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Report No: 56032-PK

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US$115.8 MILLION

TO THE

ISLAMIC REPUBLIC OF PAKISTAN

FOR A

KARACHI PORT IMPROVEMENT PROJECT

August 13, 2010

Sustainable Development Unit
Pakistan Country Management Unit
South Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 30, 2010)

Currency Unit = Rupees
Rs 85.52 = US$1
US$1.48 SDR

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank	MoPS	Ministry of Ports and Shipping
CAO	Chief Accounts Officer	MPCD	Marine Pollution Control Department
CAS	Country Assistance Strategy		
CFAA	Country Financial Accountability Assessment	MTDF	Medium Term Development Framework
CAPEX	Capital Expenditure	MOF	Ministry of Finance
DSCR	Debt to Service Coverage Ratio	NCB	National Competitive Bidding
DPL	Development Policy Loans	NHA	National Highway Authority
GAAP	Governance Accountability Action Plan	NMB	Napier Mole Boat
GDP	Gross Domestic Product	NPV	Net Present Value
GOP	Government of Pakistan	NTCIP	National Trade Corridor Improvement Project
EBITDA	Earnings before interest, Taxes, Depreciation and Amortization	PAD	Project Appraisal Document
EIA	Environmental Impact Assessment	PD	Project Director
EMS	Environmental Management System	PDO	Project Development Objective
EOP	Mid-term and End of Project	PICT	Pakistan International Container Terminal
EPA	Environmental Protection Agency	PIFFA	Pakistan Freight-Forwarders Association
FMS	Financial Management Specialist	PPIAF	Public Private Infrastructure Advisory Facility
IBRD	International Bank for Reconstruction and Development	PMU	Project Management Unit
ICB	International Competitive Bidding	PNSC	Pakistan National Shipping Company
ICR	Implementation Completion Report	POM	Project Operational Manual
IEG	Independent Evaluation Group	PQA	Port Qasim Authority
IFC	International Finance Corporation	PRGF	Poverty Reduction Growth Facility
IFRS	International Financial Recording Standards	PR	Pakistan Railways
ILO	International Labor Organization	PRSP	Poverty Reduction Strategy Paper
IRR	Internal Rate of Return	PPP	Public Private Partnerships

Vice President:	Isabel M. Guerrero
Country Director:	Rachid Benmessaoud
Sector Director:	John Henry Stein
Sector Manager:	Michel Audigé
Task Team Leader:	Simon David Ellis/Hasan Afzal Zaidi

PAKISTAN
Karachi Port Improvement Project

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PAKISTAN

KARACHI PORT IMPROVEMENT PROJECT

PROJECT APPRAISAL DOCUMENT

SOUTH ASIA REGION

SUSTAINABLE DEVELOPMENT DEPARTMENT, TRANSPORT UNIT

Date: August 13, 2010 Country Director: Rachid Benmessaoud Sector Manager/Director: Michel Audige Project ID: P112902 Lending Instrument: Specific Investment Loan	Team Leader: Simon David Ellis/Hasan Afzal Zaidi Sectors: Ports, Waterways and Shipping (100%) Themes (secondary): Infrastructure services for private sector development (S) Environmental screening category: Partial Assessment

Project Financing Data

[X] Loan [ ] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Total Bank financing (US$m.): 115.8
Proposed terms: IBRD Flexible Loan with fixed-spread, commitment-linked repayment schedule, level repayments, and 28 years maturity including a grace period of 7.5 years.

Financing Plan (US$m)

Source	Local	Foreign	Total
Borrower	0.6		0.6
International Bank for Reconstruction and Development	83	32.8	115.8
Total:	83.6	32.8	116.4

Borrower:
Islamic Republic of Pakistan

Responsible Agency:
Karachi Port Trust

Estimated disbursements (Bank FY/US$m)

FY	2011	2012	2013	2014	2015				
Annual	15	40	40	14	6.8				
Cumulative	15	55	95	109	115.8				

Project implementation period: January 2011 End: June 2015
Expected effectiveness date: January 2011
Expected closing date: December 2015

World Bank Lend

Does the project depart from the CAS in content or other significant respects? *Ref. PAD I.C.4.*	[ ]Yes [X] No
Does the project require any exceptions from Bank policies? *Ref. PAD IV.G.14.* Have these been approved by Bank management? Is approval for any policy exception sought from the Board?	 [ ]Yes [X] No [ ]Yes [ ] No [ ]Yes [ ] No
Does the project include any critical risks rated "substantial" or "high"? *Ref. PAD III.E.9.*	[X]Yes [ ] No
Does the project meet the Regional criteria for readiness for implementation? *Ref. PAD IV.G.10.*	[X]Yes [ ] No

Project development objective *Ref. PAD II.C.4, Technical Annex 2*

The Project Development Objective (PDO) of the proposed financing is to replace the lost port capacity and reduce shipping costs to the Pakistan economy through the reconstruction of the failed berths at Karachi port and increasing the effectiveness and efficiency of port operations and enhancing environmental sustainability.

The indicators that are proposed to measure the project performance in achieving the PDO are:

(i) Reduction in waiting to service time ratio for the project berths;
(ii) Improvement in occupancy and rate of cargo handling at the project berths;
(iii) Increase in throughput of the project berths;
(iv) Development, and start of implementation, of strategic development and business plans; and
(v) Development and implementation of environmental management system.

Project description *Ref. PADII.D.5, Technical Annex 3*

The project has two components:

Component A: Reconstruction of Berths 15 – 17A at Karachi Port (US$ 112.6 million).
The component will finance the reconstruction of berths 15-17A on the East Wharf at Karachi Port. It is expected that Bank financing will be used for a single consultancy procurement for the supervision consultant and a single civil works procurement comprising:

(i) Construction of a total length of quay wall of 922 m composed of 522 m for the rehabilitation of the four berths 15 to 17A, and the further continuation of the quay wall by 400 m at an angle of 20 degrees giving room to the ships turning circle and adding a general cargo and Ro-Ro berth;
(ii) Demolition of the two existing Ship Repair Berths (SRBs) and existing shed; and
(iii) Construction of pavements and storage facilities for the whole backyard.

Component B: Institutional strengthening (US$3.8 million).
The institutional component will address three main areas:

(i) Sub-component B1: Preparing a five-year business plan and vision document that covers

capital investments, operations, human resource development, land management, IT and port user representation.

(ii) Sub-component B2: Strengthening environmental management at the port to eventually comply with ISO international standards.

(iii) Sub-component B3: Improving financial management and financial planning to meet IFRS accounting standards and effectively utilize port revenues.

Which safeguard policies are triggered, if any? *Ref. PAD IV.F.14, Technical Annex 10*
Environmental Assessment (OP/BP/GP 4.01).

Significant, non-standard conditions, if **any**, for:
Ref. PAD III.F.10.

Board presentation:
September 9, 2010

Loan/credit effectiveness:
The following conditions for loan effectiveness apply:

(i) The Subsidiary Agreement has been executed on behalf of the Borrower and the Project Implementing Entity; and

(ii) The Accounting Policies and Procedures Manuals have been updated and adopted by the Project Implementing Entity in form and substance satisfactory to the Bank.

Covenants applicable to project implementation:
The following dated covenants apply:

(i) Chief Accounts Officer, Manager Finance and Chief Internal Auditor are appointed no later than three (3) months since project effectiveness; and

(ii) Financial Audit 2009 is finalized and submitted to the Bank team no later than three (3) months since project effectiveness.

I. STRATEGIC CONTEXT AND RATIONALE

A. Country and sector issues

1. *Pakistan's national transport system* is functioning but costly, with inefficiencies that are estimated to cost the economy at least 4 to 6 percent of GDP each year. The main weaknesses of the Pakistan transport system relative to "international norms" are summarized as follows. Port operating costs are high, resulting in high charges to users; there are long dwell times for inbound containers, resulting in congested terminals and the need to construct additional facilities earlier than necessary; access channels are relatively shallow, which will increasingly limit shipping connections; and there is a shortage of modern bulk handling facilities which not only raises the cost of importing essential commodities but also creates congestion on the quayside for the other traffic. Furthermore, trade logistics services lack breadth and vertical integration; the railways carry little long distance freight; the main road infrastructure requires major investment to provide the accessibility, capacity and quality required for rapid and reliable road services; and the trucking sector operates old and technologically outdated trucks, offering low freight rates but long transit times and unreliable service quality unless shippers are prepared to introduce additional and costly measures. The trucking sector has low private costs but high external costs in terms of vehicle overloading, leading to road damage and high accident rates, and also congestion.

2. *National Trade Corridor Improvement Program (NTCIP).* To reduce these costs and improve Pakistan's competitiveness, the NTCIP was initiated by the Government of Pakistan (GOP) in 2005. The key aims of the NTCIP are to encourage modern streamlined trade and transport logistics practices; to improve port efficiency; to reduce costs for port users and enhance port management accountability; to create a commercial and accountable environment in Pakistan Railways and increase private sector participation in the operation of rail services; to modernize the trucking industry; to reduce the cost of externalities for the country; to sustain delivery of an efficient, safe and reliable National Highways and Motorways System; and promote and ensure safe, secure, economical and efficient civil aviation operations and boost air trade. In the wake of the current global recession and political problems within Pakistan the country needs these transport and trade logistics efficiencies as much for stabilization as for growth.

3. *Karachi Port Trust (KPT).* The ports are a key component of the NTCIP, as they are used for almost 95 percent of Pakistan's international trade. There are three ports in Pakistan. The Karachi Port Trust (KPT) handles the majority of Pakistan's sea-borne trade traffic (38.7 million tons in 2008-09), and almost all of the remainder (25.2 million tons) is handled by the Port Qasim Authority (PQA). The new port at Gwadar, completed in 2005, had not attracted any significant traffic until the GOP, late last year, diverted imports of bulk cargoes - wheat and fertilizers - to the port, which handled 1.3 m tons during January-June 2009. Growth of dry cargo at Pakistan's ports has been high, averaging 11 percent p.a. in the five years up to 2008-09; and it has been even higher for the bulk cargoes - coal, fertilizers, wheat, cement, rice and clinker. KPT's traffic in these cargoes increased at 18 percent p.a. in the five years up to 2008-2009.

4. The Karachi Port comprises two wharves, East and West. There are around 30 berths in these two wharves. Of these berth numbers 1 through 17A and Ship Repair Berths (SRB) are on the East Wharf. Berths 5-17 were constructed during 1955-1960 under a World Bank financed First Development Project. Berths 5-9 were reconstructed in the late 1990's and four of those berths were subsequently concessioned to a private container terminal operator, Pakistan International Container Terminal (PICT). By early 2000 the remaining berths 10 -17A had also become suspect and in July 2007 berths 10 and 14 actually collapsed into the water forcing KPT to stop all operations on all suspect berths 10-17. KPT has already started reconstruction of berths 10-14 with its own resources but is currently in negotiations with IFC to seek external finance. The reconstruction of berths 15 - 17A forms the basis for this project.

5. These berths are shallow draft (10.4m) and ill-equipped to handle unitized or heavy cargo, but were nevertheless used mainly for dry bulks, general cargo and containers from geared vessels and were approaching full capacity in 2007. The collapse resulted in queues of ships waiting for berths in 2008, and the situation will worsen, as the rapid growth of bulk cargoes is expected to continue at Karachi Port, despite the diversion of some wheat and fertilizer to Gwadar Port. Particularly rapid growth is expected in the use of coal for power stations, and although the government favors use of local coal, its cost-competitiveness and quality remains questionable, so that much of the coal is likely to be imported. Pakistan's coal imports have been rising at about 20 percent p.a. to 3.39 million tons over the five years to 2008-09. Also, cement and wheat imports soared in 2008-09. Initial projections by the mission indicate that by 2010-11 the PQA and KPT traffic will reach nearly 27.5 million tonnes of general and dry bulk cargoes against a projected available capacity of 25.5 million tonnes.

6. The recent slowdown in the world and Pakistani trade is unlikely to have a major negative impact on the feasibility of the project. Whereas world container traffic growth is expected to fall by 10 percent in 2009, and Pakistan's container traffic fell by 2 percent in 2008-09, KPT's container traffic grew by 3 percent and dry bulk traffic by 7percent in 2008-09. Already in 2008-09 the limitation in KPT's general and bulk cargo capacity delayed wheat imports with serious economic and social repercussions for the Government.

7. **Key sector issues for Karachi Port.** Although a number of operations have been concessioned at the port which has improved overall efficiency there are still a number of areas requiring reform. The Bank had started the preparation of a project to scale back the influence of the Karachi Dock Labor Board (KDLB), which although beyond the remit of the KPT alone, does have an adverse impact on overall port operations and charges. The planned closure of the KDLB would have provided a major relief to the trade as the KDLB Cess (i.e. a charge to fund the scheme) imposes an excessive and redundant burden on the current cost of using the port. However, the government had opposed lay-offs in general and in KDLB specifically, and in May 2007 the Bank project was put on hold at the request of the government. Although this reform is still being considered the current Government is also considering structuring the recently concessioned Pakistan Deep Water Container Terminal as a 'New Port' held by the KPT. In this case the KDLB Act would not be applicable and as the natural attrition period is another 40 plus years this is an effective mechanism to at least diminish the impact of KDLB on container traffic.

