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Report No: 21867

IMPLEMENTATION COMPLETION REPORT
(IDA-22280)

ON A

CREDIT

IN THE AMOUNT OF SDR 96.4 MILLION (US\$136.7 MILLION EQUIVALENT)

TO THE

ISLAMIC REPUBLIC OF PAKISTAN

FOR THE RURAL WATER SUPPLY AND SANITATION PROJECT

February 26, 2001

South Asia Infrastructure Sector Unit
South Asia Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective December 1989)

Currency Unit = Pakistan Rupee (Rs)

Rs.1.00 = US\$ 0.0476

US\$ 1.00 = Rs.21.00

At completion (June 30, 2000): US\$1.00 = Rs. 52.30

FISCAL YEAR

July 1 to June 30

ABBREVIATIONS AND ACRONYMS

AG	Auditor-General
AJK	Azad Jammu and Kashmir
CAS	Country Assistance Strategy
CIDA	Canadian International Development Agency
DACs	Departmental Accounts Committee
DOs	Development Objectives
ECNEC	Executive Committee of the National Economic Council
FSU	Federal Support Unit
FY	Fiscal Year
GoAJK	Government of AJK
GoBaloch	Government of Balochistan
GoSindh	Government of Sindh
IAs	Implementing Agencies
ICB	International Competitive Bidding
ICR	Implementation Completion Report
LCB	Local Competitive Bidding
LGRDD	Local Government and Rural Development Department
M&E	Monitoring and Evaluation
MIS	Management Information System
MLGRD	Ministry of Local Government and Rural Development
MTR	Mid-Term Review
NCB	National Competitive Bidding
NGOs	Non-Governmental Organizations
O&M	Operation and Maintenance
PHED	Public Health Engineering Department
PIRC	Policy Investment Review Committee
PITs	Project Implementation Teams
QMR	Quarterly Management Report
RDD	Rural Development Department
RWSS	Rural Water Supply and Sanitation
SAP	Social Action Program
SAPP	Social Action Program Project
SAR	Staff Appraisal Report
SIPs	Strategic Investment Plans
SOEs	Statement of Expenditures
SPP	Sindh Pilot Project
TACs	Technical Assistant Consultants
VDA	Village Development Association
WSC	Water and Sanitation Committee
WSP-SA	Water and Sanitation Program for South Asia

Vice President:	Mieko Nishimizu
Country Director:	John W. Wall
Sector Director:	Vincent Gouarne
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<i>Project ID:</i> P010366	<i>Project Name:</i> RURAL WATER
<i>Team Leader:</i> Raja Rehan Arshad	<i>TL Unit:</i> INFSA
<i>ICR Type:</i> Core ICR	<i>Report Date:</i> February 26, 2001

1. Project Data

Name: RURAL WATER
Country/Department: PAKISTAN

L/C/TF Number: IDA-22280
Region: South Asia Regional Office

Sector/subsector: WR - Rural Water Supply & Sanitation

KEY DATES

	<i>Original</i>	<i>Revised/Actual</i>
<i>PCD:</i> 03/29/88	<i>Effective:</i> 08/15/91	07/02/92
<i>Appraisal:</i> 11/22/89	<i>MTR:</i> 09/30/94	11/19/95
<i>Approval:</i> 04/23/91	<i>Closing:</i> 06/30/2000	06/30/2000

Borrower/Implementing Agency: GOVT. OF PAKISTAN/PROV. GOVT. BALOCHISTAN AND SINDH'S PHED & LGRDD; AND AJK LGRDD

Other Partners:

STAFF	Current	At Appraisal
<i>Vice President:</i>	Mieko Nishimizu	W.A. Wapenhans
<i>Country Manager:</i>	John W. Wall	Abdullah Elmaroufi
<i>Sector Manager:</i>	Vincent Gouarne	Michael H. Wiehen
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2. Principal Performance Ratings

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HL=Highly Likely, L=Likely, UN=Unlikely, HUN=Highly Unlikely, HU=Highly Unsatisfactory, H=High, SU=Substantial, M=Modest, N=Negligible)

Outcome: S

Sustainability: L

Institutional Development Impact: SU

Bank Performance: S

Borrower Performance: S

	QAG (if available)	ICR
<i>Quality at Entry:</i>		S
<i>Project at Risk at Any Time:</i>		

3. Assessment of Development Objective and Design, and of Quality at Entry

3.1 *Original Objective:*

3.1.1. The Project objective is to improve rural productivity and health, particularly of women and children, and reduce poverty and deprivation in rural AJK, Balochistan and Sindh, by increasing coverage and service levels of Rural Water Supply and Sanitation (RWSS). The Project supported an integrated, community-based RWSS strategy, phasing in a sustainable, financially-viable approach to community-based management and O&M, which would eliminate or progressively moderate the level of provincial recurrent budgetary support required.

3.1.2. Assessment of Development Objectives: The Project evolved from the Strategic Investment Plans (SIPs), a comprehensive sector review conducted by the Government of Pakistan in 1988-89 in all the four provinces, AJK and Northern Areas of Pakistan, with assistance from the World Bank and CIDA. As a consequence of the review and the emerging recommendations, the government set out to, for the first time in the country, introduce a community-based RWSS approach to service provision in place of the prevalent conventional supply driven mechanisms, which had not proven sustainable. The Project thus provided an opportunity to the government to test a new mechanism for improved and sustainable service provision by using a need-based bottom up approach. The involvement of beneficiary communities in the provision and O&M of the infrastructure and services was particularly important to ensure demand-driven investments, and resulted in empowerment, greater ownership, and sustainability. The objective was well complemented by Project components, except there was no direct provision to assist expansion of women's income earning opportunities.

3.1.3. The Project objective was generally clear, in promoting integrated, community-based RWSS strategies for service provision, with communities responsible for operation and management. It was realistic and consistent with the Bank's CAS and government's priorities in terms of reduction of poverty and in particular, improvement of delivery of social services and targeting women, children and the poor. At the time of the Project design the Bank had no country involvement in the RWSS sector, and the new approach thus relied on the findings of the SIPs and experience from other parts of the region. Hence the Project not only introduced a new approach to RWSS service provision in Pakistan, but also laid the basis for the design, two years later, of the RWSS sub-sector of the multi-donor assisted Social Action Program Project (SAPP) in which the RWSS component focused on macro-policy reforms supporting community participation, institutional strengthening and capacity building of service provision institutions. Indeed, the key policy reforms initiated nationally in the RWSS sector under SAP were based on the experience gained in the first couple of years of the Project.

3.1.4. The Project was quite demanding for the respective governments and the implementing agencies, as it introduced a shift from the conventional supply-driven approach to service provision, to a new demand-driven one. This entailed adoption of consistent policies, albeit different for each of the Project areas to cater to the uniqueness of them. The multi-Project area (AJK, Sindh, and Balochistan) nature of the Project also added to the complexity of the Project, especially, considering that except for AJK, the other two had two implementing agencies each responsible for different aspects of the Project. The geographic dispersion, and different Project rules and components of the three Project areas were also quite demanding for the Bank's supervision effort. The Project, however, was very much in line with the change required in the way service provision was being made in accordance with the findings of the SIPs, and the development priorities of the government.

3.1.5. The Project's implementation schedule proved ambitious, given its complexity and the extent of change being introduced. This was the major explanation for the reduction in the Project's size, and

corresponding cancellation of SDR 20 million, agreed during the mid-term review in 1996. A further cancellation from Balochistan of SDR 4.25 million occurred in 1998.

3.2 Revised Objective:

3.2.1. There was no change in the original Project objectives at MTR, except that the size of the Project was reduced in Balochistan and Sindh.

3.3 Original Components:

Province/ State/ Agency	Description of Components	Appraisal Estimate (Nos.)	Revised Estimate (Nos.)
AJK		Credit: \$28.0m	Credit: \$28.0m
LGRDD	<ul style="list-style-type: none"> Construction of new, rehabilitated and augmented water supply schemes, including provision of cattle troughs and community bathing as appropriate (approx.) 	1600	No Change
	No. of districts	5	No Change
	Additional population served (approx.)	630,000	No Change
	No. of villages (approx.)	500	No Change
	<ul style="list-style-type: none"> Construction, integrally with the water supply program, of demonstration latrines (approx.) 	3,200	No Change
	Provision of essential materials for latrines to be constructed by households (approx.)	9,700	No Change
Balochistan		Credit: \$37.8m	Credit: \$24.7m
PHED	<ul style="list-style-type: none"> Construction of new water supply and drainage schemes in rural townships (approx.) 	6	No Change
	Population Served (approx.)	140,000	No Change
	<ul style="list-style-type: none"> Rehabilitation of rural water supply schemes including renovations, upgrading, and extensions (approx.) 	70	35
	Population Served (approx.):	350,000	
	<ul style="list-style-type: none"> Equipment, Spares and Vehicles. Special equipment for construction of tubewells in rural communities in the four PHED administrative circles (approx.) 	160	Canceled
LGRDD	<ul style="list-style-type: none"> Construction, integrally with the water supply program, of demonstration latrines (approx.) 	80	No Change
	<ul style="list-style-type: none"> Provision of essential materials for latrines constructed by householders (approx.) 	11,200	No Change
Sindh		Credit: \$70.9m	Credit: \$49.6m
PHED	<ul style="list-style-type: none"> Construction of new mechanized water supply schemes in the six PHED Circles in villages generally under 2,500 population (approx.) 	300	175
	<ul style="list-style-type: none"> Construction of drainage schemes (approx.) 	100	68

	● Rehabilitation of water supply and drainage schemes including renovations, upgrading, extensions and completions (approx.)	480	237
	● Construction, integrally with the water supply program, demonstration latrines (approx.)	3,000	Canceled
	Provision of essential materials for latrines constructed by householders (approx.)	17,500	Canceled
	● Rehabilitation and construction in the Arid Zones of hand dug wells (approx.)	730	Canceled
	Rehabilitation and construction of existing and new small check dams (approx.)	110	Canceled
RDD	● Construction of water supplies generally using handpumps (approx.)	1,800	2,745
	● Construction of 135 small on-site sullage drainage schemes in the two worst-served Districts, Sukkur and Larkana (approx.)	135	Canceled
	● Construction, integrally with the water supply program, of demonstration latrines (approx.)	3,500	Canceled
	● Provision of essential materials for latrines constructed by households (approx.)	10,000	No Change
<u>Institutional Development</u>	This component would comprise: sector institution strengthening to provide cost effective managerial and technical guidance to rural communities; detailed design and supervision; hygiene education and promotion programs; training and community-based program orientation for politicians, sector agency personnel and community leaders; a phased program of private sector support including flexible, pilot women's income generating activities (comprising training, technical assistance, and information dissemination within communities), mistri (small scale contractor) training, and technical guidance in improved handpump and latrine component manufacturing and marketing; finance, cost recovery and management systems improvements; construction and rehabilitation of office accommodation in Sindh and Balochistan; management information systems for improved RWSS planning; improvements in water resources data bases, and RWSS design methodology and scheme selection criteria; preparation of District Development Plans in selected districts (Balochistan); and preparation of future investments and pilot projects.		Downsized

<u>Policy Reform and Resource Mobilization</u>	The provincial and state governments would implement complementary policy and resource mobilization measures by: (a) introducing a sustainable and viable modality whereby the communities would pay for O&M costs and be fully responsible for the RWSS services; (b) increasing local resource mobilization through enhanced land cess (in Sindh) and water service charges (GOB townships); and promoting private sector involvement.		No Change
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3.4 Revised Components:

The revised components are included in the table in section 3.3.

3.5 Quality at Entry:

3.5.1. Formal Quality at Entry criteria were not in effect at the time of Project preparation, but nonetheless, the Project design anticipated and catered to many of the criteria now in place. These are discussed in other sections of the report.

4. Achievement of Objective and Outputs

4.1 Outcome/achievement of objective:

4.1.1. The Project DOs are to improve rural productivity and health, particularly of women and children, and reduce poverty and deprivation in rural AJK, Balochistan and Sindh, by increasing coverage and service levels of RWSS. The Project supported an integrated, community-based RWSS strategy, phasing in a sustainable, financially viable approach to community-based management and O&M, which will eliminate or progressively moderate the level of provincial recurrent budgetary support required. Although the Project was down-sized in Balochistan and Sindh at the mid-term review (MTR), the original broad objectives have been retained and were achieved satisfactorily in AJK and Sindh, and partially in Balochistan as described below.

4.1.2. AJK

The achievement of outcomes and resulting objectives is satisfactory. The Project successfully managed:

- to provide water to over one million people as compared to 630,000 projected during appraisal (an increase of 75 percent);
- to address deprivation by providing services to the entire village according to the revenue records, thus including all segments of the community;
- to further and streamline the community-based approach to RWSS in AJK by building the capacity of the implementing agency in the areas of social mobilization, technical guidance to the communities, detailed design and procurement, health and hygiene, etc.; and,
- although an analytically rigorous study is not available, records available with Local Health Dispensaries and Centers indicate that there has been improvement in health conditions due to a reduction in incidence of water-borne diseases.

