

Water Sector Roadmap PAKISTAN

A. Sector Outcomes	Indicators				
	5 past	Current	5 years	10 years	15 years
National Water Reforms					
1. Effective national water policy	No policy exists	Under discussion	Implemented effectively but not fully meeting needs	Implemented effectively and meeting needs	
2. Effective water sector apex body	No body in place	Under discussion and consideration	Exists and partially effective	Exists and partially effective	
3. Effective water action agenda	No plan or action agenda	Under discussion/consideration	Partially implemented/partially achieving results	fully implemented/fully achieving results	
Water Resources Management					
4. Total annual withdrawals as share of annual water resources (includes both ground and surface 1991)		61%	61%	68%	
5. Existing policy and capacity to collect and manage water data among agencies	Ineffective	Ineffective	Partially effective	Full effective	
6. River basin perspective for management and development	No river basin plan in place	No river basin plan in place	Exists but not effective	Fully integrated into IWRM	
7. Devolution of integrated water resources management	No participation and no local authority	No participation and no local authority	Limited participation and local authority	Common participation and local authority	
8. Adversely affected water quality		River 6% Lake 40% Severe to moderate	River 10% Lake 45% Severe to moderate	River 5% Lake 35% Severe to moderate	
9. Water quality management in place	Exists but not effective	Exists but not effective	Partially Effective	Fully effective	
10. Adversely affected coastal zone		12% of total coast 90% of estuaries	12% of total coast 90% of estuaries	10% of coast 85% of estuaries	
11. Economic losses from floods and droughts (annual average from 1990 to 2000)		\$182 mil	\$150		
12. Loss of life from floods and droughts (annual average from 1990 to 2000)		414	350		
Water Service Delivery					
13. Incidence of children under 5 with diarrhea		26%	25%	20%	10%
14. Urban population with access to safe water		83%	85%	90%	95%
15. Urban population with access to adequate sanitation		59%	60%	70%	85%
16. Performance of UWSS – non-revenue water		30-40%		25%	15%
17. Amount (%) of urban effluent that is treated		1% Karachi Islamabad	3%	15%	25%
18. Cost recovery for urban water supply (O&M only)		<30%	30%	50%	75%
19. Private sector participation in urban water supply		Technical only	Technical/management	Service contracts/BOT	Full divestiture

20. Effective regulatory system for urban water supply		Discussion/consideration	Exists but ineffective	Fully Effective	
21. Rural population with access to safe water		53%	60%	75%	80%
23. Rural population with access to adequate sanitation		27%	33%	40%	
23. Self-sustaining rural water supply systems		Some	10%	25%	50%%
24. Irrigation efficiency		40%	42%	45%	50%
25. Average yield per ha or yield per volume of water For wheat and rice respectively		2.49 3.07		3.23 3.93	
26. Cost-recovery for irrigation system O&M		30%	35%	60%	
27. User participation in irrigation		WUAs exist	O&M	Governance	
B. Sector Outputs					
1. Increased support for institutional reform especially after new national water law is passed – significant help to implement will be needed to develop specific reforms as well as for data collection etc.		Direct Technical assistance	Technical assistance attached to investment		
2. Planning is needed to meet increasing water demand - integrated water resources planning with a heavy emphasis on demand management in all sectors.		Increased options assessment /planning	Invest in supply & demand		
3. Increased support for monitoring, enforcement, and mitigation of water quality issues.		Sector planning	Pilot demonstration	Support for full program	
4. Increase water supply/sanitation rehabilitation and pursue new strategies to ensure cost recovery and O&M.		Sub-sector planning	Rehab lending & management reform	Possible Privatization corporatize	
5. Increase irrigation rehabilitation and pursue new strategies to ensure cost recovery and O&M		Sub-sector planning	Rehab lending & management reform	System control by Water Users Associations	
6. Increase bulk water supply storage once reforms in service delivery and water resources management have been achieved		WRM Planning & demand mngmnt.	Monitor sector reforms-plan storage	Lend for storage if reform progress	
C. Sector Issues and Constraints	<p>1. The government is currently debating a new national water policy that will address many of the institutional shortcomings. It is due to be finished in 2002 and possibly adopted as law in 2003 – will address data issues, private sector issues, cost recovery in all sub-sectors,</p> <p>2. ADB has just finished drafting Medium Term Development Plan with the government, yet the institutional framework for both service delivery of water resources as well as for water resources management needs significant improvement prior to any investment going forward</p> <p>4. Pakistan is heavily water constrained and will need to aggressively pursue conservation as well as development of new supply</p> <p>5. Water quality is a growing problem and will affect limited available supplies increasing negative health impacts – very little waste is treated and there is a lack of money in the sector sanitation activities.</p> <p>6. Pakistan is prone to flood and has a high risk</p> <p>7. Poor collections and billing practice plus very low tariffs lead to low cost recovery – systems are in bad state of repair</p> <p>8. Private sector involvement is very low and a weak enabling environment exists.</p> <p>9. Rural water supply is a high priority due to current low investment and overwhelming poverty dimension.</p> <p>10. Irrigation is largest concern in the water sector with overwhelming consumption, yet has poor O&M and low productivity relative to other countries. Management reform efforts have stalled due to unwillingness of irrigation agency to accept changes and cede authority to water users.</p>				