8. For operations there is a continuing movement towards the landlord port model by further concessioning and privatization of some of the services provided by the KPT, such as cargo handling, pilotage and towage and dredging. Container terminals have already been concessioned and there are plans to concession the bulk terminals although the original plans ran into some legal obstacles. The current cargo handling arrangements for bulk cargoes lack efficiency with over 30 stevedores competing for the business of ship loading and unloading each bringing their own equipment and labor. These would be the arrangements to apply, at least initially; to cargo handling at the project berths and discussions are on-going on how to speed up the concessioning of bulk terminals in line with the KPT's implementation of the landlord port model.

9. The KPT currently has substantial cash reserves but needs an overhaul of its finances to improve utilization of its available resources, to break even operationally, to maintain and develop its common user infrastructure and to keep port charges to a minimum. In terms of the latter there is an on-going rationalization of the complicated port charging structure and a reduction of ten percent in port tariffs has just been announced. Another part of the financial overhaul and restructuring would involve the revaluation of the KPT assets and preparation of a business plan to detail all its financial and operational plans and strategy going forward. The KPT has been in discussions with IFC to use its advisory services to address some of these issues as well as possibilities to use public-private partnerships (PPP) and to address some of the legal impediments to a more flexible use of its cash reserves.

10. **Future development plans at KPT.** Going forward KPT has a substantial development program that will require additional financial resources. These include (i) deepening the channel and harbor to accommodate the ever increasing sizes of ships calling in the region; (ii) reconstructing old and shallow berths; (iii) investments to improve cargo movements such as the cross harbor bridge and cargo village; and (iv) the on-going development of the deep water container port. KPT also has interests in a number of non-port related activities which need to be rationalized.

B. Rationale for Bank involvement

11. The Bank is uniquely positioned to provide support to the GOP in improving the efficiency of KPT. It has an extensive international experience with development of institutional mechanisms and policies for helping ports move towards a more commercial orientation. Moreover, the Bank is one of the main international financial institutions to support the implementation of the NTCIP, of which the KPT is an integral part. The on-going Second Trade and Transport Facilitation project (TTFP2) is supporting the overall policy dialogue surrounding the NTCIP and this includes work in the ports and shipping sectors. The TTFP2 project is supporting the development of the ports master plan for the country and its subsequent implementation. This investment operation will complement TTFP2 and help back port reform in the country.

C. Higher level objectives to which the project contributes

12. The proposed operation is aligned with the Bank's new Country Assistance Strategy for 2010-2013, which accords a high priority to removing infrastructure constraints in the transport sector and improving the efficiency and reliability of the transport and logistics network. This operation is included in the new CAS to support further efficiency improvements in the port sector.

13. It also supports the GOP's Medium-Term Development Framework (MTDF) 2005-10 in establishing an efficient and well integrated transport system that will facilitate the development of a competitive economy and poverty reduction. This project is designed in line with the strategic thrust of the MTDF which is on optimal utilization of the existing capacity, improved management for maintenance and operation and coordinated use of various modes of transport.

14. It will contribute to the implementation of the National Ports Sector Strategy through further commercialization and improving the existing facilities to increase the port efficiency. In addition, it will also support the implementation of the KPT's current Business Plan, which has four key Five-Year Strategies, two of which the proposed operation will directly contribute to: (i) improvement of net contribution from existing operations and strategically increasing the revenue base by making Port operations efficient, cost effective and competitive; and (ii) creation of more financial opportunities by developing Port's infrastructure to attract the region's transshipment cargo to the Port.

II. PROJECT DESCRIPTION

A. Lending instrument, Financing Arrangements and other approaches

15. A Specific Investment Loan (SIL) from International Bank for Reconstruction and Development (IBRD) is proposed for the operation. The IBRD loan will be on-lent to KPT through the GoP at an interest rate of 8.2 percent.

B. Program objective and Phases

Not Applicable

C. Project development objective and key indicators

16. The Project Development Objective (PDO) of the proposed financing is to replace the lost port capacity and reduce shipping costs to the Pakistan economy through the reconstruction of the failed berths at Karachi Port and increasing the effectiveness and efficiency of port operations and enhancing environmental sustainability.

17. The indicators that are proposed to measure the project performance in achieving the PDO are:

(i) Reduction in waiting to service time ratio for the project berths;

(ii) Improvement in occupancy rate of the project berths[1];
(iii) Increase in throughput of the project berths;
(iv) Development, and start of implementation, of strategic development and business plans; and
(v) Development and implementation of environmental management system.

18. Main project beneficiaries will be shipping lines and public and private sector importers and exporters of bulk and general cargoes, especially coal, fertilizers, wheat, cement, clinker and rice. The benefits will include lower shipping costs, shorter turnaround and faster delivery times. For imports, these cost reductions are expected to be passed on to consumers reducing prices; while for exports, lower transportation costs should improve margins and competitiveness for Pakistani export industries. The Project is also expected to benefit Afghan transit trade.

D. Project components

19. The project has two components:

Component A: Reconstruction of Berths 15 – 17A at Karachi Port (US$ 112.6 million).

20. The component will finance the reconstruction of berths 15-17A on the East Wharf at Karachi Port. The cost estimates include civil works, construction supervision consultants, contingencies, interest during construction, fees and taxes. Cost associated with environmental management and project management will be financed by KPT. It is expected that Bank financing will be used for a single consultancy procurement for the supervision consultant and a single civil works procurement comprising:

(i) Construction of a total length of quay wall of 922 m composed of 522 m for the rehabilitation of the four berths 15 to 17A, and the further continuation of the quay wall by 400 m at an angle of 20 degrees giving room to the ships turning circle and adding a general cargo and Ro-Ro berth;
(ii) Demolition of the two existing Ship Repair Berths (SRBs) and existing shed; and
(iii) Construction of pavements and storage facilities for the whole backyard.

Component B: Institutional strengthening (US$3.8 million).

21. The institutional component will address three main areas:

22. ***Sub-component B1: Preparation of a ten-year business plan and strategic development plan (US$ 3.2 million).***
This sub-component will finance an experienced consultancy firm to prepare a comprehensive Business Plan and strategic development plan redefining the KPT's business structure projected

[1] Berth occupancy provides an overall indicator of the extent to which a port is active. Feedback from port operators puts the optimal range of berth occupancy in the range of 30-40 percent for ports servicing primarily unscheduled vessels. However, some caution needs to be used in interpreting figures: optimal levels of berth occupancy will vary from port to port depending on port configuration, cargo mix, volumes of trade and vessel scheduling. The present occupancy of the berths operated by KPT is around 70 percent.

to the short, medium and long term. The exercise will focus on (a) definition of future orientation of KPT as an institution, and (b) definition of physical development of assets and territorial management.

23. Both themes will be developed as part of a corporate business plan for the KPT covering all present and potential future activities to converge in a strategic development plan. The plan will set out how KPT will move closer to landlord port management and assume greater planning and regulatory function. The consultants will help identify the core port business and make recommendations on effective exploitation of non-core areas such as land management. The plan will also cover capital investment requirements for development of infrastructure facilities; efficiency enhancement of shipping and cargo handling operations; shore-side transport and logistics; career planning and training for human resource development; modern concepts for land management; provision of IT based management and operations and port users' representation in policy decisions.

24. To support with the implementation of short term recommendations emerging from this process, this sub-component will also support the following three activities:

(i) Training budget to support recommendations on human resource development;
(ii) Consultancy to design and evaluate the tender process for the concessioning of a bulk terminal; and
(iii) Advisory support consultants to facilitate implementation of other short term recommendations emerging from the process.

25. ***Subcomponent B2: Strengthening environmental management at the port to eventually comply with ISO international standards (US$ 0.3 million).***
This sub-component will support the design and implementation of an environmental management system (EMS) to implement a structured program of continual improvement in environmental performance that follows procedures drawn from established international business management practices and principles of quality management systems. Through the systematic approach of an EMS, KPT will: (i) define and implement the organization's environmental policy; (ii) ensure compliance with relevant environmental legislation and regulations; (iii) identify and manage its environmental impacts; and (iv) achieve continual improvements in environmental performance. The development and implementation of an EMS will allow KPT's management to track its environmental performance, and thereby develop and adopt measures to improve performance.

26. ***Sub-component B3: Improving financial management and financial planning to meet IFRS accounting standards (US$ 0.3 million).***
This component will support KPT's move towards International Financial Recording Standards (IFRS) compliant accounts, to facilitate greater access to market based financing over the medium term. Studies will be undertaken to define and implement the necessary steps to move the KPT to IFRS compliant accounts as part of its financial due diligence and for computerization of accounts.

E. Lessons learned and reflected in the project design

27. The Bank has been active in the port of Karachi since 1955. It has supported six projects to date with the last being the Karachi Port Modernization project during 1991-1998. In the last decade a number of projects have been dropped including most recently the Karachi Dock Labor Project because of difficulties in getting agreement on lending terms and reforms being proposed.

28. The lessons from previous engagement suggest that straightforward design is critical to success. The performance on the civil works aspects of previous projects has been good but implementation of institutional components has been less well executed. However, given the size of both the port and city of Karachi, seeking a long term strategic engagement going significantly beyond the rehabilitation of berths is likely to be worthwhile. Lessons suggest that more attention should be given to the private sector participation in operations, shore to gate (land side) performance and the overall management of port activities.

29. Delays in implementation have been a problem mainly due to the delays in the approval process both in the KPT and at the government level. Delays to agreed time frames can also cause an increase in the originally estimated costs. To minimize this it is important that project components have been discussed and agreed with all stakeholders, including the implementation authority, concerned Ministry, Economics Affairs Division and Planning Commission, and that consultants and contractors have been carefully consulted with. The latter needs particular consideration at this time because some international consultants and contractors are reluctant to work in Pakistan because of the security situation.

30. This project has also benefited from the on-going construction of berths 10-14 and designs for berths 15-17A have been modified to account for some of these issues including improved underground services design, better transition with adjacent structures and improved protective works for the structures.

F. Alternatives considered and reasons for rejection

31. The project involves the reconstruction of existing berths which have been decommissioned due to structural depreciation. A "do nothing" scenario was rejected both because of growing port congestion and the need to make safe the existing structures. However, a number of alternatives were considered as follows:

(i) *Relocation of berths to idle part of the harbor* – alternative suitable locations for the proposed bulk berths do exist in the Western Backwaters and Keamari Groyne areas of the port. However, these areas have already been identified for the future development of the cargo village and Pakistan Deepwater Port. Relocation on Manora Side of the port is not viable because the provision of transport links would be prohibitively expensive.

(ii) *Increase in cargo handling capacity at existing operational berths* – while the port does have plans to increase cargo handling capacity through improved equipment this

alternative would only provide a short term solution given current cargo projections. Furthermore, there is a specific requirement for some gearless berths.

(iii) *Deepening channel to accommodate larger ships at existing berths* – KPT already has plans to deepen berths and access channels. However, there is a limit to which dredging can be undertaken at existing berths because the structures have not been designed for much greater depths. The proposed new facilities are designed for larger ships.

III. IMPLEMENTATION

A. Partnership arrangements (if applicable)

32. The KPT is currently in discussions with the IFC to receive an IFC-IBRD sub-national loan of US$60 million towards the reconstruction of berths 10 – 14. These berths are already under construction and are scheduled to be completed by the end of 2010. The KPT's Board gave approval for this loan in April 2009 and the IFC has carried out its own appraisal of the project. Under Section 29 A of the KPT Act, the port needs the GOP's permission to borrow which they received in December 2009.

B. Institutional and implementation arrangements

33. The project will be implemented at the KPT Area as defined by the KPT Act in the city of Karachi, Pakistan. Under the guidance of the MOPS, KPT will bear the responsibility for project implementation. Under the KPT, the Planning and Development Division (P&DD) will undertake the day-to-day implementation activities as it has successfully done for previous Bank operations. The P&DD will be supported by consultants where necessary to discharge its duties. International consultants have already been contracted under KPT's own funds for the design services under the project. KPT will also hire the services of an eligible consultancy firm to supervise the construction activities. The Supervisory Consultant firm will act as "The Engineer" for supervision. At the site, the firm will provide a competent Chief Resident Engineer supported by a team of specialists and an inspector, who will supervise the works of the Contractor. The KPT's P&DD has thinned out in the last few years and additional staff at appropriate levels will have to be recruited to ensure that adequate project management capacity is in place during implementation, this will include a project director specifically assigned to this project.

34. The environmental work will be carried out by the Marine Pollution Control Department (MPCD) in accordance with both Pakistan and Bank environmental standards.