4.1.3 In the absence of scientific evaluation of the outcome indicators, informal surveys of beneficiaries indicate that there has been an increase in productivity as a result of a healthier labor force due to reduction in water-borne diseases and the resulting reduction in labor down-time, and lower expenditure on treatment and medicines for water-borne diseases. Furthermore, interviews of women in villages show that they have more free time at their disposal, part of which is available for income-generating activities, and the

remaining to better meet their household and child-rearing responsibilities. Increased school enrollment and attendance, especially of girls, is also evident. An element of poverty reduction is therefore assumed.



4.1.4. Sindh

The achievement of outcomes and resulting objectives is satisfactory. The Project managed:

- to provide water and drainage coverage to approximately 1.1 million as compared to the appraisal estimates of 1.6 million. Although the MTR reduced the number of water supply and drainage schemes by almost half, the Project still managed to provide improved services to about 70 percent of the projected population;
- to moderate the level of provincial recurrent budget costs by transferring part of the O&M responsibility of the operational schemes to the communities through the uniform policy that was adopted at the start of the Project, according to which the government would only subsidize O&M for a period of four years, in terms of electricity costs and major repairs;
- to introduce a community-based approach to RWSS in Sindh. The institutional strengthening component successfully managed to bring about a change in mind-set of the government institutions, from a supply driven approach to a more bottom-up participatory one. Furthermore, new skills were introduced into the ranks of the PHED and the RDD for social mobilization, which were later used as precedents by other provinces under SAP;
- to reduce the completion time of schemes by making funds available in time for the entire scheme. This practice has now been made the norm, especially as a result of policy reforms under SAP, and has addressed the issue of deprived communities where schemes were started but not completed due to paucity of funds or changing priorities;
- although it is difficult to attribute benefits, a study of 73 villages did show improved health as a result

- of improved provision of water and sanitation facilities; and
- to save women's time carrying water by making it available within the house or at the doorstep.

4.1.5 The reduction of labor down-time and the savings on treatment and medicines for water-borne diseases, together with the additional time for women to undertake productive activities, particularly at peak periods of agricultural activity, are assumed to have contributed to reduced poverty.

4.1.6 Unfortunately the health impact study conducted in 73 villages where improved water facilities were provided has significant methodological weaknesses which limit its usefulness. Although well documented, the study did not include any control villages (hence not allowing factors such as seasonality to be discounted), and follow-up interviews were held only three months after the health and hygiene promotion training, too soon to assess long term impacts (or for the new schemes to break down).

4.1.7. Balochistan

The achievement of outcomes and resulting objectives is unsatisfactory. The Project managed:

- to complete 18 (of the 70 original) rural water supply schemes, where improved water facilities are contributing to the development objectives;
- to complete two (of the six original) rural township schemes, Kuchlak water supply and drainage, and Mastung drainage. Both are operational and contributing to the development objectives. Mastung water supply is also complete but due to some of the existing tube-wells becoming dry, the increase in water supply has not been achieved. New tube-wells have been installed and are expected to be operational in early 2001. In these towns, concentrated community mobilization towards the end strengthened the community-based approach, which will help in cost recovery;
- to introduce an integrated, community RWSS strategy in Balochistan in a prevalent environment which favored a supply-driven approach; and
- to have GoBaloch adopt a uniform policy which made it mandatory for a community based approach to be followed for all future investments in the sector, which paved the way for additional policy reforms strengthening participatory approaches under SAP.

4.1.8 However, due to the inability of the PHED to complete the work program and LGRDD's component not getting implemented, the overall development objectives of the Project could not be achieved.

4.2 *Outputs by components:*

4.2.1. The Project achieved the restructured work program in AJK and Sindh, whereas it was only able to do so partly in Balochistan.

4.2.2. AJK

LGRDD: The AJK component managed to achieve completion of 1,621 schemes as against 1,600 in the SAR, and provided water to over one million population as compared to the 630,000 projected in the SAR. The AJK component was not down-sized during the MTR. Furthermore, AJK managed to use the whole of its share of the credit. This is commendable not only from the perspective of using the entire credit, but also achieving a greater coverage within the same resources. The reasons for greater coverage within the same resources include higher contributions in capital costs by the communities and lowering of overall scheme costs. The sanitation component did not do quite as well, primarily because it was started in 1997, the water supply component being given priority from the outset. 1,000 demonstration latrines were constructed as against 3,200 in the SAR, and construction of 8,250 household latrines was facilitated as against the SAR target of 9,700. The achievement on the household latrine side is good, considering that a

subsidy-free household sanitation policy was adopted in 1998, different from the subsidy-driven approach in the original Project design.

4.2.3. Sindh

PHED: The Project managed to achieve completion of 492 schemes, which is accomplishment of not only the MTR work program of 480 schemes, but also 12 schemes of the SPP. The Project managed to provide water and drainage coverage to approximately 1.1 million as compared to the appraisal estimates of 1.6 million. The mission would like to commend PHED in particular, and GoSindh in general, for this achievement, as the PHED component was late in taking off and actually picked up pace after the MTR. On the integration of water and sanitation components, PHED's component for a latrine program was canceled during the MTR due to lack of performance with the result that although health and hygiene education was imparted by the social organizers, there was no appreciable increase in the household latrine coverage in the area where PHED schemes were implemented.

RDD: The component facilitated installation of 2,564 hand-pumps against the agreed target of 2,745, and 7,691 latrines against a target of 7,192. The achievement on the demonstration latrines is 84 percent. The progress on the latrines side is commendable as in 1998 due to a policy change, the subsidy-driven household latrines program was replaced by a subsidy-free one. The progress on the field offices under the RDD component, however, has been poor with the field offices not being completed by June 30, 2000.

4.2.4. Balochistan

PHED: The Project has not been able to achieve the MTR and the further down-sized work program of 1998. Of the 4 rural township water supply schemes only 2 have been completed. 3 drainage schemes are complete (in Hub, the drainage scope of work was reduced as the work was completed by the town committee from its own resources) but not yet taken over by the town committees. Out of the 20 water supply rehabilitation schemes 18 are complete, and of the 20 office buildings 19 are complete.

LGRDD: The LGRDD component did not get implemented.

4.2.5. Environmental Impact

Overall: The Project had positive environmental impacts through the provision of improved water supply and drainage schemes, and construction of household toilets. The hygiene education has imparted a positive environmental impact by reduction of indiscriminate defecation in open areas.

AJK: The water supply schemes are primarily based on spring water sources. The spring water sources have been protected and water is conveyed to the settlements through pipes. The availability of water near the houses has reduced the practice of undertaking domestic washing activities in natural streams, and hence contaminating water which in many cases is used downstream for drinking purposes. Similarly, the construction of household toilets has introduced the accumulation of excreta at desired locations rather than spread all over the village. The installation of tubewells and water availability in the houses has also reduced the extent of personal washing in natural streams, hence protecting the natural water bodies.

Sindh: The construction of drainage schemes along with the wastewater treatment facilities has improved environmental conditions in the villages. The construction of handpumps, tubewells and protection of open wells has contributed to the safety of the groundwater. The groundwater exploitation for drinking purpose is small compared to agricultural use. Surface water schemes use bleaching powder (chlorine gas) for disinfecting drinking water, but the quantities of bleaching powder used are small and its impact on the environment is negligible.

Balochistan: The construction of drainage schemes has improved environmental conditions in the

townships. The exploitation of groundwater for drinking is small compared with the water used for agriculture purposes.

4.3 Net Present Value/Economic rate of return:

4.3.1 The recalculation of the net present value (NPV) and the economic rate of return (ERR) assessed at appraisal was severely constrained by the availability of reliable disaggregate data. Notwithstanding, the NPV and ERR were calculated for the majority of assessed components and for the entire Project. The overall ERR assessed at appraisal was 14 percent and is higher than the 8 percent (medium case scenario) assessed at the ICR, which is derived from adopting many of the assumptions made during the appraisal analysis. If government collected estimates for time savings and for other variables are employed, the total ICR economic rate of return becomes 21 percent (best case scenario). In the worst case scenario, the ERR becomes negative. Given these wide variations, the ERR is best analyzed in the context of the different scenarios and their underlying assumptions.

4.3.2 One would however expect a lower ERR compared to the appraisal estimate, since (a) the Project had mixed results in terms of achieving the projected outcomes, varying significantly by province; and (b) the benefits from institutional development and reform, assessed at appraisal for Balochistan, are not included in the ICR calculation for lack of quantified data, but their costs are.

4.3.3 The summary calculations of ERR under different scenarios are shown in the table below. More details on the adopted methodology and comparative data assessed at appraisal and during the ICR, and a comprehensive sensitivity table for the different scenarios can be found in Annex 3.

Summary Table of ERR Calculations Performed under the Different Scenarios

	<i>Appraisal</i>	<i>ICR</i>		
		worst	medium	best
Total Project	14%	n/c	8%	21%
AJK component	11%	3%	13%	31%
Sindh component	17%	n/c	7%	17%
Balochistan (Rehabilitation) component	13% (including institutional component)	n/c	n/c	n/c
Balochistan (Township) component		n/c	n/c	2%

n/c: not calculable, ERR below 0

4.4 Financial rate of return:

No financial rate of return was calculated at appraisal.

4.5 Institutional development impact:

4.5.1. AJK

LGRDD: Consultancy services were utilized satisfactorily. A technical advisory unit provided technical assistance to the LGRDD till 1998, for: training of staff, masons and plumbers, and community members;

health and hygiene education; and detailed design and procurement based on participatory methods. Although technical assistance was provided for developing an M&E system, it could not be operationalized till the end of the Project due to various reasons, the main one being that the staff hired for making the system operational did not have appropriate credentials and could not be removed or replaced due to litigation problems. The training was provided to most of the staff of the department, and not just the staff funded from the Project.

4.5.2. The Project also satisfactorily supported the department by providing incremental staff including engineers, health educators, extension workers, draftsmen, drivers, etc. The decision of the GoAJK after the MTR to implement the Project through the entire LGRDD rather than only through the Project Directorate staff, contributed to significant institutional strengthening of the entire department. The result is that the LGRDD now has the capacity to implement a follow-on project of similar or greater magnitude.

4.5.3. Provision of office accommodation, furnishings and facilities, at the center, markaz and district levels, strengthened the capacity of the department to respond to the demands of the communities in a decentralized manner. Similarly, provision of vehicles, and equipment, especially computers, at the various levels, improved the operational and management efficiency of the department.

4.5.4. Sindh

PHED: Consultancy services were utilized satisfactorily. Advisory consultancy services provided technical assistance till 1998, which assisted in: establishment of a training coordination unit, a planning, monitoring and evaluation unit which was extensively used by the PHED, and a hydrogeological cell; strengthening of the design and construction supervision capability of the department; establishment of Project Implementation Teams for social mobilization; and, design and supervision of program components. The PHED was also supported by incremental staff financed from the Project. Specialized office and technical equipment was also provided to improve the management and operational efficiency of the department.

4.5.5. The noticeable impact was that the Project managed to change the mind-set of the PHED engineers from a technical orientation to a participatory one. Albeit during the initial years there was a lot of resistance to the new approach, with training and exposure to participatory practices alongside the social organizers, attitudes changed. This change was further reinforced by the exposure of the technical staff to the Sindh Pilot Project within the Project, in which NGOs partnered with the PHED, to mobilize communities to share in the scheme capital costs based on sharing responsibilities and components of the infrastructure, and taking on the responsibility for complete O&M. The change in the attitudes and recognition that the government cannot afford to continue implementing top-down conventional engineering based systems, has resulted in the government deciding to implement all future investments, irrespective of the source of funding, with communities sharing in the capital costs.

4.5.6. The Project was implemented through the regular hierarchy of the organization, which resulted in the entire department being exposed to the new approach. The Project Directorate was a small set up and not a separate parallel organization within the larger organization, and which now ceases to exist.

4.5.7. RDD: Advisory consultancy services provided technical assistance till 1998, which assisted in: establishment of a water and sanitation unit; training; monitoring and evaluation; sanitation technology; hand-pump development and maintenance; and, establishment of PITs for social mobilization and health and hygiene education. The RDD was also supported by incremental staff financed from the Project. Specialized office and technical equipment was also provided to improve the management and operational efficiency of the department. However, the RDD could not sustain some of the initiatives. For example, the M&E system, and the work on sanitation technology and hand-pump development, could not be

sustained.

4.5.8. One of the major impacts was the move of the department from imported and expensive hand-pumps to indigenously manufactured hand-pumps, based on the work done under the hand-pump development and maintenance sub-component. Furthermore, the department moved away from 100 percent subsidy for hand-pump installation, to making the communities responsible for installation. Another major impact was the shift in the department's strategy from a subsidy driven household latrine program to a subsidy free one, with focus shifting to facilitation, awareness building, and health and hygiene education.