D. Actions, Milestones, Investments	By Issue	Schedule	By Agency		
			ADB	Others/ External	Govt.
TA for national water policy	National policy and reforms	Current		World Bank	
Finalize mid-term dev. plan	National reforms and development planning	Current	Workshop and approval		
Pass national water law	National policy and reforms	2003			Adopt law
Donor Agreement	Reform agenda, donor coordination plan and investment strategy, and government support	2003	Meet with WB & others	Other donors with ADB	Sit with donors and develop plan
Revise national planning agenda in line with new water law – master plan	National policy and reform and investment planning. Need to address long term water supply and demand issues and coordinate sub-sector strategies	2003 - 2005	Coordinate with Gov't	Coordinate with Gov't	Lead planning process
Prepare TA for UWSS and Rural water supply/san for new management and costs recovery	UWSS and rural water supply/sanitation and reform is high priority	2003/2004	Either WB or ADB	Either WB or ADB	Develop sub-sector restructuring plan
Prepare TA for irrigation sector reform	Largest water using sector needs rehab, improved productivity, and cost-recovery	2004/2005	Either WB or ADB	Either WB or ADB	Develop sub-sector restructuring plan
Prepare loan for UWSS or RWSS	Prepare rehab loans with structural reforms for cost recover/private participation/start regulatory environment	2004/2005 through 2010-12	Either WB or ADB	Either WB or ADB	Implement restructuring
Prepare loan for irrigation	Prepare rehab loans with structural reforms for cost recovery and user management – emphasis on demand management	2005/2006 through 2010-12	Either WB or ADB	Either WB or ADB	Implement restructuring
Prepare sector supply loan/TA and/or water quality, sanitation, demand mang. program	Address water supply and water issue through sector loan program. Develop new storage based on performance of previous sector activities and government support for reforms. Regardless, move forward with water quality, improved sanitation, and demand management lending	2006-2008 through 2015	Either WB or ADB	Either WB or ADB	Develop sub-sector restructuring plan/ Implement restructuring

Note: RSAN will be able to assist RD staff in collecting some of the sector statistics (Sector Outcomes) from external sources. Once a water sector assessment has been undertaken, much of the descriptive information will also be available from the National Water Sector Profile (NWSP) format. The Pakistan NWSP is a good example of the wealth of information that can be collected through a water sector assessment. In DMCs where ADB has not yet undertaken a water sector assessment, the water sector road map could outline the steps to do so, and also draw on information collected by the government and other donors.