C. Monitoring and evaluation of outcomes/results

35. Monitoring and evaluation of results and outcomes of the project will be carried out by the P&DD of KPT. This will include review and monitoring of the project performance according to the established Results Framework and Monitoring Indicators (Annex 3). The project performance will be assessed through a number of quantitative and qualitative indicators, which have been developed to measure progress in achieving the PDO and timely detect and address problems in implementation. Mid-term and End of Project (EOP) targets were

established and agreed with the KPT during project appraisal. Individual indicators will be measured against these targets. Project progress reports will include reporting on these indicators. The KPT will furnish to the Bank quarterly reports to monitor physical and financial progress for all civil works and consultancy assignments.

D. Sustainability

36. Karachi port is a large entity that even in the midst of this financial crisis has seen growing cargo volumes. The port has a strong financial position, substantial cash reserves and revenues consistently above operating expenses. Rehabilitation of the project berths will reduce ship waiting times and reduce some of the emerging capacity constraints at the port. Continued focus on the operational aspects of the port will ensure the long term sustainability and competitiveness of the port both within Pakistan and regionally. The port does have an ambitious development plan that may pose some sustainability risks if it is not phased appropriately, or if there is political influence, but the current capital expenditure plans are not likely to pose undue burdens on KPT finances (see annex 9).

E. Critical risks and possible controversial aspects

37. The KPT has experience of implementing large civil works projects such as this and is currently reconstructing five neighboring berths using international contractors and consultants. The work appears to be to a high standard and the KPT capability to manage the work is also good. In terms of long term sustainability the port is large, financially viable and cargo flows have been, and are expected to continue, growing at a good rate. The main projects risks are:

Risk	Risk Rating	Context/Mitigation
KPT does not dredge the harbor and approach channels to allow access by design depth vessels	Moderate	◦ Even at existing water depths the port is fully operational although the larger vessels are lightened to allow access. The proposed TA program will assess long term requirements for dredging and support with privatization of dredging facilities.
Government diverts cargo away from Karachi port	Low	◦ Some diversion will occur but in the context of growing overall volumes this is unlikely to adversely impact the functioning of the port. The Bank is supporting preparation of a ports master plan to look at longer term development needs for the ports sector in the country.
KPT will not concession the operations at the project berths or otherwise adopt efficient operations	Moderate	◦ KPT plans to move towards a landlord port model and has already attempted to concession bulk cargo berths although this has run into legal difficulties. The proposed TA program in this project will support the development of a concession agreement for a bulk terminal.
Security situation slows or adversely impacts implementation progress	Low	◦ Improvements to the neighboring berths have already attracted international consultants and contractors who can operate within the relatively secure environment of the port.
Concerns regarding:	Substantial	◦ KPT competitively hired a consulting firm to design the berths. An independent ports engineer hired by the Bank has reviewed all cost

- quality of design, - transparency in procurement, and - efficiency of supervision and contract implementation		estimates and tender documents: • Procurement will be reviewed by the team and will also be cleared by OPRC; • International websites and KPT's website will be used for all procurement information dissemination; • A two-tier procurement complaint redressal mechanism has been agreed; • KPT will appoint an independent supervision firm as The Engineer on the works contract; • During supervision the Bank will also hire an independent ports engineer to join six monthly supervision missions.
Inadequate FM staffing capacity negatively impacts internal controls and may cause delays in implementation of FM procedures for the project	Substantial	• Three key FM positions are to be filled in the Accounting, Finance and Internal Audit divisions; • Accounting staff are to be involved in checking payments; And • Scope of internal audit to be expanded.
Overall project rating	**Moderate**	

F. Loan/credit conditions and covenants

38. Conditions for loan effectiveness:

(i) The Subsidiary Agreement has been executed on behalf of the Borrower and the Project Implementing Entity; and

(ii) The Accounting Policies and Procedures Manuals have been updated and adopted by the Project Implementing Entity in form and substance satisfactory to the Bank.

39. Dated covenants:

(i) Chief Accounts Officer, Manager Finance and Chief Internal Auditor are appointed no later than three (3) months since project effectiveness; and

(ii) Financial Audit 2009 is finalized and submitted to the Bank team no later than three (3) months since project effectiveness.

IV. APPRAISAL SUMMARY

A. Economic and financial analyses

40. **Economic.** The economic analysis was carried out for the rehabilitation of berths 15-17a and comprised an assessment of costs and benefits of project investments as compared to a rational "without-project" scenario and covered the period of 20 years.

41. The total investment cost is estimated at US$158.8million: (i) $108.8 million for civil works for berths 15-17A, construction supervision, environmental management, and physical

and price contingencies; and (ii) $50 million, the estimated cost of equipment to be installed at the reconstructed berths after concessioning. The main benefits considered in the analysis include: (a) reductions in the costs of queuing for berths as a result of the provision of additional berths, and (b) reductions in the costs of ship time at berths as a result of faster handling equipment that will be installed by the new private operators. The analysis did not assess the potential benefits associated from economies of size in shipping resulting from the dredging of the harbor. The dredging is not part of the project and there is some uncertainty as to when this activity will take place.

42. Based on these assumptions, the project is estimated to yield a net present value (NPV) of USD 118m (at 12 percent discount rate) and an economic internal rate of return of 23.2 percent. The robustness of these results has been verified by a sensitivity analysis.

43. **Financial.** The financial analysis[2] has focused on the overall financial health of KPT and their ability to generate sufficient surpluses to repay the proposed loan. In terms of KPT's historical financial performance, its competitive position and significant control over its tariffs, has led to healthy rates of growth, high profitability, and the accumulation of significant reserves. However, a high level of labor costs is an issue, especially given that operating expenses are growing at a higher rate than operating revenues. As KPT uses its cash reserves to finance its Capital Expenditure (CAPEX) program, non-operational revenue are expected to drop, quickly and substantially. Changes in taxation will put additional pressure on KPT's profitability in coming years.

44. Financial projections for the period of the expected loan were developed to assess KPT's capacity to service the debt given its on-going CAPEX program. During the first 5 years total revenue are projected to stay flat, at about US$175-190 million level as growth in operational revenue due to higher traffic is set-off by a decline in non-operational revenue (interest income). Non-operational revenues decline as KPT uses up its cash reserves to finance its CAPEX program.

45. Operations, however, are expected to generate strong cash flow which is projected to increase by 25 percent over the next 8 years from US$59 million to US$88 million. Despite corporate taxes, KPT's net income will be strong mainly within US$ 60-70 million range. The EBITDA[3] margin is projected to decline from 49 percent to 45 percent and stabilize at this level. Over this period, KPT is projected to pay to the government of Pakistan US$ 153 million in taxes. Current Assets are declining due to investment of accumulated cash but projected to stay at a comfortably high level. Current ratio is projected to be no lower than 1.2. Long-term debt peaks at US$ 191 million in 2012 when both IFC and IBRD loans are expected to be disbursed. The level of debt of 3.7 times EBITDA is at its maximum in 2012 though cash reserves provide comfortable cushion.

[2] The financial analysis (annex 9) has been carried out by IFC and includes both for their proposed investment and for IBRD.

[3] EBITDA – Earnings before Interest, Taxes, Depreciation and Amortization

46. The estimated financial nominal internal rate of return in the base scenario is 20 percent. Debt Service Coverage Ratio ("DSCR") defined as EBITDA net of taxes divided by the total financial debt service is strong, with the minimum of 1.6 in 2014.

B. Technical

47. A combination of the ongoing construction works to rehabilitate berths 10 to 14 and the new berthing line being proposed under this project will give the port of Karachi a modern operational facility comprising a total quay wall of approximately 1,700 m with a planned water depth of initially 14.0 m deepened at a later stage to 16.0 m. Once these facilities become operational, the Port's Western Wharf should be decongested and become available for phased reconstruction. Presently, there are 30 stevedoring companies registered to operate in the port of Karachi although only 17 companies are still active. In the short term these companies will undertake cargo handling operation using their own equipment until the berths can be concessioned.

48. In the medium term, the new areas are to be subdivided in specialized operational zones dedicated especially to dry bulk handling, project cargo, general cargo, roll-on/roll-off and containers. The optimum future exploitation of this new infrastructure in respect of equipment and labor force deployment will go along with the review of the further orientation of KPT to the Landlord management concept and the adaptation of KDLB framework. The resulting infrastructure will facilitate berthing of the largest vessels (depending on tide) and create an operation surface for storage and handling of dry bulk and general cargo including containers.

49. In the longer term, and assuming that deep water port facilities are created in the estuary, these berths would then be used for local and sub regional shipping activities presently concentrated on berths 18 to 21 which have no further room for expansion.

C. Fiduciary

50. **Procurement.** Procurement arrangements for the project have been agreed with KPT. P&DD will be responsible for the procurement. KPT has fairly established procurement procedures and the P&DD staff is quite conversant with international competitive bidding, and has also worked on the previous Bank funded projects. The KPIP will finance one major civil works contract costing about US$ 90 million, one consultancy for supervision of civil works, and a few goods and consultancy contracts related to the institutional strengthening component of the project. Details of the procurement agreements are provided in Annex 8.

51. Due to the size of the procurement involved and country environment, the procurement risk is rated as substantial. However this will be minimized by having only one large civil works contract and by having a proper procurement documentation system in place by KPT. The evaluation responsibilities in P&DD have been filled with relevant technical staff having procurement experience. KPT will publish on their web site the status of procurement of various contracts and their performance. A procurement complaints handling system will also be established to keep track of any complaints.

52. **Financial management.** The project will use the financial management system already in place at the KPT which needs some improvement. The KPT Finance's Division will be responsible for management of mechanisms to draw the Bank funds, disbursement of the funds for project activities, maintenance of proper books of accounts, and preparation of in-year and annual audited financial statements. The Financial Manual needs updating. Key positions of Chief Accounts Officer, Manager Finance and Chief Internal Auditor are vacant in the Accounting and Internal Audit Divisions. These need to be filled on a priority basis. These positions have been advertized and likely to be filled by end August – this is a condition for effectiveness. Internal controls need to be strengthened. There is also a need to develop a system for costing services offered by the KPT. This would be reviewed as part of Technical Assistance component. Given that key positions have yet to be filled the control risk is rated as Substantial. If these appointments are filled the residual risk rating will be changed to Moderate.

D. Social

53. The design consultant team has carried out site screening for possible land acquisition and resettlement impacts, including the spoil deposit areas. The screening concluded that the project, to be reconstructed at the existing site, will not have any adverse impact. The Bank task team carried out its own screening and confirmed this conclusion.

E. Environment

54. ***Environmental Impacts.*** The Environmental Impact Assessment (EIA) prepared by the KPT identified potential environmental impacts associated with both construction works and port operations. As the reconstruction of the berths will be carried out at the existing locations, there will be no change of land use and no land acquisition. Most of the impacts will be site specific. Potential impacts of the construction activities may include noise, dust, air pollution, soil contamination, camp effluent, vehicle and equipment exhaust, oil/chemical spills generated from the construction machinery and labor camps, workers' health and safety issues. No major/capital dredging activity is planned under the project except limited dredging/excavation for piling work and foundations. The disturbance of bed sediments through dredging activities may cause a short-term adverse impact on the seawater quality including turbidity plumes, release of contaminants and oxygen depletion.

55. Potential impacts of the port's daily operations may include food waste, packaging material, paper and organic waste from the entering ships and on-land facilities. As a result of the improved project berth capacity, the number of boats/ships/cargos may grow which may lead to increased pollution. Accidental oil spills may cause a long-term irreversible negative impact on the sea flora and fauna, including the adjacent mangroves and green turtles.

56. ***Environmental Management.*** The EIA prepared by the KPT suggested measures to prevent, minimize, and mitigate adverse impacts and improve overall environmental performance of the proposed project during construction and operational stages. Consultations have been held with different project stakeholders, including different government departments, educational institutions, NGOs and communities to discuss the project and its environmental impacts. Based on the findings of the EIA and suggestions of the public consultations, an EMP

has been developed for the Project, designed to mitigate, minimize, and compensate any negative effects and to enhance the overall benefits of the Project. The developed mitigation measures address the issues of water quality, soil disturbance, disposal of the construction material, health and safety of workers, air quality, solid waste, dust and noise pollution, disturbance to flora and fauna, disposal of dredged material, burrow/open pits, traffic congestion. The EMP also includes the review of regulatory requirements and applicable standards, institutional arrangements for the implementation of the EMP, roles and responsibilities of different agencies, and an environmental monitoring plan.

57. ***Implementation and Monitoring Arrangements.*** The MPCD has been assigned the responsibility for ensuring compliant implementation of mitigation measures and monitoring of EMP during the construction and operation stages of the project under the supervision of the General Manager (Planning & Development). The Planning and Development Division is to include the implementation of EMP in the bidding documents and a contractor is to be responsible for the on-ground implementation of the proposed mitigation measures. The EMP has provisions for the implementation of environmental monitoring program and earmarks resources for the capacity building needs of MPCD.

58. Due to the contiguous and continuous nature of the rehabilitation works, Bank's OP 4.01 Environmental Assessment is to be applicable to the works under contract 15-17A and Ship Repair Berths 1 and 2 on the East Wharf.