4.5.9. Balochistan

PHED: The advisory consultancy services provided technical assistance till 1996, and was prematurely terminated by the government as it decided that it no longer needed it. The consultants assisted in: formation of a Planning and Design Circle; establishment of the Chief Engineer (South) office; training of PHED staff and community relations staff; and monitoring and evaluation. During the initial design consultancy, detailed designs, cost estimates and procurement documents were prepared for the two rural township schemes. Subsequently, engineering consultants prepared detailed designs and tender documents for the remaining four townships. Equipment and vehicles were provided at district level, along with office accommodation. However, the district level office accommodations were completed in the final year of the Project, and consequently the full impact was not realized during the Project period. A separate package of technical assistance was agreed during the MTR for financial management. These consultants prepared a financial strategy for the rural township water and drainage systems in general, and prepared detailed financial feasibilities for each township, in particular. They also developed a billing and collection system for the townships, along with providing training to the respective staff. As only two township schemes were completed and made operational by the end of the Project, the billing and collection system is still in the process of being operationalized.

4.5.10. The major impact of the institutional strengthening component was the change in the mind-set of the technical staff towards community-based participatory development. This became evident during SAP when the community relations staff mobilized communities to take over the existing portfolio of schemes, and the technical staff worked along side the social mobilizers to discuss technical options. However, this only happened in the case of small rural villages. The community mobilization in the rural townships was non-existent during the initial years, with the result that the initial designs were not done in a consultative manner. A concentrated effort was made at the tail end of the construction phase, in collaboration with NGOs, to mobilize communities, which resulted in some awareness building.

4.5.11. LGRDD: This component did not get implemented.

4.5.12. Federal

Ministry of Local Government and Rural Development (MLGRD): A Federal Support Unit (FSU) was established in the MLGRD for policy guidance, inter-governmental coordination, capacity building and long-term sector development. The FSU was instrumental in developing the uniform policy principles through consultations and studies. It also initiated action research initiatives, especially the Sindh Pilot Project. The FSU also convened the Policy Investment Review Committee (PIRC) every quarter to review progress in the sector and provide an opportunity for cross fertilization of experiences and ideas. The unit performed well during the period 1992 to 1995, after which it was disbanded due to the then government and top management shifting its focus to implementation of the federally driven public works program and disassociating itself from the water and sanitation sector, as it is a provincial subject. The important policy development and coordination role that the federal government was playing received a major setback after the dissolution of the unit.

5. Major Factors Affecting Implementation and Outcome

5.1 Factors outside the control of government or implementing agency:

5.1.1. The shifts from LCB procedures to NCB procedures with use of sample Bidding Documents in 1998, as well as adopting post-qualification procedures as necessitated by the Bank's Guidelines caused delays in the overall pace of implementation because of increase in the cycle time. While in the Bank's judgment they were meant to enhance the economy and efficiency of procurements undertaken, they did not necessarily produce the expected results due to the environment and prevailing practices in the country.

5.1.2. ICB procedures were used for pipe and equipment procurement, which was not feasible for the types of equipment and pipes being procured. This resulted in significant delays during the initial years of the Project. Subsequently, ICB was revised to NCB.

5.1.3. One of the conditions for Project effectiveness was the completion of designs of a given number of schemes in each Project area. Since by then neither the IA capacity had been built nor any community mobilization taken place, the designs were undertaken by the design consultants in a conventional supply-driven mode without community consultation. When scheme implementation in these communities began, and the designs were discussed with the beneficiaries, they were found to be incompatible with their needs and/or affordability levels. They all thus had to undergo substantial revisions, if not be entirely redone at substantial costs, effort and delay.

5.1.4. Legal disputes erupting in land procurement in Balochistan delayed the implementation of most of the contracts. Furthermore, frequent periods of poor law and order adversely affected the pace of work.

5.1.5. In all three Project areas delay in obtaining electricity connections for the schemes was a perennial problem. This issue was taken up with the power authorities on a number of occasions but due to a larger problem involving the federal and provincial governments, it remained an issue until the end.

5.1.6. Inadequate procurement capacity and lengthy administrative and clearance procedures contributed to procurement delays particularly in early stages of the Project.

5.2 Factors generally subject to government control:

5.2.1. Staff hired by IAs on contractual basis for the Project become a trained resource for the provision of similar services in the future. The long-term institutional strengthening would depend on the continuation of the services of the key field staff. Their regularization remains an issue almost across the board. Even if their value is generally accepted, the regular staff view them as lateral entrants to the service effecting their seniority adversely, and consequently tend to oppose their regularization.

5.2.2. There was frequent staff turnover at the senior Project management and above level, particularly in Balochistan. This resulted in lack of continuity and emphasis on Project implementation.

5.2.3. Adequate and timely release of counterpart funding for civil works remained a problem in Balochistan until the government's contribution for civil works was reduced from 40 percent to 15 percent effective from January 1, 1999.

5.2.4. Initially priority was given to providing water supply. Neither demonstration latrines, nor the incentive materials construction subsidies for building latrines for a part of the village, were as attractive. Part way through the project the sanitation policy changed from providing subsidies to giving information on the benefits of sound health and hygiene practices. This change was well managed - for instance, in AJK, through direct information campaigns such as a National Seminar, and through indirect approaches such as to schools and students. The result was that the original physical targets (for household latrines) of the project were almost achieved through householders' efforts alone. Another outcome of the approach adopted in AJK was that children became the most aware and educated about good hygiene practices, and became the agents of change within households (which bodes well for longer term sustainability).

5.3 Factors generally subject to implementing agency control:

5.3.1. Water and sanitation need to be viewed as a package. The timing of delivery of sanitation

information and training is crucial for its success. It needs to be disseminated while the water supply scheme is being implemented for maximum effectiveness. In many communities this was not done in an integrated manner, i.e., it was either done too early or too late, which resulted in the communities not willing to focus on a service that depended on the provision of water.

5.3.2. The IA staff responsible for scheme implementation must be exposed to contract and Project management training, otherwise they remain ignorant of the IA's contractual obligations, as well as unable to set and follow Project milestones. Moreover, contractors tend to take advantage of their ignorance, and levy claims for damages that the IAs may unknowingly have caused.

5.3.3. Financial management systems used by the IAs did not allow for sufficient control of funds and monitoring of progress. Although the Technical Assistance (TA) consultants were to address these shortcomings they were not dealt with satisfactorily, leading to inadequate financial reporting and audit comments.

5.3.4. In AJK and Balochistan, the monitoring and evaluation (M&E) systems, albeit developed by the TA consultants during the initial stages of the Project, did not become functional. The Sindh PHED, however, used the M&E and MIS quite extensively. But when its key technical staff left due to lack of incentives, this system also became under-utilized. The system was well designed and should become an example for taking to scale such M&E systems across the country. Furthermore, in the design of future projects, the M&E and MIS should be given priority and should be made a condition for effectiveness, to ensure that baseline information can be entered into the system as soon as Project implementation is initiated.

5.3.5. In Sindh and Balochistan two IAs were involved, i.e., the PHED and LGRDD, with one Special Account having the PHEDs as signatories. The LGRDDs were required to submit their invoices to them for reimbursement. This made the LGRDDs subservient to the PHEDs which remained an issue throughout, and adversely affected their performance and outputs.

5.3.6. The Project provided for substantial TA to the IAs. The TA was in the form of joint venture between international and national consultants. The TA consultants came on board immediately after the Project became effective, whereas at that point the IAs had not mobilized adequately to absorb the TA provided, nor manage the work of the TA consultants towards the desired outcomes. When, over time, the desired IA capacity had been built, it was towards the middle of the consultancy period.

5.3.7. In Sindh and Balochistan, construction of schemes was done by contractors, and not the communities, as in AJK. The contractors were accountable to the IAs. In some cases, complaints about defective or sub-standard work from the communities remained unheard. Consequently, after completion, many communities were unwilling to take over the schemes, and costly rectification of defects had to be undertaken. The process of scheme implementation needs to ensure that the role of the beneficiaries to supervise the works in terms of what they want, is recognized. One way of doing this is to encourage communities or communities' representatives to certify the appropriateness of the work from their perspective, prior to payment to the contractors.

5.4 Costs and financing:

5.4.1. The Project implementation plan was ambitious, considering that a new strategy for service provision was being introduced which required, except in AJK, a change in the mind-sets of all key stake-holders, and building of certain new skills within hard-core technical departments. Furthermore, as new policies were being adopted and understood, and communities were being involved in identification, planning and design for the first time, disbursements in the initial years it would have naturally been slower than a standard project. However, the implementation plan was designed, more or less, on the lines of any other civil work focused project. This was one of the reasons why at the time of the MTR, the disbursement lag was significant. Counterpart funding was also low during the initial years, especially in Sindh and Balochistan, mainly because of the slow pace of implementation.

5.4.2. In AJK, the cost sharing policy is based upon Government providing all pipes for schemes, and any

water tanks of greater than 5,000 gallon capacity. Communities provide all water tanks of less than 5,000 gallon capacity, trenching and laying of pipes, and all repairs and O&M except in the case of repairs arising from catastrophic events, for which Government provides funds. The amount of capital cost contribution by communities varies from scheme to scheme depending upon the number of tanks required, but is estimated to be within the range 10% to 40%.

5.4.3. In Sindh, in addition to providing all capital costs, Government provides a cash payment broadly equivalent to electricity and repair costs in the first year. This amount is paid quarterly to village organizations for the first 4 years, without adjustment for inflation, and the village organization is fully responsible for making all payments to suppliers. Initially this subsidy is equivalent to about 60% of operating costs, falling to about 40% at the time it is withdrawn. The Sindh Pilot Project demonstrated that communities are in fact prepared to contribute towards capital costs, provided they are able to control the choice of scheme design and its construction.

5.4.4. In Balochistan, the policy in rural townships is for PHED to adopt new tariffs and to substantially improve collection. Partly due to the delay in completing schemes this approach has not been operationalized yet, although tariff schedules have been announced. In villages, schemes are being operated and maintained by communities.

5.4.5. During the MTR revised programs were agreed for Sindh and Balochistan, resulting in a credit reduction of SDR 15 million and SDR 5 million respectively. Later a further reduction of SDR 4.25 million was agreed for Balochistan.

5.4.6. Although the MTR work program was achieved in Sindh, there was a saving in the component at the end of the Project as a result of reduction in the cost of schemes due to refinement in technical designs and specifications.

5.4.7. The change in the rupee-dollar parity in excess of what was anticipated at the MTR, also resulted in savings in both the Sindh and Balochistan components. AJK, however, managed to utilize the entire credit by completing the original number of schemes, but targeting larger villages, thus serving a greater population.

5.4.8. In Balochistan, due to delays in works as a result of delayed availability of counterpart funding and periods of poor law and order, the cost of the contracts escalated beyond the original price. These delays were also one of the main reasons for the MTR work program not being achieved, which resulted in an unutilized balance remaining at the end of the Project.

6. Sustainability

6.1 Rationale for sustainability rating:

6.1.1. **General:** The start of the Project in 1992 was followed by the SAPP in 1994. The policy reforms in the RWSS sub-sector of SAPP were in line with the policies introduced under the Project (see para. 3.1.3). The program approach of SAPP, i.e., its focus on policy reforms and implementation strategies, mainstreamed the approach initiated under the Project throughout the country. Conversely, the Project also benefited from the policy and implementation reform approach under SAPP, as the latter brought about a consistency in the policy environment as it ensured that all investments in the sector, regardless of the source of funding, are community-based and follow more or less the same rules. The evolution of the policy reforms under SAPP also facilitated the change in the sanitation program under the Project and other Project investments in the sector, both government funded and donor assisted.

