provincial Government officials, invited representatives from selected local governments who could make commitments on behalf of their organizations, and civic and civil society groups on the

tems have collapsed due to a lack of maintenance and poor design and almost all systems dispose untreated sewage into the storm water drains and water bodies. As a result, there is sewage-contaminated stagnant water in streets and lanes, and the heavily contaminated natural water bodies has made their water and fish life unsafe for food and is a major environmental health hazard, since the water in the canals is used untreated by settlements downstream for drinking and for agricultural purposes. In addition, over 50

*The solid waste management problems in urban areas are compounded by the behaviour of waste generators. In many areas, householders and shopkeepers throw their waste directly onto streets. Door-to-door collection systems are not prevalent. This is likely to be because of a lack of awareness of the link between public health and solid waste management, and because of a lack of alternatives, such as conveniently placed sanitary community bins.

*Prevailing waste management activities present a number of health

latrines, and staff for maintaining them is not always available since maintenance of toilets is considered to be job of the "lower" castes. Women and girls are the worst sufferers as a result of lack of such sanitation facilities.

*Government spending for the water and sanitation sector has been poor (0.08 per cent of the GDP for the year 2002-03, and 0.09 and 0.10 per cent for the years 2003-04 and 2004-05 respectively). These allocations are insufficient to meet the Millennium Development Goals and other targets

they contain do not exist for the urban and/or rural areas of Sindh. Institutional capacity and capability for such documentation is almost non-existent. In the absence of such documentation, realistic and cost effective planning cannot take place.

*There is also inadequate technical capacity and capability in government agencies to plan and implement and an absence of management information systems.

*Engineering standards followed in Sindh create systems that are expensive to build, operate and maintain. Standards developed by NGO and innovative government programmes have overcome these constraints and are being increasingly applied as solu-

...tion of good practices.

- *A proper system of dissemination of the information of the water quality of all sources will be developed by the providing agency. The provincial government and EPA will be responsible for coordinating and developing a system of information dissemination.
- *Each water source and water facility from which people are drawing water for drinking purposes will be marked to indicate whether its water quality conforms to the physical, chemical and bacteriological standards prescribed for drinking.
- *A system of colour coding will be devised and indicating clearly through a colour code if it is fit for human or animal consumption or not. The green code will indicate water which is fit for drinking and the red code will indicate its unsuitability for human consumption.
- *Civil society organizations and community activists will participate in information dissemination and raising awareness about water sector issues, water testing and quality issues.
- *Best Practices regarding successful initiatives in the drinking water sector will be widely disseminated and shared and will be used to enhance the performance in the sector.

FINANCIAL STRATEGY

- *The government will follow an approach of full cost recovery in the sector as a whole but will consider a differentiation approach which will include full cost recovery, partial cost recovery, subsidization and cross-subsidization to achieve financial sustainability in the sector. The tariff system should ensure appropriate subsidies to poorer communities.
- *The TMAs will ensure that drinking water schemes will be given the highest priority in the allocation of funds to the Citizen Community Boards at the local level.
- *The TMAs will introduce a system for operations and maintenance on full-cost recovery to maintain the water supply system in a sustainable way. However the cost for major breakdown will be paid by the providing public sector authority. The current tariff for both residential and commercial users will be revised to ensure that the operational costs of the municipal entities are fully met.
- *The providers will be encouraged to promote metering of water consumption to discourage the indiscriminate use of water.
- *The implementation of professional system for billing and collection will be encouraged through a options such as through strengthening the TMAs, outsourcing to the private sector, community-based system of collection, etc.
- *Systems of performance grants will be encouraged to reward those institutions and individuals who have been able to meet performance milestones and achieve the specified targets.
- *The capacity of service providers in the area of financial management, budgeting, audit and accounting, revenue collections will be strengthened.