F. Safeguard policies

Safeguard Policies Triggered	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	X		
Natural Habitats (OP/BP 4.04)		X	
Forests (OP/BP 4.36)		X	
Pest Management (OP 4.09)		X	
Physical Cultural Resources (OP/BP 4.11)		X	
Indigenous Peoples (OP/BP 4.10)		X	
Involuntary Resettlement (OP/BP 4.12)		X	
Safety of Dams (OP/BP 4.37)		X	
Projects on International Waterways (OP/BP 7.50)		X	
Projects in Disputed Areas (OP/BP 7.60)		X	

59. *Environmental Assessment (EA OP/BP 4.01):* In view of the location of the project and scope of construction activities and their subsequent impacts the project is categorized as Environmental Category "B". The process has included: (i) undertaking of Environmental Impact Assessment (EIA), and (ii) development of the Environmental Management Plan (EMP). Details are given in Environment Sections above and in Annex 11.

G. Policy Exceptions and Readiness

60. The prequalification process for selection of construction firm has been undertaken and the evaluation report reviewed by the Bank. KPT will be submitting the revised evaluation report

after addressing Bank comments. Bid documents prepared by KPT were reviewed by the Bank. These will be amended based on Bank comments.

61. On the government side, all internal approvals have been obtained, including processing of the PC-1.

Annex 1: Country and Sector or Program Background

PAKISTAN: Karachi Port Improvement Project

Country and Sector Background

A. Economic developments.

1. Pakistan's macroeconomic environment has been influenced by the intensification of the war and deepening of the global financial crisis which has affected the domestic economy through bringing substantial decline in Pakistan's exports and a visible slowdown in foreign direct inflows. Real GDP grew by 2.0 percent in 2008-09 as against 4.1 percent in 2007-08. At the beginning of fiscal year 2008-09, Pakistan's economy was confronted with four major challenges which posed threats to Pakistan's recovery and socio-economic growth including *regaining macroeconomic stability, poverty reduction, fiscal retrenchment* and *weaknesses in the external account.* The overall vision has been to regain macroeconomic stability and to attain GDP growth rate of 6 percent by 2012-13 from 2.0 percent in 2008-09.[4]

2. In order to prevent macroeconomic difficulties from slowing down the pace of job creation and adversely affecting poverty reduction, the Government of Pakistan (GOP) has recently reached an agreement with the International Monetary Fund (IMF) for a USD7.6 billion package. For the first time, IMF has accepted Pakistan's homegrown programs which pursue two main objectives: (i) to restore the confidence of domestic and external investors by addressing macroeconomic imbalances through a tightening of fiscal and monetary policies until visible signs of demand curtailment; and (ii) to protect the poor and preserve social stability through well-targeted and adequately funded social safety nets. The government's new broad-based program for economic stabilization was mainly focused on rationalization of expenditures, removal of unproductive subsidies to reduce the burden on the budget; significant cuts in expenditures to reduce budgetary deficit and a tight monetary policy to fight inflation.

3. Pakistan's economic development partly depends on modernization of its transport sector which accounts for 11 percent of GDP and 16 percent of fixed investment. Pakistan's national transport system is functioning but costly, with inefficiency that is estimated to cost the economy at least 4 to 6 percent of GDP each year. In addition, this inefficiency constrains economic growth and diversification, reduces export competitiveness, and hinders social development.

B. National Trade Corridor Improvement Program.

4. In 2005, GOP initiated the National Trade Corridor Improvement Program (NTCIP) to reduce these costs and improve Pakistan's competitiveness. The national trade corridor linking Karachi to Peshawar accounts for 95 percent of external trade and contributes 85 percent of GDP. The initiative addresses constraints in rail, road, ports, and air services and infrastructure, and provides regional cooperation opportunities, particularly with India, Afghanistan, Iran and China. The key aims of the NTCIP are to encourage modern streamlined trade and transport

[4] Economic Survey of Pakistan 2008-09. "Overview of the Economy." http://www.finance.gov.pk/admin/images/survey/chapters/overview09.pdf

logistics practices; to improve port efficiency; to reduce costs for port users and enhance port management accountability; to create a commercial and accountable environment in Pakistan Railways and increase private sector participation in the operation of rail services; to modernize the trucking industry; to reduce the cost of externalities for the country; to sustain delivery of an efficient, safe and reliable National Highways and Motorways System; and promote and ensure safe, secure, economical and efficient civil aviation operations and boost air trade.

5. In the wake of the current global recession and political problems within Pakistan the country needs these transport and trade logistics efficiencies as much for stabilization as for growth. However, limited progress has been made to date and the World Bank Logistics Performance Index suggests that Pakistan is slipping down the international league table from a rank of 68 in 2007 to 110 in 2010. It suggests that there is still much to do to address institutional reforms, infrastructure constraints and procedural improvements.

C. Ports sector.

6. The ports are a key component of the NTCIP as they handle around 95 percent of the country's imports and exports. There are three ports in Pakistan: Karachi Port (KP), Port Qasim (PQ) and Gwadar Port (GP). The first two are national ports and handle about 64 million tons of cargo annually. KP maintained by the Karachi Port Trust (KPT), handles about 39 million tons of cargo or 61 percent of the entire national trade, while PQ maintained by the Port Qasim Authority (PQA) handles about 25 million tons. Both KP and PQ also serve as ports for Afghanistan and the landlocked Central Asian countries.

7. The competitiveness of Pakistan's ports compares favorably to other regional ports but more could be done to reduce tariffs and increase service efficiency[5]. Pakistan's main exports are trading in an increasingly competitive market and Pakistan needs to ensure that its ports fully support its external trade position with the highest efficiency at the lowest cost. Handling speeds at Pakistan ports are generally up to international standards and published tariffs seem to be competitive for handling cargoes, but high for handling containers by international standards. The dwell time for containers is well above an efficient international norm, and on-shore container processing times are more than twice as long as those at efficient international ports. Moreover, Pakistan has the highest charges on vessels (or port entry charges). Competition between the authorities of KP and PQ so far has been limited. The port authorities do not have marketing departments, and competition in the port sector occurs mainly at the terminal level. The terminals are free to negotiate tariffs, while the port authorities are not.

8. The ship-shore handling speeds at Karachi are in line with those at efficient international ports for all categories of cargo – especially containers, but also bulk cargoes and general cargo. Containers are handled at over 25 moves per crane/berth hour[6]. Bulk cargoes are handled at approximately 3,000-9,000 tons/ship-day, depending on the commodity handled, and general cargo at 2,500 tons/ship-day (for comparison with other ports, see Table 1). The Karachi Dock

[5] World Bank. "Trade and Transport Facilitation in South Asia: Systems in Transition." Report No. 44061-SAS. June 23, 2008. Washington, D.C.

[6] World Bank. "Pakistan Transport Competitiveness in Pakistan: Analytical Underpinning for National Trade Corridor Improvement Program." Report No. 36523-PK. July 18, 2006. Washington, D.C.

Labor Board (KDLB) does not detract significantly from ship-shore handling efficiency, simply because its workers do not participate in the actual cargo handling work. Handling rates for break bulk cargo at KPT can also be considered comparable with other ports in the region, but could still be improved, if mechanized or partly mechanized. Break bulk handling is undertaken largely by private stevedoring companies and they manage a handling rate of 2,500 tons/day. While it is significantly higher than in Chennai or Mumbai it is lower than the bagged cargo handling rates at Kandla (Table 1).

Table 1. Non-container traffic and its service efficiency at South Asia ports

Port	Country	Volume, million tons			Cargo handling rates (tons/ship-day)			
		POL	Break Bulk	Bulk	Fertilizer	Coal	Steel	Break bulk
Karachi	Pakistan	11.4	1.2	11.4	3,300	8,000	6,400	2,500
Port Qasim	Pakistan	11.2	0.2	5.4	N/A	10,000-12,000	N/A	N/A
Vizag	India	15	2	33	N/A	11,300	N/A	N/A
Kandla	India	22	4	13	4,000	N/A	N/A	2,800
Haldia	India	17	1	17	N/A	6,000	N/A	1,600
Chennai	India	11	1	22	2,100	N/A	N/A	1,100
Mumbai	India	19	7	6	N/A	N/A	1,600	1,600
Chittagong	Bangladesh	4	N/A	N/A	N/A	N/A	N/A	N/A

Source: World Bank. "Trade and Transport Facilitation in South Asia: Systems in Transition." Report No. 44061-SAS. June 23, 2008. Washington, D.C.

9. Charges for handling bulk cargoes and the residual general cargo, however, are relatively low by international standards. They are negotiated at levels of around US$4-6 per ton, which often include additional services such as bagging on the quay or re-handling. However, container handling charges at port Karachi's specialized terminals are on rather the high side. They are estimated at USD 113 per TEU (USD 122 per 20 foot container and USD 210 per 40 foot container). There are two main reasons for the relatively high charges. Firstly, the shipping lines impose several additional charges including, in some cases, a shipping surcharge whose justification is now no longer clear. Secondly, a "terminal handling charge" (THC) is effectively charged twice: (i) by the shipping line and (ii) by the container terminals. If the THC were charged only once, the cost would be around USD 88 per TEU, which is more than in line with international charges, including in Indian ports.[7]

10. Port entry charges are high at KP. The combined KPT charges on ships for port entry, tugs, pilotage and berth hire amount to about USD0.82 per GRT[8]. Until recently they were even over USD 1 per GRT, but under NTCIP, KPT has reduced the average port entry cost to USD0.82 which is still above PQA's port charges (USD 0.72 per GRT). This would be equivalent to USD 26 per TEU on the assumption of a 35,000 GRT ship handling 1000 TEU. These high tariffs are particularly for "wet charges" but make the port dues at KPT and PQA higher than some of their regional competitors such as Colombo, Dubai and Shalala (Table 2). The high charges may deter ships from making additional calls, particularly for relatively low

[7] World Bank. "Pakistan Transport Competitiveness in Pakistan: Analytical Underpinning for National Trade Corridor Improvement Program." Report No. 36523-PK. July 18, 2006. Washington, D.C.

[8] Gross Register Tonnage (GRT) represents the total internal volume of a vessel, where a register ton is equal to a volume of 100 cubic feet (2.83 m^3), which volume, if filled with fresh water, would weigh around 2.8 tons.

volumes of containers and they feed through to the users in higher freight rates. Overall economic policies may be better served by lower port profits and lower shipping freight rates.

Table 2. Regional comparison of port charges/vessel call (USD per 2,800 TEU vessel)

Port	Port Dues	Port	Port Dues
Karachi, Pakistan	30,000	Singapore, Hong Kong	6,000
Port Qasim, Pakistan	30,000	Colombo, Sri Lanka	5,500
Nhava Sheva, India	26,000	Jebel Ali, UAE	3,100
Yantian, China	14,000	Salalah, Oman	2,100

11. At Karachi, the average dwell time is 6-7 days (as of 2008)[9], which is above the international standard of 3-5 days. In general, the long dwell times lengthen supply chains and reduce competitiveness. While green customs channels have been established at Pakistan ports, containers still have to be moved from ship to stacking yards before they are cleared. Direct delivery from the quayside would reduce dwell time significantly as well as congestion in the stacking yards. Failure to solve the dwell time problem would entail unnecessary duplication of investment in container terminals. Conversely faster dwell time tailored with customs reform should contribute to capacity increase.

12. KP has limited draft of 10 to 12m within the harbor and 12.2m at the approach and to allow the next phase of container shipping, drafts need rapidly to be deepened to 13.5m within the harbor and 16.0 m at the approach or even deeper, to not lose KP's competitive position and be relegated to feeder port status. In the past years, the average size of ship serving KP has substantially risen, and as traffic increase, shipping lines will want to deploy even larger ships. If this issue is not addressed, the limited drafts would become the most serious constraint.

13. KP has a limited inland transport capacity. KP is linked to the rest of the country by the Pakistan Railways (PR), with only 2 freight trains a day serving the port. Besides a railway system, congested urban streets are another way to move freight from/to KP to/from motorways. Such inadequate hinterland connectivity, coupled with limited draft, has been contributing to reduction in the port's performance because of lengthy detention of containers. KPT is currently in discussion with the PR to increase the number of trains serving the port, and is also considering constructing a harbor bridge which will serve as a by-pass to improve road connectivity.

14. Increasing the role of private sector management at KPT would raise productivity, particularly for containers and break bulk cargo, especially if accompanied by competition within and between the ports. Trade competitiveness could be strengthened by (i) reducing port costs and port charges on both vessels and cargo, (ii) deepening drafts which would reduce shipping costs and provide the capability to handle the expected increase in vessel size, (iii) mechanizing the handling of break bulk cargoes, and (iv) improving inland transport capacity, and (v) revising the authority for negotiating tariffs.

[9] *Source*: World Bank. "Trade and Transport Facilitation in South Asia: Systems in Transition." Report No. 44061-SAS. June 23, 2008. Washington, D.C.