6.1.2. **AJK: The sustainability rating for the AJK component is highly likely.** Community-based approaches have been a norm in AJK for the last many decades. The Project assisted in further streamlining and consolidating the participatory approaches by introducing and taking to scale systematic community mobilization techniques and strategies. There is a high level of government commitment to providing water and sanitation to the communities on a priority basis. Communities are not only involved

in the identification, planning, and design, but also share in the capital costs of the infrastructure (up to 20 percent of the total infrastructure cost) and are responsible for implementation. Furthermore, they are responsible for complete O&M, as has been the historical practice. This enhances ownership, especially sharing in the capital costs, which makes sustainability more certain. The policy environment has also been adapted to the prevalent trends of community-based approaches. The LGRDD has historically consulted with the communities while providing services. This practice has been mainstreamed as a result of the Project. The capacity building of the entire department under the Project has ensured that the improved management and operational efficiency will remain after the Project for all new investments, regardless of the source of funding. The enhanced capacity of the implementing agency has created a conducive environment for a follow-on project with enhanced scope of work to include other community infrastructure services. On the financial side, there is no operating cost liability on the government as the schemes are being managed by the beneficiaries. As most of the schemes are based on simple low-cost technologies, the O&M liability is minimal, and within the affordability range of the communities. **Data indicates that out of 549 schemes completed more than three years ago, 95 percent are still operational.**



6.1.3. **Sindh: The sustainability rating for the Sindh component is likely.** There has been a change in the mind-set of the PHED towards participatory approaches. Furthermore, the Sindh Pilot Project has demonstrated that communities are willing to share in the capital costs (up to 15 percent of the total infrastructure cost) provided there is demand for improved water service. Government's commitment to the community-based approach is demonstrated in the adoption of the uniform policy at the outset of the Project and more recently, in deciding to base future investments on the principles of capital cost sharing. This has been complemented by the policy reforms under SAPP, according to which the government is attaching top priority to completing under-construction schemes and rehabilitation of existing schemes vis-a-vis starting new ones, and transferring them to the beneficiaries. The decentralized management of the PHED and RDD helps ensure improved operational efficiency, especially in social mobilization and schemes based on appropriate technology. The services of the social organizers hired under the Project, with many years of experience under their belt, were initially discontinued by the government after the Project. However, they are now in the process of being reinstated. Although the communities have an improved service, the presence of a partial subsidy from the government for a period of four years, could undermine the sustainability of the schemes once the subsidy is withdrawn. The possibility of this happening has been mitigated by the design of the subsidy, by keeping the amount constant over the four year period. By the time the subsidy is withdrawn, in real terms it would have reduced to less than 40 percent, thus not being a major loss. Already it has been observed that some village organizations are not using the subsidy funds and instead are operating and maintaining the systems from their own resources. The subsidy funds are kept in the bank account as contingency funds for major repairs, like motor and/or pump repairs, etc. **Data shows that 95 percent of 93 schemes (out of the total number of 492 schemes constructed under the project) constructed more than three years ago are still operational.** This is a

further indication that although the subsidy in real terms has gone down during the three years, the communities are continuing to operate the schemes.

6.1.4. **Balochistan: The sustainability rating for the Balochistan component is unlikely on the rural township component.** Although there has been a change in the mind-set of the PHED towards participatory approaches, as there was no community mobilization done in the rural townships at the time of planning and design, and subsequently, during implementation, sustainability remains uncertain. A concentrated effort was made at building the awareness of the communities and mobilizing them at the tail end of the construction phase, but it is not adequate to ensure that the water and drainage systems would be operated and maintained in a sustainable and self-financing manner. Furthermore, the billing and collection system has not been fully operationalized, and whether the users are going to pay the monthly tariff to the PHED and/or town committee, is uncertain, especially for drainage. **The sustainability rating of the rural village water schemes is likely** as they were rehabilitated based on demand, and communities were involved in the planning and implementation. **The institutional strengthening aspect of the Project is likely to be sustainable** as the PHED has regularized key staff, and is mobilizing communities under SAPP and transferring existing schemes to the beneficiaries. Furthermore, in accordance with the uniform policy, all new investments in the sector are being made with the involvement of communities and transferring the schemes to them on completion for O&M.

6.2 Transition arrangement to regular operations:

6.2.1. **AJK:** All systems implemented under the Project are being operated and maintained by the beneficiaries, and there is no liability on the government for regular operations. The implementation of the systems is largely done by the communities. This coupled with training imparted under the Project contribute to skill development necessary to carry out minor repairs during the operation of the systems. The communities collect O&M funds from the households on a regular basis to pay for minor repairs and for major repairs they collect on an 'as and when required' basis. The LGRDD assists in the case of a natural disaster, for example, part of the pipe network getting damaged due to a land-slide, etc. The department has funding for such emergencies from the development budget.

6.2.2. **Sindh:** All systems implemented under the Project have been transferred to the communities and are being operated and maintained by the communities. The government transfers its share of funds directly to the village organizations' bank accounts every quarter through an automated transfer from the National Bank, designed under the Project. Communities generally are collecting O&M funds on a monthly basis to pay the operators' salary where required and for routine maintenance. As explained above, some communities are not using the government's share for O&M and instead saving it for major repairs. The policy reforms introduced under SAPP, especially that no scheme transferred to the community would be taken back by the government for O&M, is ensuring that the communities understand that they have to operate and maintain the systems and there would be no assistance forthcoming from the government if the communities are unable to do so.

6.2.3. Adequate PHED staff exists in the field to provide technical assistance as and when required by the communities. The strengthening of the department's capacity on the social mobilization side is continuing as the PITs are mobilizing communities to take over existing schemes in line with the SAPP agreements. Furthermore, the same PITs will be mobilizing communities when new schemes are initiated by the government.

6.2.4. **Balochistan:** The two completed rural township water supply schemes are initially being operated and maintained by the PHED. The billing and collection system is in the process of being operationalized. The new tariff rates for the next 10 years, based on the financial feasibilities, have already been notified by

the government. The PHED is initially going to operate and maintain the water supply system and transfer it to the town committee in a phased manner. The drainage systems are going to be managed by the town committees. Adequate arrangements are not in place to ensure that the town committees are willing to or would be able to manage the drainage systems. The government is looking into this aspect and considering combining the management responsibility of water supply and drainage so that one organization is responsible for both.

6.2.5. The rural water supply schemes are being operated and maintained by the communities. According to the uniform policy, existing systems are also being transferred to the communities in a phased manner. Similarly, new rural schemes being undertaken by the government from its own resources will also be transferred to the communities for O&M on completion. Consequently, there is no financial liability on the government during the regular operation of the systems.

6.2.6. The government has transferred the community development staff to the non-development budget. Consequently, the government is equipped to mobilize communities under new investments.

7. Bank and Borrower Performance

Bank

7.1 Lending:

7.1.1. The Project design evolved from the SIPs, a comprehensive sector review conducted by the Government of Pakistan in 1988-89 in all the four provinces, AJK and Northern Areas of Pakistan, with assistance from the World Bank and CIDA. It was realistic and consistent with the Bank's CAS and government's priorities in terms of reduction of poverty and, in particular, improvement of delivery of social services and targeting women, children and the poor. Assistance to the government was provided during project preparation through a reasonably good skill mix of Bank staff and consultants. Lessons learnt from similar projects in the region and elsewhere were incorporated in the designs in addition to the recommendations emerging from the SIPs. The project design was based on cutting-edge knowledge that existed at the time of project preparation, and the project, especially the AJK component, was considered as a leading initiative in the sector for many years. However, designing the project for multi-areas with multi-agencies in two out of the three areas was in hindsight not a good concept, as it increased the complexity of the project in terms of coordination, operational aspects and supervision.

7.1.2. Risks were appropriately identified and the mitigation measures suggested were appropriate. However, considering that one of the risks identified was delayed start-up because of introduction of a new approach, the targets were ambitious. The design of cross-subsidy in Sindh through the levy and collection of additional cess, was not pragmatic and implementable. Furthermore, Sindh is the only province where partial subsidy is being given for O&M, and is raising a question regarding sustainability of investments.

7.1.3. The implementation plan was based on the pattern of a civil works focused project, without allowing for the social mobilization aspects. Similarly, the fact that designs and bidding documents for the initial set of systems were completed prior to project effectiveness, as required by regional guidelines, negated the spirit of the community-based approach as the beneficiaries were not involved in the planning and design. The use of ICB procedures for procurement of materials used in community-based projects was not realistic, which was soon recognized, and instead NCB and community contracting procedures were introduced. The provision of one Special Account each in Sindh and Balochistan for two implementing agencies in each province created coordination problems which resulted in the LGRDDs being dependent on the PHEDs. The project's financial management system did not receive the in depth attention that more recent projects have received since the recruitment of FMSs. However at appraisal, in

accordance with OD 10.60, attention was drawn to the weak financial capacity of the IAs, and remedial measures built into the design of the project. These included a Financial Management Study, review and strengthening of accounting and cost recovery practices, Project accounting training (project-wide) and Technical Assistance. Financial management improvement was to be closely coordinated with the Province/State Accountant General and the Director General of Audit.

7.2 Supervision:

7.2.1. Supervision was done through regular supervision missions, assisted by field visits by appropriate Bank staff and staff of the Water and Sanitation Program for South Asia (WSP-SA) as and when required, and regular formal and informal contact with the implementing agencies. Field visits between regular supervision missions, especially by the WSP-SA staff who are Islamabad-based and were involved in supervision of the RWSS component of SAP, were used to follow-up on actions agreed during the missions. However, as the project was being implemented in two provinces and one state, the supervision effort was spread thinly. The missions still managed to identify implementation problems and discuss their resolutions with the IAs and the governments. This is evident in the fact that the task team agreed to change in procurement procedures when it was recognized that the ICB procedures are not appropriate for the type of materials being procured. Furthermore, the shift in the sanitation component from a subsidy-driven approach to a subsidy-free approach in line with the best practices, was as a result of the constant exchange between the task team, WSP-SA and the implementing agencies. The skill mix of the supervision missions was adequate, comprising in most cases an institutional specialist, a water and sanitary engineer, and a social development specialist. In the initial and final years, procurement specialists were also part of the supervision missions. A financial analyst was included off and on in the missions. A Financial Management Specialist was involved only at the tail end of the Project (Sindh only). The MTR was held in December 1995, based on which the Project was down-sized by SDR 20 million (SDR 15 million from Sindh and SDR 5 million from Balochistan). A detailed revised annual work program was agreed with the implementing agencies, which was monitored rigorously by the Bank team with support from WSP-SA, as future cancellations were tied to the work programs not being achieved. This resulted in the AJK and the Sindh components being completed, whereas Balochistan was further down-sized by SDR 4.25 million in 1998. The SAPP II also provided an opportunity to work with the implementing agencies and governments to follow-up on most of the actions from a macro level. SAPP I and II also provided the much needed coordination among all the donors, which helped bringing about consistency in policies and approaches, thus complementing the supervision effort. In the last two years, additional visits were made by WSP-SA to the project areas and workshops were held in which the technical and the social development staff were invited so that they could identify the problems in the field, discuss the issues, and brainstorm on the solutions. World Bank managers got involved at critical junctures, specially when problems surfaced regarding payments to the technical assistant consultants in Balochistan. The Country and Provincial Portfolio Reviews also contributed in raising the issues at the highest levels, and getting agreements on the solutions.

7.2.2. With task management in Headquarters initially, there was less interaction with implementing agencies on procurement. This was addressed with the transfer of responsibility for procurement review to the Islamabad Field Office where there was adequate knowledge of the sector and of field realities. The high rate of turnover of Task Team Leaders created a break in continuity and institutional memory. This was mitigated to quite an extent by the support provided by the WSP-SA staff based in Islamabad, who not only assisted on operational aspects, but also provided input on latest evolving thinking and best practices in the sector. In 1998 through close interaction with the implementing agencies, the Bank's procurement staff provided further guidance to the implementing agencies on IDA's procurement procedures, highlighting key issues with recommendations for corrective actions. IA staff were also provided basic procurement training through workshops conducted by the Islamabad Field Office. Two rounds of ex-post

and end-use audits were also conducted through specialized audit firms and issues were followed-up with the concerned agencies.

7.2.3. Financial Management Specialists have only recently been engaged by the Bank. The regular involvement of a financial management specialist (or a suitably qualified consultant under their oversight) would have improved the Bank's supervision, monitoring and implementation of the financial management aspects of the Project. The TA input related to financial management varied in different Project areas and was not properly monitored either by the Bank or the IAs. If the expertise had been available earlier, the World Bank could have undertaken further measures such as: (a) insisting that the Government's own process of resolution of the audit observations was carried out through the system of Departmental Accounts Committee meetings within a reasonable time; (b) enforcing more rigorously the remedies under OP/BP 10.02 (prior to its introduction, under OD 10.60), regarding the preparation of acceptable action plans to deal with audit observations and the underlying internal control weaknesses; (c) insisting on the timely provision of financial management training of staff; and, (d) assessing the need for and ensuring provision of more accurate and timely accounting information.

7.3 Overall Bank performance:

7.3.1. The overall Bank performance is rated just satisfactory, as the effort put in by the Bank and WSP-SA staff during preparation and supervision, considering that this was a complex multi-area and multi-agency Project, yielded completion of the AJK component and the revised Sindh component and partial completion of the Balochistan component. Furthermore, the right-sizing done during the MTR was realistic as both Sindh and AJK increased their rate of implementation after the MTR but could not have achieved more by the closing date.

Borrower

7.4 Preparation:

7.4.1. The federal government initiated the preparation process by launching the SIPS in the late 1980s, and remained committed to implementing the recommendations. The government continued to provide timely input and support to Project preparation by facilitating necessary clearances and approvals. The federal and provincial/state governments developed uniform policies during the Project preparation phase and adopted them after the Project was launched. The government also supported the establishment of Project units, especially the FSU in the MLGRD.