D. Cargo volumes.

15. Cargo volumes through Pakistan's ports have been increasing rapidly over the last five years and remained resilient to the recent global down-turn. During FY 2007-08, KPT experienced a remarkable increase of 55.3 percent in exports and maintained the increasing trend, though at a slower pace (14.5 percent), in FY 2008-09. Meanwhile, PQA experienced a shortfall of 25.7 percent in exports during FY 2007-08, but managed to remain at the same level in handling exports (with a slight increase at 3 percent) in FY 2008-09. The new port at Gwadar, completed in 2005, had not attracted any significant traffic until the GOP, late last year, diverted imports of bulk cargoes - wheat and fertilizers - to the port, which handled 1.3 million tons during January-June 2009. The average growth of the container traffic has been high - at 10.6 percent in the past decade at Pakistan's two main ports, with 8.18 percent at KP. Even during the last two years of recession, there was an average annual growth rate of 7.05 percent at KP and it is expected to increase at the same rate until 2010-2011, picking up to 8 percent in the next ten years.

16. Growth of dry cargo has been high, averaging 11 percent p.a. at Pakistan's ports, and even more at KP, in the five years up to 2008-09. It has been even higher for the bulk cargoes - coal, fertilizers, wheat, cement, rice and clinker. KP's traffic in bulk cargoes increased at 18 percent p.a. during the same period (Table 3).

Table 3. Cargo volumes handled by KPT and PQA during 2004-2009, thousand tons

	2004/5	2005/6	2006/7	2007/8	2008/9	Growth p.a 2004/5-2008/9
Coal	1,631	2,323	2,703	4,228	3,545	21%
Of which KPT	1,402	1,977	2,703	3,556	3,397	25%
Wheat	1,509	840	125	1,762	2,318	11%
Of which KPT	84	4	43	473	983	85%
Cement	134	113	1,022	2,775	5,111	149%
Of which KPT	134	113	711	2,229	3,793	131%
Fertilisers	1,409	2,092	1,230	1,486	676	-17%
Of which KPT	1,409	2,092	1,230	1,486	676	-17%
Rice	1109	1320	1661	1117	1053	-1%
Of which KPT	1041	846	1253	937	828	-6%
Steel	1262	1685	842	795	586	-17%
Of which KPT	1262	1685	842	795	586	-17%
Total, cargoes shown						
KPT	5,332	6,717	6,782	9,476	10,263	18%
PQA	1,722	1,656	801	2,687	3,026	15%
TOTAL	7,054	8,373	7,583	12,163	13,289	17%

Source: Economic Analysis Report of the Consultant.

17. The rapid growth of bulk cargoes is expected to continue at the KP (Table 4), despite the diversion of some wheat and fertilizer to GP. Particularly rapid growth is expected in the use of coal for power stations. Although the government favors use of local coal, its cost-competitiveness and quality remains questionable, and much of the coal is likely to be imported. PQA is constructing a dedicated coal terminal which is expected to meet much of the future coal handling requirements. KPT also plans to develop dedicated handling facilities in the future.

Table 4. Summary of forecasts for the bulk and general cargoes handled at the KPT berths

	Coal	Fertilizers	Wheat	Cement	Rice	Iron, Steel	Iron Scrap	Others	Total	Growth p.a.
2008/9	3,397	676	983	3,793	828	986	337	1,579	12,579	
2015	7,100	1,615	2,518	3,932	1,030	1,321	483	2,116	20,115	8.1%
2020	10,500	1,964	1,674	4,278	1,417	1,768	588	2,701	24,890	4.4%
2030	15,913	2,908	1,969	4,816	1,985	3,166	790	4,399	35,947	3.7%

Source: The forecast done by the consultant for the economic analysis of the project

E. Karachi Port Trust (KPT).

18. KPT is an agency of the federal government originally established under the KPT Act (1886) to administer the Karachi Port. Karachi is Pakistan's busiest port handling about 60 percent of country's total port traffic. It is located in close proximity to major shipping routes and is currently developing a deep water container terminal to play a more important transshipment role in the future. KPT has a governing board comprising eleven members. It is headed by a Chairperson who is appointed by the Government of Pakistan and the remaining 10 Trustees are equally distributed between representatives of the public and private sectors. The federal government oversees KPT's operations through the Ministry of Ports and Shipping.

F. Port facilities.

19. The KP comprises two wharves, East and West. The port has 30 dry cargo berths, three liquid cargo-handling berths (oil piers) and two ship repair jetties. Of those thirty berths, 17½ berths are on the East Wharf— berth numbers 1-17A. Berths 5-17 were constructed during 1955-1960 under a World Bank financed First Development Project. Berths 5-9 were reconstructed in the late 1990s and four of those berths were subsequently concessioned to PICT. By early 2000 the remaining berths 10-17A had also become suspect and in July 2007 berths 10 and14 actually collapsed into the water forcing KPT to stop all operations on all suspect berths 10-17A.

20. Much of the cargo handled at the berths 10-17A has been shifted to other berths at KPT but from 2008 ship waiting times for berths have been increasing. The occupancy of the berths operated by KPT has also been steadily increasing in the past years and now stands at an average of 70 percent[10]. This indicates increasing congestion at the port which will only worsen, if the volume of bulk cargoes continues to grow at the predicted rate.

21. Berths 10-14 are already under reconstruction and scheduled to be completed by the end of 2010. KPT are currently in discussions with IFC to finance these berths through a sub-national loan. KPT has approached the WB to help finance the reconstruction of berths 15-17A which is the basis for this project. Currently the Berths 10-17A are shallow draft (10.4m) and before the

[10] Berth occupancy provides an overall indicator of the extent to which a port is active. Feedback from port operators puts the optimal range of berth occupancy in the range of 30-40 percent for ports servicing primarily unscheduled vessels. However, some caution needs to be used in interpreting figures: optimal levels of berth occupancy will vary from port to port depending on port configuration, cargo mix, volumes of trade and vessel scheduling.

collapse were ill-equipped to handle unitized or heavy cargo, but were nevertheless used mainly for dry bulk and general cargo and were approaching full capacity in 2007. The reconstruction is necessary to prevent any further quay walls from collapsing and to restore the approximately 40 percent of berthing capacity that has been lost. In addition, cargo handling and storage capacity has also to be restored. It is planned that the bulk (dirty) cargos will move to specialized facilities at PQ and PG which will leave the berths 10-17A for dry bulk, break bulk, containerized cargo and for domestic and coastal dry cargo traffic.

G. Port operations.

22. KPT has been trying to move towards the landlord port model and has made some progress in this direction. Out of the 30 dry cargo berths, 9 have been assigned to two private terminal operators – Karachi International Cargo Terminal (KICT) and Pakistan International Cargo terminal (PICT) – to operate as independent container terminal on a BOT basis. However, the remaining 21 berths are operated by KPT and cargo handling arrangements for bulk cargoes lack efficiency with over 30 stevedores competing for the business of ship loading and unloading each bringing their own equipment and labor. KPT have attempted to concession a bulk terminal on berths 10-13 but this ran into a legal dispute which has yet to be resolved. Delays in resolving this dispute have hampered the port in their goal of having a number of dedicated bulk terminals concessioned to the private sector. The port has decided to put on hold some of its original plans for the outsourcing of pilotage and towage, and dredging.

23. Until the legal dispute is resolved there is still some uncertainty on operations but KPT plans to operate the newly rehabilitated berths 10-17A as follows:

(i) Berths 10 and 11 are being considered for possible concessioning to a container terminal.
(ii) Berths 10 to 15 are planned to be dedicated to dry bulk cargo handling through tendering of PPPs for cargo handling and storage operations.
(iii) Berths 16 to 17A and beyond to be operated as common user facilities for break bulk, containerized cargo, RoRo and domestic and coastal dry cargo traffics. These will be operated by tendering to Stevedores and licensed operators.

H. Future investment and business plans.

24. To accommodate future demand KPT has an ambitious investment program but it also needs to modernize the management of the business. In order to maintain its dominance in the country as the major sea port, and to cater for larger vessels due to the growing import and export demand and for the ever increasing need for improvement in the port facility, KPT has developed an elaborate plan for port expansion, including (i) deepening the channel and harbor to accommodate the ever increasing sizes of ships calling in the region; (ii) improving the KPT's hinterland connectivity through its host city of Karachi; (iii) investments to improve cargo movements such as the cross harbor bridge and cargo village; and (iv) plans to develop a deep water container port.

25. However, to implement such an ambitious plan, the KPT needs to reform its business model and consider the most appropriate investment strategy going forward. This project will support the development of a strategic development plan and vision document to support KPT to implement its investment program and strengthen its competitive status not only in the country, but also in the region. Some of the key issues are as follows:

(i) Review the investment strategy to align priorities with expected business requirements and phase the investment program in line with expected revenues and sources of capital.
(ii) Reinvigorating the move towards the landlord port model including the concessioning out of some bulk terminals and outsourcing services such as pilotage and towage.
(iii) Increased attention to human resource development for the management cadres including training in business management, marketing and operational skills needed in the increasingly competitive sector.
(iv) Addressing issues of the labor force and particularly the role of the Karachi Dock Labor Board (KDLB) whose 4,000 members undertake little actual work[11], but have to be paid. KDLB workers add USD 17/TEU and about USD 1/ton for general cargo, which is equivalent to 15-20 percent of the total handling charges. Although KPT has reduced its labor force and staff from about 14,000 to 5,000, it still forms almost 60 percent of KPT's costs (less depreciation).
(v) Management of non-core port activities related to the extensive landholdings owned by KPT in Karachi City and property development projects such as the Maritime Enclave, Port Business District, and Food Court. It may be more efficient to identify priorities and determine if the non-operational landholdings should be managed by a separate entity which will allow port management focusing entirely on managing core port activities.
(vi) Improving relations with port users and neighboring community which will be key to taking forward the ambitious investment program and making the port responsive to the needs of the users and other stakeholders. Now may be the time to reestablish the port user group and review the composition of the KPT board to make it more responsive to user needs.

I. Port finances.

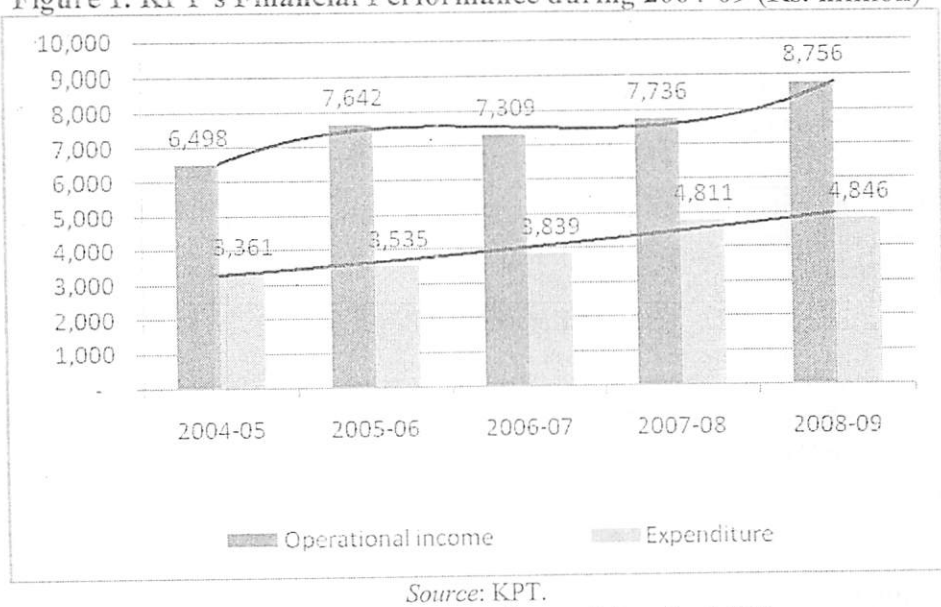
26. At present KPT has a strong financial position but it needs to improve financial planning and management to finance the investment program and to attract external finance. Its sound financial performance is demonstrated by an average annual revenue growth of 5 percent during the past five years (see Figure 1 and Annex 9) and given the growth forecasts this is likely to continue. The KPT's budgeted revenues have been nearly twice as high as its budgeted costs. A surplus of this level is unusual in the port industry, as is the very high level of income from non-port related investments, which is in the range of 40-50 percent in case of the KPT. However, going forward KPT will need to undertake careful financial planning to utilize its resources

[11] Container terminal operators and private stevedoring companies employ their own workers but still have to pay for large KDLB gangs who attend and observe the work. In addition, the operators have to pay a KDLB cess to compensate KDLB members when there is no "work" available.

effectively particularly given gradually reducing tariffs and the introduction of a 35 percent tax rate at the beginning of 2010[12].

27. The large capital expenditure program will require KPT to look for capital from both domestic and international sources. Its current financial accounting system, while sufficient for domestic borrowing, would not meet the requirements of international Banks. Through this operation technical assistance will be provided to get the port up to International Financial Reporting Standards (IFRS) and to improve its ability to raise finance on international markets. Through a separate Public Private Infrastructure Advisory Facility (PPIAF) grant the Bank is planning to support the port to improve its overall financial planning arrangements. This will include optimizing the deployment/investment of KPT's surplus cash consistent with the demands of its medium term business plan; a review of the current legal impediments for KPT to invest its cash; and the preparation of a governance accountability action plan (GAAP).

Figure 1. KPT's Financial Performance during 2004-09 (Rs. million)



Source: KPT.

Note: This does not include capital expenditures of about Rs. 2 Billion per year

J. Environmental management.

28. The planned expansion of the port while maintaining good community relations will require enhanced environmental planning and management. While implementing its new investments, KPT will face a large number of environmental issues which will require not only compliance with the country's regulatory framework, but also improvement in its environmental management capacity and development of environmental monitoring program within the institution. KPT will need strengthening of its environmental management and procedures to reach compliance with certification schemes such as ISO 14001 and OHSAS 18001.

[12] Although KPT have paid tax for FY09 and FY10, they are currently disputing the legality of this tax.

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

PAKISTAN: Karachi Port Improvement Project

Issue	Project	Latest Supervision Ratings	
World Bank-financed, completed or on-going		Implementation Progress	Development Objective
Designed to address transport and logistics issues through support to reforms and improvement in infrastructure and its operations.	Second Trade and Transport Facilitation (P101684)	On-going	MS
Designed to assist with sustainable delivery of a productive and efficient national highway network, contributing to lower transportation costs.	Highways Rehabilitation (P010556)	On-going	S
Modernize Pakistan's traditional trade and transport facilitation practices and procedures.	Trade and Transport Facilitation Project (P056213)	Closed	S
Designed to assist in the economic development of Pakistan, providing additional capacity to cope with present and future traffic, rehabilitation, and reconstruction of existing facilities in the port.	Second Karachi Port Project (P010031)	Closed	S
Designed to improve and expand the port of Karachi through the expansion of existing facilities.	Third Karachi Port Projects (P010076)	Closed	S
Designed to improve and expand the port of Karachi.	Fourth Second Karachi Port Project (P010089)	Closed	S
Designed to improve and expand the port of Karachi through the rehabilitation and expansion of existing facilities in the port.	Karachi Port Modernization Project – Ports V	Closed	S

Other development agencies, completed, ongoing and planned		
Donor	**Projects**	**Status**
ADB	Support to Port Management Unit	On-going
	Preparation of Transport Sector Policy	On-going

Annex 3: Results Framework and Monitoring

PAKISTAN: Karachi Port Improvement Project

Results Framework

PDO	Project Outcome Indicators	Use of Project Outcome Information
To replace the lost port capacity and reduce shipping costs to the Pakistan economy through the reconstruction of the failed berths and increasing the effectiveness and efficiency of port operations and enhancing environmental sustainability.	(i) reduction in waiting to service time ratio for the project berths; (ii) improvement in occupancy rate of the project berths; (iii) increase in throughput of the project berths;	To assess the project's contribution to KPT's efforts in improving its efficiency
Intermediate Outcomes	**Intermediate Outcome Indicators**	**Use of Intermediate Outcome Monitoring**
Component 1: Berth Reconstruction - Reconstruction of berths, quay wall and backyard facilities	(iv) reconstruction of berths 15, 16, 17, 17A, additional general cargo and Ro-Ro berth, quay wall of 922 meters and backyard facilities completed;	To assess progress in performance and to re-direct, if necessary, to achieve the PDO
Component 2: Institutional Support The institutional capacity of KPT strengthened in areas of long-term business planning, financial management, and environmental management	(v) KPT's Five-year Business Plan developed and key short-term recommendations implemented; (vi) KPT's audits fully complying with IFRS[13]; (vii) KPT complying with ISO 14001 environmental management	To assess progress in performance and to re-direct, if necessary, to achieve the PDO

Arrangements for results monitoring

The Project performance will be assessed through a number of quantitative and qualitative assessments. The indicators and assessments will be regularly monitored as per frequency outlined in the Arrangements for Results Monitoring Table. The definitions of the outcome indicators used in the KPIP's Results Framework and Monitoring are provided below:

(i) "Waiting to service time ratio" is ship days waiting for berths divided by ship days at berths.

(ii) "Berth occupancy rate" is total days at berths divided by berth days available at project berths;

(iii) "Berth throughput" is total tonnage of cargo handled at berths (150 m equivalent) divided by total number of berths.

[13] IFRS is a set of International Financial Recording Standards or accounting standards, developed by the International Accounting Standards Board (IASB) that is becoming the global standard for the preparation of public company financial statements.

Arrangements for results monitoring

		Target Values					Data Collection and Reporting		
Project Outcome Indicators	**Baseline**	YR1	YR2	YR3	YR4	YR5	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
(i) reduction in waiting to service time ratio;	0.54				0.3	0.35	Annual progress reports	Cargo traffic survey to collect the data and economic analysis to process the data	P&DD
(ii) improvement in occupancy rate of project berths;	74%[14]				45-55%	45-55%			
(iii) increase in berth throughput, 000 tons per berth per year	0 tons				562.5[15]	1,125[16]			
Intermediate Outcome Indicators									
Component 1: Berth Reconstruction									
(iv) reconstruction of berths 15, 16, 17 & 17A, quay wall of 922 meters and backyard facilities completed	Non-functional berths	10%	50%	90%	Reconstruction fully complete		Annual progress reports	Reporting	P&DD

[14] Average occupancy of project berths before collapse
[15] This is half the final target.
[16] It is the present capacity of each berth at KPT as per Aide Memoire of the Preparation Mission, October 30, 2009

Project Outcome Indicators	Baseline	Target Values					Data Collection and Reporting		
		YR1	YR2	YR3	YR4	YR5	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Component 2: Institutional Support									
(v) KPT's Five-year Business Plan developed and key short-term recommendations implemented	No five-year Business Plan		Business Plan developed for 2011-2016	Design for bulk terminal concession produced	Key short-term recommendations implemented		Annual progress reports	Reporting	P&DD
(vi) KPT's audits fully complying with IFRS	Partial compliance with IFRS		Recommended action for IFRS compliance produced		Recommendations implemented	Full compliance with IFRS	Final audit report	Auditors report	KPT's Finance Division
(vii) KPT complying with ISO 14001 environmental management	No compliance with ISO 14001		Recommended action for ISO compliance produced		Recommendations implemented	Compliance with ISO 14001	Final Auditors report	Auditors report	MPCD

Annex 4: Detailed Project Description

PAKISTAN: Karachi Port Improvement Project

1. The Eastern Wharf of the Port is presently extremely restricted in its operational capacity. Vessels carrying heavier bulk such as cement and rice have to be lightened at berths 1 to 5 in order to reduce draught and proceed to resume operations at berths located inside the port with lesser draft (berths 22 and 23 with draught of 7.3m). Given that the waterfront berths 10 to 17A are out of service, together with the contiguous areas of backyard operation there is increasing congestion and delays to vessel operations. The rehabilitation of berths 10 to 17A will offer the possibility of dredging to 16m depth, create a larger apron area with new bollards and a wide clean paved area and provide a uniform quay wall of around 1.550 meters length. The new facility will provide an ample backyard area permitting a versatile management of the new port infrastructure. Berths 10 to 14 are already under construction and will be completed by the end of December 2010. KPT are currently in discussions with IFC to provide an IFC-IBRD sub-national loan to support financing of these berths. This project will finance the construction of berths 15 to 17A and related studies.

2. This project will include two components:

Component A: Reconstruction of Berths 15 to 17A (US$112.6 million)

3. The component will finance the reconstruction of berths 15-17A on the East Wharf at Karachi Port. The cost estimates include civil works, construction supervision consultants, contingencies, interest during construction, fees and taxes. This component will finance the reconstruction of a total length of quay wall of 922 m composed of 522 m for the rehabilitation of the four berths 15 to 17A, and the further continuation of the quay wall by 400 m at an angle of 20 degrees giving room to the ships turning circle and adding a general cargo and Ro-Ro berth. The civil works comprise:

(i) Construction of approximately 922 meters of continuous 2 meter diameter concrete piled quay wall with the front wall tied back with 140 mm solid steel tie rods connected to the anchor wall 55 meters behind, comprising 1.6 meter diameter reinforced concrete piles at 2.1 meter spacing. The quay wall will be equipped with 100 ton capacity bollards and fenders sized for the largest 100,000 DWT bulk vessels.

(ii) The new berths are designed for a declared depth of 16 meters port datum with allowance for over dredging / siltation. It is expected that the overall channel dredging will be undertaken first to 14 meters and eventually to 16 meters when economies of size justify it. The dredging work is not part of this project and the project benefits have been calculated assuming current water depths.

(iii) Construction will include berth filling behind the new quay wall, paving the yard and provision of water supply and sewerage services, electrical utilities and lighting.

(iv) Demolition and debris removal will be included for the old Ship Repair Berths 1 and 2, the old revetment wall, the Napier Mole Boat (NMB) Wharf and transit shed no.16.

4. **Detailed Design:** The detailed design, construction drawings and tender documents were originally completed in June 2007. These documents have been amended to incorporate lessons

learnt during the construction of berths 10 to 14. Changes include a decrease in the spacing of tie rods from 4.2 meters to 2.1 meters, an increase in the size of anchor piles from 1.6 meter diameter to 2.0 meter diameter and anchor beam design amended and strengthened. Other changes have included improved transition details and a better design of the quay wall beyond berth 17A to the turning basin.

5. **Supervision Consultants:** This component will also finance the construction supervision consultants for Berths 15 to 17A at an estimated cost of US$3.8 million.

Component B: Institutional strengthening (US$3.8 million).

6. The institutional component will address three main areas:

Sub-component B1: Preparation of a ten-year business plan and strategic development plan (US$ 3.2 million)

7. This sub-component will finance an experienced international consultancy firm to prepare a comprehensive Business Plan and strategic development plan redefining the KPT's business structure projected to the short, medium and long term. The exercise will focus on (a) definition of future orientation of KPT as an institution, and (b) definition of physical development of assets and territorial management.

8. Both themes will be developed as part of a corporate business plan for the KPT covering all present and potential future activities to converge in a strategic development plan. The plan will set out how the KPT will move closer to landlord port management and assume greater planning and regulatory function. The consultants will help identify the core port business and make recommendations on effective exploitation of non-core areas such as land management. The plan will also cover capital investment requirements for development of infrastructure facilities over the next 10 years up to 2020; efficiency enhancement of shipping and cargo handling operations; career planning and training for human resource development; modern concepts for land management; provision of IT based management and operations and port users' representation in policy decisions.

9. In undertaking this exercise the following areas will be reviewed:

- Traffic analysis and forecast: the KPT will have to establish according to its own visualization of Pakistan's economical development the development of volumes of the different commodities shipped via Karachi;
- Definition of strategies to attract or eventually dissuade certain traffic to be handled via Karachi;
- Review of physical facilities: Existing port infrastructure and facilities, their details and state of repair. Proposals and preliminary details for new facilities during the next 10 years (up to 2020) to accommodate forecast traffic growth and type of ship.
- Efficiency enhancement: The KPT will review the handling practices, methods and speeds, current and forecast, to prepare an efficiency enhancement plan including concessioning terminals and facilities to move closer to landlord port management.

- Qualitative and quantitative human resource assessment leading to development of targeted training program; The structure and project related suitability of KPT's Planning and Development staff will be reviewed and supplemented through recruitment, training and professional development courses, local and foreign, to transform it into KPT's Core Technical Unit.
- Study of KPT working and conversion to IT based management and operations;
- Review of statutory documentation governing the functioning and institutional role of KPT internally and in respect to the port community;
- Definition of the type and modus of use of land under KPT custody, zonification and destination;
- Identification of opportunities to modify or adapt the legal and regulatory framework of KPT in respect of the targeted role as Regulatory Body and Authority; and
- Options to strengthen and institutionalize regular dialogue and consultations with port users and the broader port community.

10. To support with the implementation of short term recommendations emerging from this process, this sub-component will also support the following three activities:

(i) Training budget to support recommendations on human resource development;
(ii) Assistance by specialist international consultants, employed on short term basis, to assist in advising and preparing concession documents, evaluation and award of terminals and facilities; and
(iii) Advisory support consultants to facilitate implementation of other short term recommendations emerging from the process. This sub-component will also finance implementation support where required, particularly with regard to contract management.

11. This exercise will be undertaken in parallel with the ports master plan that is being considered for the country under the on-going Bank financed Second Trade and Transport Facilitation Project.

Sub-component B2: Strengthening environmental management at the port to eventually comply with ISO international standards (US$ 0.3 million).

12. This sub-component will support the design and implementation of an environmental management system (EMS) to implement a structured program of continual improvement in environmental performance that follows procedures drawn from established international business management practices and principles of quality management systems. Through the systematic approach of an EMS, KPT will: (i) define and implement the organization's environmental policy; (ii) ensure compliance with relevant environmental legislation and regulations; (iii) identify and manage its environmental impacts; and (iv) achieve continual improvements in environmental performance. The development and implementation of an EMS will allow KPT's management to track its environmental performance, and thereby develop and adopt measures to improve performance.