7.5 Government implementation performance:

7.5.1. Based on the Project outcomes, its commitment to decentralized participatory development, and support to achievement of Project objectives, the performance is rated as satisfactory except in Balochistan. The governments' implementation efforts resulted in adoption of uniform and consistent sector policies and ensured that all investments in the sector, regardless of funding source, are made in accordance with the policies. This brought about an environment which was conducive for introduction of a new way of doing business, i.e., moving away from a supply-driven approach to a participatory one. The government commitment to participatory development was mainstreamed with the launch of the SAPP in FY93. The macro policy reforms adopted under SAPP provided umbrella support for Project implementation. Rapid turnover of senior staff in Balochistan and during the pre-MTR stage in Sindh also, resulted in lack of continuity as new appointees struggled to understand their jobs and the participatory approach. Delayed releases of counterpart funding in Balochistan resulted in the contracts getting delayed which resulted in higher cost of the completed schemes and others not getting completed. Project implementation turned around after the MTR in AJK and Sindh with generally adequate and timely support to implementation from the government.

7.5.2. There were shortcomings in achieving the financial covenants in terms of timeliness and completeness of audit reports and follow-up action on qualified audit reports pointing out serious internal control issues. Other covenants were generally met, for example uniform policies were adopted by the provinces/state; funding was provided from the development budgets for financing a proportion of the capital costs; ensuring O&M of the completed schemes; and providing funds raised through cesses and other levies in Sindh.

7.6 Implementing Agency:

7.6.1. AJK: The performance of LGRDD was highly satisfactory as it managed to implement the original work program and achieve the DOs. The LGRDD after the MTR decided to implement the Project using the Department's core staff in addition to the Project staff, which not only helped in completion of the work program but also enabled the whole department to benefit from the institutional strengthening under the Project. Staffing decisions were taken in a timely manner and the placement of staff was done fairly promptly. The LGRDD utilized the services of the technical assistant consultants in an optimum manner, and their services were truncated a year before the envisaged period. Beneficiary participation was further enhanced and streamlined during the Project as the social mobilization strategies were mainstreamed. The department furthered community participation in procurement by decentralizing to the district levels and getting Chairpersons involved in the tendering and bidding process. However, the LGRDD could not operationalize the MIS developed by consultants, mainly due to staffing reasons. Furthermore, the department gave priority to water supply vis-a-vis sanitation and consequently the latter component was rushed in the final years of the Project.

7.6.2. Sindh: The performance of Sindh PHED and RDD was satisfactory, as they managed to implement the down-sized post-MTR work program and achieve the DOs. The performance of the departments improved significantly after the MTR, primarily because of improved management by and support from the senior levels, and improved recognition and understanding of the community based approach. During the last three years, the PHED decentralized the management functions by creating three additional Chief Engineers, with increased authority to take decisions regarding implementation aspects. The social mobilization performance of the Project Implementation Teams (PITs) was also good, with the result that communities became aware of the new approach and started participating in the planning and design of schemes. The PHED to a greater and the RDD to a lesser extent utilized the services of the technical assistant consultants. The PHED continued to use the MIS developed by the consultants. However, with the departure of qualified staff due to lack of incentives, the system could not be used to the optimum level. The PHED also worked as a partner with NGOs on a pilot Project covering 12 schemes (the Sindh Pilot Project) and were open to appropriate technology based schemes with community contribution in capital costs. The PHED was handicapped in terms of obtaining electricity connections for the completed schemes as this was an issue beyond its control. However, the PHED provided diesel pump-sets as part of the design, which are being used by the communities. The government managed in 1997 to develop an automated mechanism for transferring its share of O&M funds directly to the bank accounts of village organizations. This was a lengthy and difficult task as it involved several discussions at the highest levels among the finance and other relevant departments.

7.6.3. Balochistan: The performance of the Balochistan PHED was unsatisfactory. Although the department recognized and subscribed to the community-based approach, poor management, delays in hiring of social mobilizers, and poor contract management resulted in the MTR work program not being completed. The technical assistant services were also not utilized to the optimum, as there was a lack of coordination in terms of availability of consultants and counterpart staff. Community participation was not undertaken in the rural township schemes at the time of planning and design, and the social mobilization staff focused on the rural village schemes and transferring existing schemes under SAPP. The MIS

developed by the consultants was not operationalized as counterpart staff was not available at the time of development of the system. The procurement actions were also subject to delays for various reasons. The performance of LGRDD was highly unsatisfactory as its component did not get implemented.

7.6.4. Overall performance of each of the implementing agencies has been satisfactory on procurement, except for Balochistan where delays were experienced. Following training in procurement and guidance from the Bank after 1997-98, the respective implementing agencies at the later stages in the Project were found receptive to the need for making improvements in the procurement procedures. The use of Bank's sample bidding documents, and record keeping formats was common in each agency.

7.7 Overall Borrower performance:

7.7.1. The overall borrower performance based on all three Project areas, is rated satisfactory, although it varied among the three provinces/state.

7.7.2. Nevertheless, the Government's financial management system used by the implementation agencies remains poor, including weak internal control systems as reflected in qualified audit reports and insufficient follow-up of significant audit observations. There is no system to control expenditures through an integrated chart of accounts, thus opening the possibility for mis-classification of expenditures while preparing SOEs. Because of inherent internal control weaknesses in the financial management system, government auditors have made several observations showing serious weaknesses in the internal control systems.

8. Lessons Learned

8.1. Overall

8.1.1. A demand-driven community-based project will be slow to take off, as it requires an aggressive Information, Education, and Communication campaign to spread the word about the initiative, and for community mobilization. This slow initial pace of implementation should be reflected in the implementation and disbursement plan.

8.1.2. TA consultants to assist IAs should not be permitted to mobilize specialist staff more quickly than IAs can mobilize their specialist counterparts, or the opportunity for technical transfer and hence systems' sustainability can be lost.

8.1.3. Project rules need not exclude the benefits of political involvement in scheme selection, but should exclude special benefits being gained by particular communities as a result, as this may adversely influence the community's willingness to maintain the completed works.

8.1.4. For maximum effectiveness, sanitation information and training should be disseminated as a package when the water supply scheme is being implemented.

8.1.5. Staff hired by IAs on a contractual basis for a Project become a scarce trained resource for the provision of similar services in the future. Yet even if their value is generally accepted, their regularization remains an issue if regular staff view them as lateral entrants to the service who affect their seniority adversely, and hence tend to oppose their regularization. This concern needs to be mitigated adequately to retain the trained staff.

8.1.6. The needs of rural communities are more than just one or two kinds of infrastructure and services. They require an integrated approach offering a menu of services from which they can choose, based on their priorities and affordability. Provision of such services, which need not all be provided simultaneously, will help ensure sustained community interest in the Community Organization and encourage broad-based capacity building.

- 8.1.7. Where required, a separate Special Account should be provided for each IA.
- 8.1.8. The use of ICB procedures for community infrastructure related equipment and material is not feasible, and resulted in a delay of almost two years at the start of this Project. For such projects, the emphasis should be on NCB and community contracting. Implementation arrangements should allow beneficiary communities to take control of, or at least to influence as far upstream as feasible, scheme planning and design, and to have the power of certification of any contractor's work prior to payment.
- 8.1.9. Adequate and appropriate procurement, accounting, M&E and auditing arrangements (including incorporating base-line data for monitoring purposes) should be established at the outset, in line with standard arrangements and any specific changes per project covenants or in legal documents.
- 8.1.10. Appropriately qualified and experienced staff to handle financial management including, inter alia, accounting, internal controls, financial reporting, disbursements, procurement, etc. as well as arrangements to have timely project audits should be in place at Project commencement as required under OP/BP 10.02.
- 8.1.11. Involvement of the communities in various forms and levels of community contracting and procurement resulted in greater ownership. The participation of the water and sanitation committees in the procurement of pipes helped in bringing down the bid bracket vis-à-vis prior to community involvement. However, there is a need to further refine the process through which community involvement can be deepened and the benefits enhanced.
- 8.1.12. The project could not establish indicators and a monitoring system specific to measuring the outputs and outcomes vis-a-vis the baseline and inputs to determine the achievement and sustainability of the objectives. For future projects in the sector, there is a need to streamline indicators, ensure that good base-line data exists, and pick a small number of standardized indicators for monitoring after the project intervention is over.

8.2. Additional Lessons from AJK

- 8.2.1. The communities shared in the capital costs in cash and kind. This translated into greater ownership and indicated a demand for an improved service. The community share was based on the concept of component sharing, which has major advantages over the percentage sharing model in terms of ease of understanding and implementation of the different components, both institutionally and financially. Furthermore, it gives the community the flexibility to pace their part of the construction in accordance with their affordability and willingness to pay.
- 8.2.2. There were no staff turnovers below the Director LGRDD level. This resulted in continued commitment, institutional memory, and understanding of the project and was a major reason for the success of the component. Staff continuity was also responsible for greater departmental capacity building and institutional strengthening, especially in terms of benefiting from the technical advisory consultants.
- 8.2.3. After the mid-term review, LGRDD decided to merge the project staff with the core staff of the department, and implement the project through the whole department. The move from project directorate implementation to a departmentally implemented approach helped capacity building and institutional strengthening of the entire department, and was one of the key reasons why the pace of implementation increased appreciably after the MTR.

8.3. Additional Lessons from Sindh

- 8.3.1. The model of Project Implementation Teams (PITs), which combined designated social and engineering staff as a team, was tried out for the first time in Sindh. The approach fared well and could be considered in other provinces and projects. The model can be further improved by optimizing the skill mix within the PITs and encouraging partnerships with NGOs, as was demonstrated successfully in the Sindh Pilot Project (SPP).
- 8.3.2. The SPP broke the myth that Sindh's communities are not willing to contribute towards capital costs. It demonstrated their willingness to contribute provided they have control over decision making, and

resulted in greater ownership and interest in appropriate technologies to correspondingly reduce costs. Furthermore, the pilot also demonstrated that sharing can be by physical components rather than in percentage terms. The SPP also demonstrated that the IAs can partner with NGOs to gain from the skills and experience of the latter in social mobilization.

8.3.3. The development of an automated system for transferring government's share of O&M funds to the bank accounts of the village organizations enabled the bypassing of government departments, thus ensuring that the communities receive the funds on time.

8.4. Additional Lessons from Balochistan

8.4.1. The selection of the beneficiary rural townships was not satisfactory. Some had benefited from previous donor assisted initiatives, and in others the civil works were high cost. These issues were not accounted for and selections were not critically evaluated, which resulted in implementation issues during Project execution.

8.4.2. Community mobilization and participation remained deficient. The needs of the community were therefore not reflected in the scheme designs. When implementation commenced, communities demanded changes, which in turn escalated costs. Only towards the end of the Project was a concerted effort made to inform beneficiaries in the two townships with completed water supply schemes of their responsibility to pay for the services being provided.

8.4.3. Technical designs should cater for the local conditions. For example, where the annual precipitation level is two inches on an average, open drains may not be appropriate.

8.4.4. Designs should attempt to allow for population growth in the time lag between design and implementation, to avoid schemes falling short of providing coverage to recent inhabitants.

8.4.5. Whereas the completed water supply schemes are to be retained by the PHED for O&M, the drainage schemes are to be transferred to the town committees. The latter is reluctant to take over the schemes, since neither were they consulted during the design and implementation of the schemes, nor is it anticipated that beneficiaries will be willing to pay for drainage alone.

9. Partner Comments

(a) Borrower/implementing agency:

9.1. Government contributions to the ICR were received from AJK LGRDD, Sindh PHED and RDD, and Balochistan PHED and LGRDD. However, only Sindh PHED provided a summary along with the main contribution, which is provided below. The other contributions have been summarized and presented below. All complete reports are available on file.

9.2. AJK

9.2.1. Community participation concept in the RWSS sector was the practice in AJK well before start of planning work of the AJK part of the project. The project further improved application of this concept. Community participation was further strengthened and institutionalized and LGRDD provided resources to the RWSS sector on priority basis. Without external assistance, maintaining this priority over eight years duration would have been difficult. The project remained the focus of the LGRDD's efforts. This project played leading role in improving the rural development approaches. Especially the RWSS sector policies, procedures, and practices were broadly discussed and improved. This project has created an impact that would keep its distinct identity for 4-5 decades to come. Lessons learnt as a result of this project would continue providing foundation to future community based programs in AJK. Provision of improved RWSS facilities in conjunction with institutional reforms was a difficult challenge. The project developed the LGRDD's confidence by and by with progress of project implementation. Being implementing agency (IA)

of AJK's part of the project, the LGRDD developed its capabilities and got potential for undertaking larger projects for economic and social development of AJK.