13. In the context of accepted international frameworks for environmental management systems, KPT's EMSs will include the following components:

(i) Definition of a set of policies and objectives for environmental performance of KPT's activities;
(ii) Identification of the environmental impacts and risks of the activities;
(iii) Establishment of programs of mitigation and improvement measures and specific actions that address identified risks and impacts;
(iv) Establishment of an organizational structure to implement the program; and
(v) Monitoring and review of the effectiveness and performance of the impact and risk mitigation program.

14. The following activities would be required to reach ISO 14000 certification:
(i) Design of EMS
(ii) Implementation of EMS
(iii) Gap Analysis and preparation for ISO 14000 Certification
(iv) External Audit

Sub-component B3: Improving financial management and financial planning to meet IFRS accounting standards (US$ 0.3 million).

15. This component will support KPT's move towards IFRS compliant accounts, to facilitate greater access to market based financing over the medium term. Studies will be undertaken to define and implement the necessary steps to move KPT to IFRS compliant accounts as part of its financial due diligence.

Annex 5: Project Costs

PAKISTAN: Karachi Port Improvement Project

Project Cost By Component	Local US $million	Foreign US $million	Total US $million
A. Reconstruction of Berths 15-17A			
Civil Works	68.40	22.80	91.20
Supervision Consultants	2.80	1.00	3.80
Environmental Management (KPT financed)	0.30	-	0.30
PMU/Operating cost (KPT financed)	0.30	-	0.30
Physical/Price Contingencies	10.30	3.40	13.70
Interest during construction	-	3.00	3.00
Front-end Fee	-	0.30	0.30
Subtotal	**82.10**	**30.50**	**112.60**
B. Institutional Strengthening			
B1: Business plan and strategic development plan	-	2.30	2.30
B1 (i): Training	0.20		0.20
B1 (ii): Bulk terminal concession	0.10		0.10
B1 (iii): Advisory including IT	0.60		0.60
B2: Environmental management strengthening	0.30		0.30
B3: IFRS compliance	0.30		0.30
Subtotal	**1.50**	**2.30**	**3.80**
Total Financing Required	**83.60**	**32.80**	**116.40**[17]

[17] Out of the Total Financing requirement of USD 116.40 million, USD 115.8 million will be financed by IBRD and USD 0.6 million by the Government of Pakistan for environmental management and project operating costs

Annex 6: Implementation Arrangements

PAKISTAN: Karachi Port Improvement Project

A. Company background

1. The port of Karachi was founded in 1854 when the first dredging project was started and first facilities were built in this area. KPT was created in 1887 following the adoption of the Karachi Port Trust Act 1886 ("KPT Act"), and since then has been the entity responsible for administering the Karachi port. Today, KPT is a public sector entity of Pakistan and federal oversight is being exercised through the Ministry of Ports and Shipping. KPT exists and operates as a trust governed by the Board of Trustees, and any accumulated surplus is used for funding of development projects, improvement in infrastructure and modernization of its fleet and equipment. KPT Act does not provide for any mandatory payments to the federal government. It is legally separate from the government and has reasonable operational independence.

2. KPT's Board of Trustees comprises eleven members – the Chairman and ten Trustees. The Chairman is appointed by the Federal Government and is also the Chief Executive of KPT. The remaining ten Trustees are equally distributed between the public and the private sectors. The five public sector Trustees are nominated by the Federal Government and may or may not be public servants. Seats for private sector Trustees are filled by elected representatives of various private sector associations[18]. Trustees hold their positions for 2 years (except for the Chairperson) but can be re-elected or reappointed for another term. The Act has provisions disqualifying Trustees in case of a conflict of interests with their Board duties as well as restricting their voting power in respect of matters in which they may have personal or professional interest.

3. KPT has six main divisions of administration each headed by a General Manager, these include: (i) Administration, responsible for HR-related and other administrative issues; (ii) Finance, covering finance and accounting; (iii) Operations, handling traffic and ship movements; (iv) Engineering, responsible for maintenance or assets; (v) Civil Works and Estate, responsible for civil works and real estate management, and (vi) Planning and Development, responsible for major capital expenditure projects.

B. Project Management

4. All KPT development projects are reviewed and approved by the KPT Board. Contract agreements are signed by the Chairperson and two trustees of the Board, and witnessed by the Secretary of the Board and the General Manager (P&DD).

5. The Planning and Development Division (P&DD) is responsible for all development projects at KPT and will undertake the day-to-day implementation activities of this project as it has successfully done for previous Bank operations. The KPT's P&DD has thinned out in the last few years, and currently out of approved staff strength of 36, P&DD is functioning with only 18

[18] (i) Chamber and Industry, Karachi; (ii) Karachi Chamber of Commerce and Industry, Karachi; (iii) Karachi Cotton Association; (iv) Pakistan Shipowners Association Karachi, and (v) Karachi Municipal Corporation.

filled positions, while the remaining 18 positions are vacant. The lower tier of the management is mostly missing. Additional staff at appropriate levels will have to be recruited to ensure that adequate project management capacity is in place during implementation.

6. As per normal KPT procedures, for large development projects, the General Manager P& DD represents the KPT Board as the designated Project Director. The General Manager in-turn is supported by a team comprising Project Manager, Project Engineer, Executive Engineer, and Assistant Executive Engineer which forms the core project management unit within P&DD. KPT has already indicated that the project management unit currently managing the reconstruction of Berths 10 to 14 will be retained to manage this proposed project as well. In addition the P&DD will be supported by consultants where necessary to discharge its duties. International consultants have been contracted to undertake the detailed design work, preparation of bidding documents and support in the procurement process. KPT will hire an eligible consultant firm for supervision of civil works for the rehabilitation of berths 15-17A.

7. The Supervision Consultant as "The Engineer" will be responsible for supervision and project management, including inspection, guidance, approval and certification of invoices submitted by the Contractors, and technical services connected with the project implementation. At the site, the consultant firm will provide a competent Chief Resident Engineer supported by a team of specialists and inspectors, who will supervise the works of the Contractor. The Supervisory Consultant will report to the General Manager P&DD/Project Director.

8. KPT will also hire individual consultants to help in matters relating to contract management, project management, legal and implementation support.

9. The detailed design for the civil works component has already been completed by the consultants for KPT. This includes the preparation of drawings, specifications and cost estimates. Lessons learnt during implementation/reconstruction of berths 10 to 14 have been incorporated in the design of berths 15 to 17A.

C. Project Implementation Period

10. The project would be implemented over a period of about five years i.e. Effectiveness: January 2011; Project Completion: June 2015; and Loan closing date: December 2015.

D. Monitoring and evaluation of outcomes/result

11. The P&D Department of KPT will be responsible for monitoring the outcome of the project. P&DD will hold meetings with the World Bank on a quarterly basis to monitor progress in implementation of KPIP. In addition, P&DD will also prepare annual reports by no later than March 31 of each year of project implementation. The reports will cover: (a) the progress of each component, key performance indicators, and financial statements; and (b) the annual work program for the following fiscal year, annual funds required for implementation, an updated disbursement profile, planned actions for mitigating negative effects during project execution, and target indicators for the coming year.

12. A detailed assessment of the project will be carried out by the Bank through a mid-term review at the end of the second year of the project. The review will focus on reviewing the likelihood of the project achieving its intended objectives, and if required, recommending corrective action.

E. Procurement

13. Procurement activities will be carried out by P&DD. The General Manager (P&D) will be responsible for the procurements, and he shall be supported by a Project Manager (PE), Project Engineer (PE) and Executive Engineer (EE) in the procurement procedures.

14. For procurement of works, the Design Consultant will carry out the bid evaluation of the bidders, which will be reviewed by P&DD, and if found acceptable, will be endorsed for approval of the Chairperson and KPT Board. For selection of consultants, a three member evaluation committee will be formed. For consultancies pertaining to P&DD, the committee will comprise the General Manager (P&D) as head of committee, and two Project Managers of P&DD. For consultancies pertaining to the other departments i.e. MPCC, FM etc., the committee shall comprise the General Manager (P&D) as head of the committee, and the General Manager and Manager of the concerned department as members. The recommendation of these committees shall be subject to administrative approvals (Chairperson and/or KPT Board) as per KPT rules.

F. Financial Management

15. Finance Division of KPT is responsible for the overall control and record keeping of the ports financial affairs, and those of this project, and is headed by the General Manager Finance (GMF). Two senior level officers report to the GMF. The Finance Manager is responsible for preparing the budgets and ensuring that all expenditures are incurred in accordance with the budgetary allocations. The annual budget is reviewed towards middle of the year, and a revised budget prepared to make necessary provision for the unforeseen developments during the intervening period.

16. The Chief Accounts Officer (CAO) is responsible for disbursing the money against the approved expenditure, maintaining the accounts in the proper order and preparing the required financial statements at the end of the financial year. The International Financial Reporting Standards are generally followed for preparing financial statements.

17. The Chief Auditor of KPT is responsible for carrying out the necessary checks to ensure that all rules and regulations are followed while authorizing the expenditure and the payments are made correctly. The audited accounts are presented to the Board for approval. The Auditor General of Pakistan also carries out an audit of KPT.

G. Environment

18. The MPCD has been assigned the responsibility for ensuring compliant implementation of mitigation measures and monitoring of EMP during the construction and operation stages of the project under the supervision of the General Manager (Planning). The MPCD is to include the implementation of EMP in the bidding documents and a contractor is to be responsible for the on-ground implementation of the proposed mitigation measures. The EMP has provisions for the implementation of environmental monitoring program and earmarks resources for the capacity building needs of MPCD.

Annex 7: Financial Management and Disbursement Arrangements

PAKISTAN: Karachi Port Improvement Project

1. A review of financial management arrangements in Karachi Port Trust (KPT) was carried out. KPT's financial management system will be used for the proposed project. Details of the review are contained in the following paragraphs.

2. **Country Issues:** Budget execution, accounting, financial reporting and internal controls need strengthening at the country level. However, issues identified in these aspects will not affect project implementation as they will be addressed adequately in the implementation arrangements.

Risk assessment and mitigation measures:

3. **Risk analysis**

(i) **Inherent risk:** The general perception is that often financial management policies and procedures are not followed in the country. Hence, it will be critical to assure that these are followed in letter and spirit.

(ii) **Control risk:** Control risk is **Substantial** as key positions have not been filled up. Moreover, accounting staff is not involved in checking payments.

(iii) **Residual risk rating:** This is currently **Substantial** but may change to **Moderate** if control issues as highlighted in the review are addressed.

Risk	Risk Rating	Risk Mitigating Measures Incorporated in Project Design	Condition of Effectiveness/ Dated Covenant
Inherent			
Country level	Substantial/Moderate	Following financial management policies and procedures in letter and spirit	NA
Entity level	Substantial	Accounting and internal audit departments to be adequately staffed and updated manuals to be issued	NA
Project level	Substantial	Accounting and internal audit departments to be adequately staffed and updated manuals to be issued	NA
Control Risk			
Budgeting	Moderate	Monthly monitoring and use of budget field in the computerized accounting system	NA
Accounting	Substantial	Accounting policies and	NA

		procedures manual to be updated and followed	
Internal control	Substantial	Key positions in accounting, finance and internal audit to be filled up and accounting staff to be involved in checking payments	Dated covenant – 3 months after effectiveness
Funds flow	Low	Achieved through timely release of funds in the Segregated Designated Account	NA
Financial reporting	Moderate	Achieved through quarterly financial reporting and monthly reconciliation with the Bank	NA
Auditing	Substantial	Audit to be conducted on a timely basis	NA
Detection Risk	Moderate	Adequate financial controls and supervision by Bank staff	NA

FM Assessment Questionnaire and Risk Rating Summary are available in the project file.

4. **Strengths and Weaknesses:**

(i) **Strengths:** None.

(ii) **Weaknesses:**

a. Three key positions remain vacant in the Accounting, Finance and Internal Audit divisions, however these positions have been advertized;
b. Audit for FY 09 is still unavailable;
c. Accounting policies and procedures manual have not been updated yet;
d. The KPT's financial system is partially compliant with IFRS;
e. The existing system for costing services is found inadequate.

Significant Weakness	Action	Responsible Person	Completion Date
Chief Accounts Officer, Manager Finance and Chief Internal Auditor vacant in the Accounting and Internal Audit Divisions	Fill up the vacant positions	Chairperson KPT	Three months after effectiveness
Unavailable audit for FY09	Provide appropriate arrangements for audit for FY09	GM (Finance)	Three months after effectiveness
Accounting policies and procedures manual not updated	Update the accounting manual	GM (Finance)	By effectiveness

Inadequate system for costing services	Develop a system for costing services	GM (Finance)	Within a year

5. **Management:** Karachi Port Trust is administered by a Board of Trustees, comprising Chairman and ten Trustees. The Chairman is appointed by the Federal Government and is also the Chief Executive of Karachi Port Trust. The remaining ten Trustees are equally distributed between the public and the private sectors. The five public sector Trustees are nominated by the Federal Government. The seats for private sector Trustees are filled by elected representatives of various private sector organizations especially port users.

6. There are four committees of the Board - Finance, Tender, Establishment and Estate. Trustees are appointed by the Chairperson on these committees.