9.2.2. Objectives were same as mentioned in the main text of the ICR. As regards AJK part of the project, achievement of these objectives is measurable and assessable on the basis of the following:

- i. Maximum equity was ensured in the provision of water supply facilities and hence the poor were main beneficiaries.
- ii. Remote villages, relatively unattractive for frequent visits from the main centers, were hubs of project activities which created casual employment opportunities for the locals during implementation. For the O&M of the completed schemes, some new job opportunities became also available to the locals.
- iii. The AJK Government has become more committed to the development of backward villages. The rural water supply activities have attracted other development activities.
- iv. In communities where water supplies have been provided, initiation of activities at the level of households has been noticed. These activities are expected to increase incomes and save expenditures. Some of these household activities are:
 - Keeping of poultry, buffaloes, and cattle.
 - Growing of vegetables and fruit trees, and
 - More hours of labor inputs to farms.
- v. Water of better quality contributes to better health. The householders' medical expenditures decreased. Statistics of the health department show reduction in the occurrence of diarrhea. There is a general opinion that school participation rate has also increased in the water supply scheme areas.
- vi. Unity of interest around the water supply facilities can be a vehicle for embarking upon other local initiatives of the communities for collective benefits. This unity gave political strength to the communities which can be a means of several other common benefits. Interaction among the water and sanitation committee (WSC), the beneficiaries and the LGRDD's officials has injected a sense of good governance.
- vii. First and foremost beneficiaries of the water supply and latrine facilities are the women and children. LGRDD feels that the project has prepared the ground for women's development in the rural areas as, for selected water supply schemes, formulation of separate women groups has been facilitated.

9.2.3. Overall project management was with the key administration officers of the department. The Director of LGRDD was also director of the project. He made operational decision under the control of the Secretary. In the districts the pivotal operational role was with Assistant Directors. Engineers, community development professionals and administration personnel assisted the Director in the Directorate. The Assistant Engineers and Extension Officers assisted the Assistant Directors in the districts. The consultants were engaged in the project for advisory and technical assistance services. Several training activities were conducted in the project. Hands on training activities were preferred. The consultants and the senior staff members of the LGRDD facilitated training events. In consultation with the World Bank, the project engaged 4 NGOs (2 large and 2 small) on a pilot basis to carry out activities in the field of health and hygiene in 8 villages.

9.2.4. Though LGRDD implemented AJK's part of the project, other government departments i.e. Planning and Development, Home, Education, Health, Accountant General and Finance had some relationship with the project for its coordination and administrative matters. Smooth sailing of the planning and implementation of the project did need the cooperation of these departments. The local body institutions such as district councils and union councils were also involved in the project activities. After their dissolution there was no involvement of local elected representative leaders in the project activities at

village level. A water and sanitation committee (WSC) for each village/scheme was instituted. The WSC played the main role at the village and community level in the planning, selection and construction of the schemes.

9.2.5. This project also implemented additional activities, which were required under the SAP. The uniform policy, sanitation policy, staff roles, selection criteria, extension and hygiene education modules, technical options for household sanitation, design criteria and several other documents were drafted and refined by the consultants and LGRDD officials.

9.2.6. Procurement procedures suggested in the project documents needed changes during implementation of the project. There was an effort made during the start of the project to procure GI pipes and fittings under ICB. This effort could not succeed and the procurement process under ICB was dropped. Thereafter a procurement procedure was decided between the LGRDD and World Bank under which pipes and fittings were purchased. This procedure provided for involvement of the community in the procurement process. LGRDD made the prequalification and post qualification of the bidders. Pipes and fittings were purchased from the prequalified firms/manufactures from 1993 to October 1998. After 1998 the prequalification process was replaced by a postqualification process. Although the postqualification process trained the staff in preparation of bid documents, it caused delay in the construction program. LGRDD assessed that postqualification could not significantly decrease the prices as compared with the prices approved during the prequalification process. The communities placed supply orders on the successful bidders and received deliveries from them. Prequalification and local tendering procedures were also used for the procurement of pumps and motors.

9.2.7. To sustain the capital investment level (under the project) is beyond means of the LGRDD. However, annual capital investments in RWSS would be around Rs.100 million (1.7 US\$) from local resources. This annual capital investment is expected to be raised 10 percent annually. The operation and maintenance of completed schemes rests with the local communities. The evaluation study confirmed that hardly 5 % schemes had become nonfunctional. Functional schemes, which are 95 %, are being formally and informally maintained by the beneficiary communities.

9.2.8. The supervision missions to the project were very few. The project benefited from the missions. They helped LGRDD in resolving management and implementation issues. The target approach suggested during the MTR mission concentrated the LGRDD's focus more on the physical aspects of the project. The six monthly targets were fixed in the MTR and thus LGRDD was put under pressure. LGRDD met the targets. But a step by step approach, needed for community participation and strengthening, had to be attuned to the targets. LGRDD expected more frequent visits of the missions. The World Bank also facilitated visitors from international and national entities to the project. On average, 4 visitor groups visited the project annually. In procurement matters, lengthy correspondence between LGRDD and the World Bank affected the construction program. Supervision missions, whenever they visited AJK, held detailed discussions with the LGRDD and other coordination agencies. Some of the recommendations made by the mission could not be implemented due to coordination and administrative problems. These recommendations include establishment of M&E/MIS, regularization of project staff, procurement of additional vehicles, strengthening of accounting system and integration of sanitation program with the departments of health and education.

9.2.9. The Water and Sanitation Program for South Asia (WSP-SA) team provided technical support to the project. The project engineers received training for computer aided designs from the WSP-SA technical member. The WSP-SA support to the project in community participation matters was not as high as was expected.

9.2.10. The project aimed to improve upon previous community participation approaches, strengthen the LGRDD's capacity and introduce policy reforms. The lessons learned were very valuable. They were continually used for the evolution of policies, procedures and processes. Some of the important lessons are described here below:

- Communities have shown their great willingness to contribute substantially to community infrastructure. The higher level of service attracted increased contributions. Component sharing was a simple method for communities to follow.
- Determination of real demand needed careful examination. Spurious and politically motivated demands often created problems in implementation. The more the stake of the communities was involved, the more they became truly participatory.
- Community mobilization and organization work demands patience. The IA's staff should be given appropriate time for this work. Only such communities should be selected about whom proper indicators of their mobilization and organization have become well evident.
- Entrusting more responsibility and delegation of more authority to be community organizations established a sense of strong ownership. Notables having vested interests could be sidelined through spread of project information among the communities.

9.3. Sindh

PHED

9.3.1. The Sindh Rural Water Supply and Sanitation Project was approved by ECNEC in September 1990 for a cost of Rs. 2151.237 million and the Credit Agreement signed on 31.07.1991. The Project was implemented by Sindh Public Health Engineering Department & Rural Development Department with their approximate share as 85% and 15 % respectively in civil works. The Project was sponsored by IDA and Government of Sindh at a cost ratio of 77% and 23% respectively.

9.3.2. A MTR of the Project was undertaken in November/December 1995 where it was agreed to down size the Project with the PHED portion being reduced, in Rupees terms, to Rs. 2064.2 million. The Sindh share of the loan was reduced from SDR 50.00 million to SDR 35.00 million.

9.3.3. The original main objectives of the Project concerning PHED are not only physical implementation of the Water Supply and Sanitation Project but also the institutional strengthening of PHED.

9.3.4. Health Impact study was undertaken in 73 villages, showed an overall 50.5% reduction in diseases, with the implementation of integrated approach of three components, water supply, sanitation and village level health and hygiene education of RWSS project.

9.3.5. The infrastructure development objective is achieved by the construction of the following schemes.

- (i) Mechanized Water Supply Scheme (New) - 185 schemes (Population Coverage 319,641)
- (ii) Mechanized Drainage Schemes (New) - 69 schemes (Population Coverage 139,577)
- (iii) Rehabilitation of existing Water Schemes & Drainage - 238 number (Population Coverage 387,645)
- (iv) Demonstrated Pit Latrines - 242 number

9.3.6. Institutional Strengthening Program achievements included the creation of Training cell, Hydrogeological, Community Participation and Hygiene Education, and Management Information (MIS) cell.

9.3.7. The Government of Sindh was supported the policy and approved in February 1993 as the "Unified Policy" to be applied not only the World Bank Project but to all schemes of ADP and SAP, whether new, on-going or completed

9.3.8. Electrification of schemes was the major factor affecting the achievement of project objectives. The power connections are still awaited on 154 Schemes including 100 new Water Supply, 32 new drainage and 22 rehabilitation schemes.

9.3.9. The assessment of the increased productivity levels after the implementation of the schemes shows a time and energy savings. The saving time ranges from 4 to 7 hours daily. Women reallocated saved times to productive activities such as sewing, embroidery, Rilli works, Cotton picking, transplanting and harvesting of crops, cattle farming. The improved RWSS schemes also boosts children's school attendance rate and energy savings helps in devoting more time to study and income generating activities.

9.3.10. Sustainability is rated as uncertain at this time. A schemes condition and the VDA performance survey was conducted during September 2000. The survey results indicated that, there were 467 (94.9%) schemes fully functional. 11 (2.3 %) schemes were partially functional due to some technical or social problems and 14 (2.8%) schemes were non-operational due to non-availability of power connections.

9.3.11. The overall IDA and borrower performance is considered as satisfactory. IDA had invested considerable resources and efforts to support the GoSindh to test the new strategy involving a high degree of community participation.

9.3.12. The funds for the government's portion of the O & M costs, are being transferred in VDAs accounts. There are 257 VDAs which have received the funds to date

9.3.13. There were 12 schemes completed under Sindh pilot project. The overall aim of the pilot project was "to test and demonstrate a new set of project rules and implementation procedures for a demand based approach to Rural Water Supply and sanitation provision involving the people, Government and non-formal organization/private sector and participatory methodologies."

9.3.14. Key lessons learned that Partnership with Community improves effectiveness and efficiency of schemes and brings sustainability and the myth that communities cannot bear full O & M costs has been broken.

RDD

9.3.15. The overall outcome of the project is just satisfactory as the varying target have been met in spite of the non-conducive situations faced from time to time by the implementers. The primary object outcome can be narrated as follows:

- i) Mechanism is needed to implement the project at the grass root level and ensuring community participation.
- ii) There is need for development of system and procedure for involving communities.
- iii) Creation of cadre of partner organizations is absolutely necessary.
- iv) Community ownership for the sustainability has more or less been achieved.
- v) Recognition of need for continued support to newly emerging community organizations is acutely felt.
- vi) Development of training and MIS mechanism needs to be speeded up.
- vii) Institutional strengthening is wanting but can be remedied .

viii) Only low level technical assistance is sufficient to cater to such project.

9.3.16. Health impact indicators show the gradual fall in reported cases of water borne and water washed diseases during the period 1992-93 to 1999-2000. The RDD components, i.e., Hand Pumps, Latrines and Health and Hygiene Education contributed in bringing down the ratio of a such diseases besides the inputs applied by the line departments running health/hygiene programs. Messages conveyed by field Project Implementation Teams (PITs) comprising of skilled and trained male and female workers have brought behavioral changes particularly in women and children with regards to health and hygiene practices which resulted in following and adopting preventive measures. The figures are substantiated by the health department Government of Sindh as well. Hence the project had an overall satisfactory effect health wise.

9.3.17. From the survey conducted in randomly selected villages, 93% of Hand Pumps, 52% House Hold Latrines, and 97% of Demonstration Latrines have been found functional which endorses the fact that communities have benefited from the facilities and the rate of recurrence of diseases has diminished to a considerable extent, i.e., 71% in Larkana and 81% in Sukkur and Ghotki Districts. Survey reports reveal that 30 to 40% hygienic conditions of the villages have been improved due to motivational efforts of the PITs.

9.3.18. It has been assessed by the survey teams that the rural women folk are adequately using time saved out of the facilities provided under the project in traditional income generating activities, i.e., embroidery, dairy farming etc. In addition taking part in agrarian and other social works through women groups formed under the project. From the survey reports it transpires that the poverty level has decreased in the communities where time spent on curative measures and labor cost has been taken over by the preventive measures through provision of water supply and better sanitary condition. The saving of man hours in healthy environments particularly for the female and children has contributed towards exploring new ways and means of earning, educating and nourishment of the children in a better manner.

9.3.19. Community participation remained the important component of the project. It could be interpreted that project was for, of and by the communities. The survey report also indicates that almost all the village based organizations are actively involved not only in RWSS project but also in other socio-economic activities.

9.3.20. Thus in RDD's assessment the Project has successfully provided a sustainable and financially viable approach to community based management and O & M. The very limited, but valuable information with RDD shows that the communities if provided with technical and partially financial assistance, their greater share could be ensured in the community based programs. The survey report reveals that the communities are inclined to replicate the low cost water supply and sanitation schemes manifestation of which is quite visible in the form of rural people's increasing tendencies towards constructing household latrines and installing the hand pumps on self help basis.

9.3.21. The key lesson learned are as under:

- In order to sustain the long term benefits of the project, a follow-up plan be launched out of local resources, manpower, government organizations & NGOs instead of relying upon the foreign credit.
- The need is not only to increase the coverage of rural water supply and sanitation in terms of figures but also equally important to make people aware about importance of health and hygiene by communicating the appropriate messages through inter-personal contacts, audio visual aids, mass media, hand bills and posters etc.

9.4. Balochistan

PHED

9.4.1. One of the objectives of Balochistan Rural Water Supply and Sanitation project was to improve rural productivity and health particularly of women and children. This objective was to be achieved by reducing the water borne diseases by providing the water supply and sanitation facilities and village level health and hygiene education. The provincial Health Department operates an organized system of hospitals, rural health centers and basic health units. The record of all type of diseases is maintained by them. To study the health impact due to improved water supply system no proper monitoring has been carried out. The informal information from Health Department reveal that the improved water supply system has definitely contributed towards reduction of water borne diseases i.e. diarrhea, malaria etc. Anyhow improvement in health is highly correlated with literacy, level of female education, and income rather than the level of water and sanitation services. It has been assumed that supply of water at the doorstep of the rural population will result in time saving and time so saved will be used in an income producing activity. In fact, women in the rural areas of Balochistan do not have excess to wage employment and thus the exact value of productivity can not be sorted out, but they have some ways of increasing their income i.e. petty trading, tailoring, growing food on household plots, handicrafts, etc. Exact income figures are not possible to work out but only a rough guess can be made.

9.4.2. While launching the project it was assumed that it will have a significant impact on alleviation of poverty. In short term measure the project activities did provide temporary employment. As long terms measures for reducing poverty the time saving of rural people specially of women has been guessed to be major factor for increasing the rural productivity. No reliable statistics are available proving the fact that an increase in income due to time saving has occurred in the rural population. Rural water supply and sanitation has reduced the disparity in access to services between rich and poor by provision of house water connections regardless of status.

9.4.3. In order to achieve the objectives PHED had to undergo institutional strengthening to find new dimensions to improve its procedures and methods of project implementation, and also training in social mobilization so that rural water supply and drainage schemes could be sustained by the local communities. For institutional strengthening the PHED created a Planning and Design Circle headed by Director General and a Chief Engineer Office for south zone of the province. The foreign consultants who were appointed to assist with institutional strengthening made a number of recommendations. There was, however, a significant disconnect between these and what PHED did in practice. In particular, the recommendation for creation of various cells was either ignored altogether or the decision came too late. This badly affected performance, as a result, the objectives relating to Management Information System, Training Cell, Design Cell, Planning Cell and Hydrogeological cell could only be achieved in a very little way.

9.4.4. Major factors affecting implementation and achievement of objectives are:

- Rapid changes of top government officials and frequent transfer of project management authorities
- Scarcity of resources and economic crisis due to frequent changes of government
- Poor identification of Township water supply and drainage schemes
- Poor capability of contractors
- Delayed energization of schemes
- Bank procedures for procurement of goods and works
- Consultants were not aware of the local conditions

9.4.5. At the start of the project and up to Midterm Review all the decisions from Bank side were made from its Headquarters at Washington USA. This was hampering the progress as the decisions were made

very late. Therefore the Bank's follow-up and monitoring of the project up to midterm review mission November 1995 was very much unsatisfactory. The visits of supervisory mission were not carried out regularly. However after the mid-term review the performance of the Bank was improved. The Bank/IDA made considerable efforts to support GOB in project implementation and provided remarkable guidance for the smooth execution of different works. A number of workshops for community participation were arranged by the Bank mission which resulted in understanding the importance of community involvement, monitoring procedures and financial management in a project.

9.4.6. The key lesson learned from the project include following:

- Before starting any future project, social mobilization and social surveys are essential. During implementation of RWSS this shortcoming has been felt badly.
- In rural areas of Balochistan regular community contact between community development staff and rural communities is only possible if proper transport facilities are made available. The movement of female community development staff in the far flung areas of province requires significant support from senior management of the department.

LGRDD

9.4.7. Work on LGRDD component could not be started till 1998 due to the issue of a separate Special Account and release of insufficient and late counterpart budget by the Government of Balochistan. The World Bank was requested through the Chief Secretary Balochistan and Planning and Development Department Government of Balochistan to either extend the left over 12 months project period to 24 months with subsidy, or to withdraw the project. The World Bank did not agree to the extension request. Finally the Government of Balochistan requested the cancellation of the LGRDD component.

(b) Cofinanciers:

Not applicable.

(c) Other partners (NGOs/private sector):

Not applicable.

10. Additional Information

10.1. Financial Management Issues

10.1.1. Sindh-PHED

The TA set up a good MIS system, however, the financial management and reporting system was not fully integrated and staff were not trained to fully operate the system. In the audit reports, all financial statements required were provided except detailed expenditure statements. However audit reports for all years were qualified with significant audit observations remaining outstanding.

10.1.2. Sindh-RDD

Although the post of an Accounts Officer existed it lay vacant for long periods, and the Accounts Section was looked after by officers responsible for other jobs. All audit reports were qualified and significant audit observations remained outstanding.

10.1.3. Balochistan-PHED

An attempt was made by the Director Finance in 1996 to introduce an integrated accounting system. However the Secretary of the Department directed that the government system should be continued. Had the integrated system been implemented several of the financial management issues could have been resolved/minimized. In some cases only audit opinions were submitted, and in one year an opinion was not attached to the Audit Report. Except for one year, the opinions were unqualified. Annotated replies were submitted by the department against outstanding observations but the issues have not been resolved by the Auditor General's office.

10.1.4. AJK-LGRDD

Pre-audit of all transactions and effective monitoring of expenditure against budget was carried out. A comprehensive computerized MIS, although developed, could not be made operational. The auditors issued qualified opinions for two years. There are significant outstanding observations. There is a serious internal control issue regarding non-adjustment of advances on a timely basis (IDA was informed that these were issued from the government's account).

10.1.5. As significant audit observations remain unresolved, IDA will carry out a detailed review of these observations to determine the extent of any ineligible expenses and appropriate action will be decided.

Annex 1. Key Performance Indicators/Log Frame Matrix

Outcome / Impact Indicators:

Indicator/Matrix	Projected in last PSR ¹	Actual/Latest Estimate
Increase in water supply and sanitation coverage in the project areas		Improved water supply coverage increased to 2.2 million
Reduction in water-borne diseases, and morbidity		There has been a reduction in water-borne diseases and morbidity
Sustainable O&M of schemes by the communities		More than 95 percent schemes are operational with communities operating and maintaining them
Lower O&M recurrent budget for the government		The recurrent budget in Sindh has reduced
Enhanced level of ownership by the communities		Empirical evidence indicates that the communities own the schemes. In AJK, the level of ownership is more because the communities have contributed in the capital costs
Reduction in drudgery for women and children in hauling water from distance		The service level has increased with the result water is available at the doorsteps or inside the house
Free time available for women to look after children and undertake other activities		Surveys and interviews indicate that women have more free time as a result of water available at the doorsteps or inside the house
School attendance of children increased		School attendance and enrollment has increased, particularly of girls
All segments of the settlements participated in the project		Complete revenue villages were provided the service with the result that all segments of the community were covered
Introduced sharing in capital cost by communities		The Sindh Pilot Project introduced the concept of capital cost sharing in terms of component sharing

Output Indicators:

Indicator/Matrix	Projected in last PSR ¹	Actual/Latest Estimate
No. of community organizations formed	2,200	3,080
No. of water supply schemes completed	1,700	1,780
No. of drainage schemes completed	60	69
No. of existing water supply schemes rehabilitated	265	253
No. of demonstration and household latrines constructed		15,400
No. of hand-pumps installed	2,750	2,580
Population served under the project	1.5 million	2.2 million

¹ End of project

Annex 2. Project Costs and Financing

Project Cost by Component (in US\$ million equivalent)

Project Cost By Component	Appraisal Estimate US\$ million	Actual/Latest Estimate US\$ million	Percentage of Appraisal
Civil Work - AJK	1.70	2.60	152.94
Equipment, Material - AJK	16.52	18.02	109.08
Consultancy Services, Training - AJK	6.95	3.56	51.22
Incremental Staff - AJK	2.40	2.57	107.08
Civil Work -Balochistan	11.40	6.48	56.84
Equipment, Material - Balochistan	14.38	4.24	29.49
Consultancy Services, Training - Balochistan	12.05	6.20	51.45
Incremental Staff - Balochistan	0.00		
Civil Work - Sindh	48.30	25.06	51.88
Equipment, Material - Sindh	3.40	0.26	7.65
Consultancy Services, Training - Sindh	16.00	10.88	68
Incremental Staff - Sindh	3.60	1.64	45.56
Total Baseline Cost	136.70	81.51	
Total Project Costs	136.70	81.51	
Total Financing Required	136.70	81.51	

Project Costs by Procurement Arrangements (Appraisal Estimate) (US\$ million equivalent)

Expenditure Category	ICB	Procurement Method¹		N.B.F.	Total Cost
		NCB	Other²		
1. Works	0.00 (0.00)	87.10 (61.40)	0.00 (0.00)	0.00 (0.00)	87.10 (61.40)
2. Goods	32.60 (28.80)	0.00 (0.00)	7.90 (5.50)	0.00 (0.00)	40.50 (34.30)
3. Services	0.00 (0.00)	0.00 (0.00)	35.00 (35.00)	0.00 (0.00)	35.00 (35.00)
4. Miscellaneous Incremental staff	0.00 (0.00)	0.00 (0.00)	6.00 (6.00)	0.00 (0.00)	6.00 (6.00)
5. Miscellaneous, Duties & Taxes	0.00 (0.00)	0.00 (0.00)	21.60 (0.00)	0.00 (0.00)	21.60 (0.00)
6. Miscellaneous Land	0.00 (0.00)	0.00 (0.00)	4.00 (0.00)	0.00 (0.00)	4.00 (0.00)
Total	32.60 (28.80)	87.10 (61.40)	74.50 (46.50)	0.00 (0.00)	194.20 (136.70)

Project Costs by Procurement Arrangements (Actual/Latest Estimate) (US\$ million equivalent)

Expenditure Category	Procurement Method ¹			N.B.F.	Total Cost
	ICB	NCB	Other ²		
1. Works	0.00 (0.00)	45.79 (34.14)	0.00 (0.00)	4.36 (0.00)	50.15 (34.14)
2. Goods	5.49 (4.34)	18.81 (17.92)	4.32 (0.26)	0.00 (0.00)	28.62 (22.52)
3. Services	0.00 (0.00)	0.00 (0.00)	20.81 (20.64)	0.00 (0.00)	20.81 (20.64)
4. Miscellaneous Incremental staff	0.00 (0.00)	0.00 (0.00)	5.10 (4.21)	0.00 (0.00)	5.10 (4.21)
5. Miscellaneous, Duties & Taxes	0.00 (0.00)	0.00 (0.00)	0.39 (0.00)	0.00 (0.00)	0.39 (0.00)
6. Miscellaneous Land	0.00 (0.00)	0.00 (0.00)	0.93 (0.00)	0.00 (0.00)	0.93 (0.00)
Total	5.49 (4.34)	64.60 (52.06)	31.55 (25.11)	4.36 (0.00)	106.00 (81.51)

N.B.F. - community contribution towards civil works

^{1/} Figures in parenthesis are the amounts to be financed by the IDA Credit. All costs include contingencies.

^{2/} Includes civil works and goods to be procured through national shopping, consulting services, services of contracted staff of the project management office, training, technical assistance services, and incremental operating costs related to (i) managing the project, and (ii) re-lending project funds to local government units.

Project Financing by Component (in US\$ million equivalent)

Component	Appraisal Estimate			Actual/Latest Estimate			Percentage of Appraisal		
	IDA	Govt.	CoF.	IDA	Govt.	CoF.	IDA	Govt.	CoF.
1. Civil Works	61.40	15.60	10.10	34.14	10.78	5.42	55.6	69.1	53.7
2. Equipment - Material	34.30	6.20		22.52	6.08		65.7	98.1	
3. Consultancy Services	35.00			20.64			59.0		
4. Incremental Staff	6.00			4.21	0.89		70.2		
5. Duties and Taxes		21.60			0.39			23.3	
6. Land		4.00			0.93			23.3	
Total	136.70	47.40	10.10	81.51	19.07	5.42	59.6	40.2	53.7

Annex 3: Economic Costs and Benefits

Approach and Assumptions adopted for ERR Calculation during Appraisal and ICR

AJK

According to government estimates, almost 100,000 households in the rural areas of AJK were receiving water supply under the project, leading to an average increase in consumption of 2.5 gallons per person and an average time-saving from collecting water of 9 hours per household on each day, of which 10 percent is being allocated to income generating purposes. Based on these government estimates, the project could realize an ERR of 31 percent, being significantly higher than the appraisal estimate of 11 percent. The sensitivity analysis revealed that the results are highly sensitive to variations in the benefit stream, being primarily determined by the assessed hours of saved and avoided time for collecting water. When lowering the estimates of time-savings from 9 to 5 (appraisal estimate) and 3 hours per household per day, the ERR drops to 13 and 3 percent, respectively. The estimated allocation of time savings towards income generation – 10 percent, assumed both during appraisal and for the ICR calculation) – is both conservative and likely to increase over time as opportunities for women's participation in income generation develop. The presented values for the ERR are therefore likely understated.

Sindh

Almost 250,000 people (current population) have benefited from the establishment of new water supply schemes in the province of Sindh. (Despite a significant portion of Sindh's component being used for the rehabilitation and upgrading of old water supply and drainage schemes, the lack of data on the marginal costs and benefits of those sub-components prevents their inclusion here. Also during the mid-term review it was established that the initial targets could not be met by project closure, and Sindh's component was downsized significantly.) The appraisal economic analysis assessed an ERR of 17 percent, based on the estimate that an average of 3.3 hours per day per household would be saved due to improved water supplies, and 27 percent of the saved time would be allocated to income generation activities. The costs included both capital and operating costs for water supply investments and institutional development costs.

Even under more favorable estimates for time-savings (5 hours/HH/day) and allocation of time towards income generation (60 percent) provided by the Government of Sindh for the ICR calculation, a comparable level of the ERR can only be established when institutional development costs are omitted in the calculation. In a sensitivity analysis the following iterations on the daily hours saved per household and the percentage of the time saved that has been allocated towards income generating purposes were conducted under different assumptions on the value of the institutional development costs. These results are displayed in the table below.

Table 1: Sindh – Possible Values for the ERR

<i>Time Savings</i>	<i>Allocation of Time towards Income Generation</i>		
	<i>27 percent</i>	<i>40 percent</i>	<i>60 percent</i>
excluding Institutional Development Cost			
2	n/c	n/c	n/c
3.3	2 %	5 %	8 %
5	9 %	12 %	17 %
including Institutional Development Cost (@10 percent of capital costs)			
2	n/c	n/c	n/c
3.3	n/c	3 %	7 %
5	7 %	11 %	15 %
including Institutional Development Cost (@30 percent of capital costs)			
2	n/c	n/c	n/c
3.3	n/c	1 %	5 %
5	5 %	8 %	12 %

n/c: not calculable, ERR below 0

Balochistan

The economic analysis at appraisal included an assessment of the costs and benefits derived from (a) the rehabilitation of rural water supply schemes; (b) the provision of water supply schemes for townships; and (c) an institutional development and reform program for the PHED. The overall ERR for all three sub-components was assessed at 13.1 percent during appraisal. For lack of quantifiable data the ICR economic analysis could not replicate the benefits arising from the institutional development and reform program. Its costs are included in the ERR for the entire project, but are excluded from the component (a) and (b) which will be discussed in more detail below. Overall, this component has not performed.

(a) Rehabilitation of rural water supply schemes. Only in the 8th year – the last year – of implementation, this sub-component has extended water supply services to 2,700 households. Even under the government estimate of an actual 7 hours/HH/day of time saved – being high compared to the 1.8 estimate during appraisal – the ERR and NPV are negative. This is not surprising, giving that O&M cost incurred by the government are about ten times higher than the assessed benefits from time-savings, resulting in a negative net benefit stream throughout the assessment period.

(b) Township water supply schemes. Two schemes out of an expected number of eight were delivering water supply to 10,302 beneficiary household in the 8th year of project implementation. Even when excluding any institutional development assistance, and while assuming 100 percent tariff collection, based on stated (and not actual) tariff collection objectives by the Government of Balochistan for the future years, the ERR is only 2 percent. Provided that the cost estimate by PHED for operation and maintenance (Rs. 116 thousand/annum) in the 8th year is reflecting actual and non-subsidized cost, these could be more than covered by the benefit-streams derived from proposed tariff collection (Rs 2.6 million/annum). A forward look would be to ascertain the establishment of a commercially-oriented regime for the operation and maintenance of the assets provided under the project, in order to ensure their sustainability.

Details of these calculations are given in the following table.

	<i>Appraisal</i>			
		<i>worst</i>	<i>ICR medium</i>	<i>best</i>
General				
<i>Time Horizon</i>	20 years project life	20 years asset life	20 years asset life	20 years asset life
<i>Prices in constant 1989 prices, converted by CPI</i>	yes	yes	yes	yes
<i>Standard Conversion Factor</i>	1	1	1	1
<i>Economic Cost (net of taxes)</i>	yes	yes	yes	yes
AJK				
<i>time-savings (incl. incremental consumption)¹ in hours/HH/day</i>	5	3	5	9
<i>women's wages (Rs./day)</i>	Rs.11.2/day in 1989	Rs.11.2/day in 1989	Rs.11.2/day in 1989	Rs.11.2/day in 1989
<i>value of leisure (in percent of shadow wage)</i>	30%	30%	30%	30%
<i>time allocation for income generation (%)</i>	10%	10%	10%	10%
<i>institutional development cost included</i>	yes	yes	yes	yes
<i>other cost included</i>	no	no	no	no
Sindh				
<i>time savings (incl. incremental consumption) in hours/HH/day</i>	3.3	2	3.3	5
<i>shadow wage for women (Rs./day)</i>	Rs.14.1/day in 1989	Rs.14.1/day in 1989	Rs.14.1/day in 1989	Rs.14.1/day in 1989
<i>value of leisure (in percent of shadow wage)</i>	30%	30%	30%	30%
<i>time allocation for income generation (%)</i>	27%	60%	60%	60%
<i>household size</i>	10	10	10	10
<i>institutional development cost included</i>	yes	at 30% of capital cost	at 10% of capital cost	no
<i>other cost included</i>	no	no	no	no
Balochistan				
<u>Rehabilitation Component</u>				
<i>time savings (incl. incremental consumption) in hours/HH/day</i>	1.8	1	1.8	7
<i>women's wages (Rs./day)</i>	Rs.10.4/day in 1989	Rs.10.4/day in 1989	Rs.10.4/day in 1989	Rs.10.4/day in 1989
<i>time allocation for income generation (%)</i>	n/a	10%	10%	10%
<i>value of leisure (in percent of shadow wage)</i>	30%	30%	30%	30%
<i>institutional development cost included</i>	no	no	no	no
<i>other cost included</i>	no	no	no	no
<u>Township Component</u>				
<i>willingness-to-pay or tariff in Rs./month</i>	Rs.38/month in 1989	Rs.58/month in 2000	Rs.58/month in 2000	Rs.58/month in 2000
<i>tariff collection rate</i>	100 %	50 %	75 %	100 %
<i>institutional development cost included</i>	no	no	no	no
<i>other cost included</i>	no	no	no	no
<u>Institutional Component</u>				
<i>costs</i>	yes	the actual costs are included for calculating the project ERR, but not the benefits		

¹ Figures provided by the government for actual time-savings are inclusive of the incremental amount consumed due to the project.

Annex 4. Bank Inputs

(a) Missions:

Stage of Project Cycle	No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.)		Performance Rating		
	Month/Year	Count	Specialty	Implementation Progress	Development Objective
Identification/Preparation					
April 1988	4	1 Ec, 2 WSS, 1 E			
June 1988	1	1 Ec			
December 1988	6	3 WSS, 1 FS, 1 D, 1 IDS			
August 1989	5	1 Ec, 4 WSS			
October 1990	5	3 WSS, 1 FS, 1 D			
Appraisal/Negotiation					
December 1990	4	2 WSS, 2 FS			
Supervision					
October 1992	5	1 WSS, 2 FS, 1 E, 1 CDS			
May 1993	4	1 WSS, 1 IDS, 1 E, 1 CDS			
September 1993	5	1 WSS, 3 E, 1 Ec			
February 1994	2	1 IDS, 1 E			
July 1994	3	1 WSS, 2 E			
January 1995	3	2 E, 1 C			
November 1995	5	3 E, 1 FS, 1 D	U	S	
June 1996	2	2 E	S	S	
March 1997	3	1 F, 2 E	S	S	
November 1997	2	1 F, 1 E	U	S	
September 1998	6	1 each E, IDS, CDS, P, FMS, D	U	S	
April 1999	7	2 E, 1 ea. CDS, FMS, P, IDS, D	S	S	
November 1999	7	2 E, 1 ea. CDS, FMS, P, IDS, D	S	S	
June 2000	4	2 E, 1 IDS, 1 CDS	S	S	
ICR					
October 2000	7	2 E, 1 P, 1 D, 2 FMS, 1 IDS			

Ec=Economist; E=Engineer; IDS=Institutional Development Specialist; CDS=Community Development Specialist; FS=Financial Specialist; FMS=Financial Management Specialist; P=Procurement Specialist; D=Disbursement Specialist; WSS=Water and Sanitation Specialist

(b) Staff:

Stage of Project Cycle	Actual/Latest Estimate	
	No. Staff weeks	US\$ (,000)
Identification/Preparation	45	161.5
Appraisal/Negotiation	8	32.0
Supervision	291	526.0
ICR	23	46.0
Total	367	765.5

Annex 5. Ratings for Achievement of Objectives/Outputs of Components

(H=High, SU=Substantial, M=Modest, N=Negligible, NA=Not Applicable)

	<i>Rating</i>
<input type="checkbox"/> <i>Macro policies</i>	<input type="radio"/> H <input type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input checked="" type="radio"/> NA
<input checked="" type="checkbox"/> <i>Sector Policies</i>	<input type="radio"/> H <input checked="" type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input type="radio"/> NA
<input checked="" type="checkbox"/> <i>Physical</i>	<input type="radio"/> H <input checked="" type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input type="radio"/> NA
<input type="checkbox"/> <i>Financial</i>	<input type="radio"/> H <input type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input checked="" type="radio"/> NA
<input checked="" type="checkbox"/> <i>Institutional Development</i>	<input type="radio"/> H <input checked="" type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input type="radio"/> NA
<input checked="" type="checkbox"/> <i>Environmental</i>	<input type="radio"/> H <input checked="" type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input type="radio"/> NA
 <i>Social</i>	
<input checked="" type="checkbox"/> <i>Poverty Reduction</i>	<input type="radio"/> H <input checked="" type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input type="radio"/> NA
<input checked="" type="checkbox"/> <i>Gender</i>	<input type="radio"/> H <input checked="" type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input type="radio"/> NA
<input type="checkbox"/> <i>Other (Please specify)</i>	<input type="radio"/> H <input type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input checked="" type="radio"/> NA
<input type="checkbox"/> <i>Private sector development</i>	<input type="radio"/> H <input type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input checked="" type="radio"/> NA
<input checked="" type="checkbox"/> <i>Public sector management</i>	<input type="radio"/> H <input type="radio"/> SU <input checked="" type="radio"/> M <input type="radio"/> N <input type="radio"/> NA
<input type="checkbox"/> <i>Other (Please specify)</i>	<input type="radio"/> H <input type="radio"/> SU <input type="radio"/> M <input type="radio"/> N <input checked="" type="radio"/> NA

Annex 6. Ratings of Bank and Borrower Performance

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HU=Highly Unsatisfactory)

6.1 Bank performance

- Lending
- Supervision
- Overall

Rating

- HS S U HU
- HS S U HU
- HS S U HU

6.2 Borrower performance

- Preparation
- Government implementation performance
- Implementation agency performance
- Overall

Rating

- HS S U HU
- HS S U HU
- HS S U HU
- HS S U HU

Annex 7. List of Supporting Documents

Aide Memoires of Preparation, Appraisal and Supervision Missions. World Bank 1987-2000

Staff Appraisal Report. World Bank. April 4, 1991

Project Agreement between International Development Association and Province of Sindh and Province of Balochistan and Azad Jammu and Kashmir. Credit Number 2228 PAK. July 31, 1991.

Development Credit Agreement between Islamic Republic of Pakistan and International Development Association. Credit Number 2228 PAK. July 31, 1991.

Strategic Provincial Investment Plan and Project Preparation for Rural Water Supply, Sanitation and Health. September 1989. Wardrop-Acres, Cowater International and Nespak.

Sindh Rural Water Supply and Sanitation Project for the Public Health Engineering Department Sindh, Health Impact Studies, Assessment of Completed 50 Schemes. August 1999

Project Preparation Study, AJK, Engineering Consultants Int. (Pvt.) Ltd., June 2000

Rural Water Supply and Sanitation Project, Financial Management Study, June 2000, Naveed Saeed

SAP Aide Memoires, 1993-2000

Community Participation Strategies and Tools, A Trainers' Manual for the Rural Water Supply and Sanitation Sector in Pakistan. MLGRD, UNDP, UNICEF, UNDP/World Bank RWSG-SA.

Community Participation in Rural Water Supply Projects in Northern Punjab and AJK, An Exploratory Study. June 1994. MLGRD, UNDP, UNICEF, UNDP/World Bank RWSG-SA.

Management Information Systems for Water Supply and Sanitation Agencies. The Need for Strengthening. November 1992. MLGRD, UNDP, UNICEF, UNDP/World Bank RWSG-SA.