7. The Finance Committee is responsible for:

(i) Reviewing feasibility of financial proposals submitted by the Investment Committee comprising of General Manager Finance, Finance Manager and the Chief Accounts Officer;
(ii) Ensuring availability of funds for projects;
(iii) Submitting financial proposals to the Board.

8. The Planning & Development Division (P&DD) advises the Finance Division regarding Letters of Credit to be opened.

9. **Staffing:** There are two divisions under the General Manager Finance (MBA), i.e. Accounts and Finance. Key positions - Finance Manager and Chief Accounts Officer - are still vacant in these two divisions. Deputy Manager Finance (Master's in Commerce) is heading the Finance Division responsible for budget and evaluation of financial proposals while the Deputy Chief Accounts Officer who is on deputation from Accountant General's Office is acting as the Chief Accounts Officer. Similarly, the Deputy Chief Auditor who is a chartered accountant is acting as the Chief Internal Auditor. The vacant positions have been advertized and likely to be filled up by end August 2010. Filling up of these thee key positions is a condition for effectiveness. Key positions are on contract. Continuity of financial management staff is critical for effectiveness.

10. The Accounts Division comprises of five sections. Job descriptions are available for each position that assures adequate segregation of functions. Staff in the Accounts and Finance Division is a mix of commerce graduates and non-commerce graduates/undergraduates.

(i) Control Account: Deals with the core accounting functions
(ii) Bill: Processes bill but without checking for supporting documents
(iii) Cash: Deals with revenue other than rental income

(iv) Pension: Deals with pension of KPT staff
(v) Estate: Deals with rental income

11. Each section is headed by an Assistant Accounts Officer supported by support staff.

12. **Budgeting:** Two types of budget are prepared – Development and Revenue. Inputs for the Development Budget are received from Civil Works and Electrical & Mechanical Divisions. These two divisions have an Accounts Officer each with support staff. These divisions provide figures for actual expenditure when forwarding any requests for payment. This facilitates monitoring of expenditure against the budget. The P&DD provides input for port development related projects.

13. The budget is compiled by the Finance Division after getting inputs from the relevant divisions. Capital budget is prepared based on inputs from divisions dealing with civil works, electrical and mechanical and port development. Information is gathered on prescribed forms for ease of compilation. There is a budget time table that is followed. The annual budget is approved by the Board and the Federal Government. A manual of the Finance Department that was issued in May, 1982 is being followed.

14. A budget field in the computerized accounting system is not used. If this is done it will then enable monitoring individual heads of revenue and expenditure. The management agreed to do this starting FY'11. A monthly statement of budget and actual revenue and expenditure is prepared for broader heads for the management's review.

15. **Accounting:** The KPT uses accrual basis of accounting. The KPT Act does not prescribe a format for financial statements to be produced; therefore, financial statements are prepared in the light of guidance under the Companies' Ordinance, 1984 and Generally Accepted Accounting Principles. KPT is being encouraged to fully use International Financial Reporting Standards (IFRSs) to make their financial statements bankable.

16. The financial manuals were issued many years ago, but have not been updated for the computerized accounting system installed in subsequent years. It was agreed that the revision and update of the financial manuals would be made a condition of effectiveness and that these manuals with specific controls as mentioned under Fund Flow Arrangements would be used for the Designated Account. The process for updating the financial manuals has been initiated. The capitalization policy is not documented. However, KPT has communicated to the Bank the capitalization thresholds as being practiced now. The KPT management has reviewed and identified needs for financial management strengthening which will be supported through the WB's Technical Assistance as described in Component 2 of the Project Description.

17. There is no manual for the computerized accounting system developed by a firm of chartered accountants. The chart of accounts is consistent with the budget heads. The following modules feed into the main system:

(i) Payment;
(ii) Stores;
(iii) Payroll;

(iv) Income (Using Integrated Port Operation System).

18. Transactions in the Payment Module are manually entered into the system. There is no cross check on the data entered into the accounting system. The person entering data has the authority to post the transactions as well. It was agreed to segregate these two functions immediately and to maintain an Invoice Register to track time taken for processing payments. Segregation of data entry and posting has since been taken care of.

19. The Income, Payroll and Stores modules feed into the main system. The Stores module is very comprehensive and includes procurement, receipts and issues. It also provides re-order levels. The following improvements have been suggested:

(i) The Store Keeper should not be able to see values of inventory items;
(ii) Periodic reconciliation of stores should be done;
(iii) The Time Keeper has the authority to make changes in the payroll, but it should be checked by someone else too. It was agreed that the field would be activated for the Assistant Manager Human Resource and Internal Auditor;
(iv) Reconciliation of gross salary with previous month should be done.

20. **Payment processing:** Major payments comprise (i) development expenditure, and (ii) repairs and maintenance. Only repairs and maintenance have been delegated to the General Manager (R&M) while the rest of the payments are approved by the Chairperson. Invoices are received in the concerned department. The Head of the Division approves the invoice and forwards to the Internal Audit with all the documentation (bill, sanction, work order, purchase order, receipt sheet, completion certificate, etc.) for pre-audit. The approved invoice is forwarded to the Accounts Section for the issuance of cheques that are signed jointly by two signatories as per authorized limits. The signatories include the Chairman, General Manager Finance, Chief Accounts Officer, Deputy Chief Accounts Officer and Assistant Accounts Officers. The ***Accounts Department is not involved in checking of invoices with the supporting documentation. This is a critical step that should be taken before sending the payment for pre-audit.*** The General Manager Finance has assured that this will be addressed.

21. **Internal control:** As mentioned above, the Accounts Section is not involved in checking payments that is being done only by the concerned division and Internal Audit. The Internal Audit Division reports to the Finance Committee through the Chairperson. Key positions in the Internal Audit Division remain vacant and need to be filled up for effective control. Currently, only pre-audit is being performed. Internal audit should be focusing on the overall control environment of the KPT.

22. **Financial reporting:** A monthly statement of overall budget and expenditure incurred is prepared for the management. Quarterly financial reports in a format agreed with the Bank will be prepared for disbursement of funds and monitoring by the Bank. These reports will be submitted to the Bank within forty five days of the end of each quarter.

23. **Fund flow arrangements:** A segregated Designated Account in USD to be opened at the National Bank of Pakistan will be established for the project where the WB's funds will be transferred on a six-month forecast basis. This account will be jointly operated by two senior

officials of the KPT working for the project. The Bank funds will be disbursed using a report-based system. Funds forecast for the next six months will be disbursed that will be accounted for on a quarterly basis. While weaknesses in the current system are being addressed it has been agreed that effective controls listed below will be used for the Designated Account:

(i) Separate books of account;
(ii) Joint signatories;
(iii) Effective internal controls;
(iv) Timely submission of quarterly financial reports; and
(v) Timely submission of project audited financial statements.

24. Costing: ***There is no system for costing various services rendered by the KPT. Hence, the KPT is not aware of profitability or otherwise of each service. This may be developed under the TA component.***

25. Audit: Audit has been completed by a firm of chartered accountants up to FY'08. Auditors have given a qualified opinion as the KPT Act does not prescribe specific requirements for presentation and disclosure of financial statements. KPT's management needs to approve financial statements for FY'07 and FY'08 initialed by the auditors. These would be signed by the auditors once approved by KPT's management which is expected by end August 2010. Auditors' observations in respect of FY'08 include the following – raised in FY's 07 and 06 too but not addressed. The management has informed that action has been initiated on the issues raised by the auditors.

- Creditors and accrued liabilities not settled for several years
- Proper accrual not made for utilities
- Slow moving and obsolete stores not being provided for
- Assets not insured
- Assets not physically verified on a regular basis
- Rates of depreciation of some categories of assets not in line with their effective lives
- Long outstanding advances
- Revenue not being booked on accrual basis
- Minutes of board meetings not being maintained
- Unsettled receivable amount from Government of Pakistan on account of projects
- Separate bank account not being maintained for staff provident fund
- Time barred cheques not reversed
- Huge balances in bank accounts not invested for long term

26. Audit for FY'09 is in progress and expected to be complete in the next three months. Auditors for FY'10 would be appointed immediately after completion of FY'09 audit. It is critical that the KPT is current on audits.

27. The project will be required to provide acceptable audited financial statements to the Bank by 31st December every year. In addition to the audited financial statement KPT's management will provide an assertion that funds have been used for intended purposes.

Audit Report	Due Date
Project Financial Statements	31st December

28. **Disbursement Arrangements.** An IBRD Loan of US$115.8 million shall be disbursed during five years. Allocation of loan proceeds by disbursement category and percentage of financing is given in Table 1 below.

Table 1 Allocation of Loan Proceeds (US$ million)

Expenditure Category	IBRD Amount	Financing Percentage
(1) Works, Goods, Consultants' services (including for audits), Training, and Operating Costs for the Project	98,800,000	100%
(2) Front-end Fee	289,500	According to section 2.04 of the Loan Agreement
(3) Interest During Construction etc	3,000,000	According to section 2.03 of the Loan Agreement
(4) Premia for Interest Rate Caps and Interest rate Collars	0	Amount payable pursuant to sections 2.07 of the Loan Agreement, in accordance with Section 4.04 of the General Conditions
(5) Unallocated	13,710,500	
Total	115,800,000	

29. GOP contributions of USD 0.6 million to the project will be used to pay for EMP implementation and operating costs of the project. Other than the above, project expenditures will be financed 100 percent by the loan, inclusive of taxes.

Annex 8: Procurement Arrangements

PAKISTAN: Karachi Port Improvement Project

A. General

1. Procurement for the proposed project will be carried out in accordance with the World Bank's "Guidelines: Procurement Under IBRD Loans and IDA Credits" dated May 2004 revised October 1, 2006 and May 1, 2010; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004 revised October 1, 2006 and May 1, 2010, and the provisions stipulated in the Legal Agreement. For each contract to be financed by the Loan/Credit, the different procurement methods or consultant selection methods, the need for pre-qualification, estimated costs, prior review requirements, and time frame are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. A GPN was published in August 2009.

2. **Procurement of Works:** Works procured under this project will include one major contract for the civil works of rehabilitation of berths 14-17, which is estimated to cost US $ 90 million. There are no other works contract envisaged at this stage. Works contracts estimated to cost up to US $ 5 million will be done using National Competitive Bidding Procedures as agreed with the Bank. Works estimated to cost more that US $ 5 m shall be done using Bank's standard International Competitive Bidding procedures The procurement will be done using the Bank's Standard Bidding Documents (SBD) for all ICB and National SBD agreed with or satisfactory to the Bank.

3. **Procurement of Goods:** Goods procured under this project could include some equipment for ports operations, harbor maintenance, IT etc. This identification shall be made during the course of the Strategic Planning consultancy. Given the nature of the Project, goods and commodities estimated to cost upto US$ 50,000 per package will be procured through Shopping procedures. Goods costing upto US $ 300,000 will be procured through National Competitive Bidding (NCB) procedures. Goods costing more than US $ 300,000 will be procured through ICB procedures. The procurement will be done using Bank's SBD for all ICBs, and bidding documents for National Competitive Bidding agreed with (or satisfactory to) the Bank.

4. **Improvement of Bidding Procedures under National Competitive Bidding:** The following improvements in bidding procedures will apply to all procurement of Goods and Works under National Competitive Bidding, in order to ensure economy, efficiency, transparency and broad consistency with the provisions of Section I of the Guidelines:

(i) Invitation to bid shall be advertised in at least one newspaper with nation- wide circulation, at least 30 days prior to the deadline for the submission of the bid.

(ii) Bid documents shall be made available, by mail or in person, to all who are willing to pay the required fee;

(iii) Foreign bidders shall not be precluded from bidding and no preference of any kind shall be given to national bidders in the bidding process;
(iv) Bidding shall not be restricted to pre-registered firms;
(v) Qualification criteria shall be stated in the bidding documents;
(vi) Bids shall be opened in public, immediately after the deadline for submission of bids;
(vii) Bids shall not be rejected merely on the basis of a comparison with an official estimate without the prior concurrence of the Bank;
(viii) Before rejecting all bids and soliciting new bids, the Bank's prior concurrence shall be obtained;
(ix) Bids shall be solicited and contracts shall be awarded on the basis of unit prices and not on the basis of a composite schedule of rates;
(x) Cost estimates shall be prepared on the basis of market rates;
(xi) Single bids will also be acceptable for evaluation;
(xii) Contracts shall be awarded to the lowest evaluated and qualified bidder; and
(xiii) Post-bid negotiations shall not be allowed with the lowest evaluated or any other bidders.

5. **Procurement of non-consulting services:** Procurement of non consultancy services is not envisaged in this project.

6. **Selection of Consultants:** The major consultancy assignment expected in this project is for the supervision of construction works. . Other assignments are envisaged under the Institutional Strengthening Component. Three such consultancies have been identified so far for strategic and business plan; ISO certification readiness; and financial management systems. Services of firms will be procured through Quality and Cost Based Selection (Section II of the Consultants Guidelines), or through the selection methods given in Section III to the Consultants' Guidelines.. Short lists of consultants for services estimated to cost less than $ 200,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

7. **Selection of Individual Consultants:** Services for assignments that meet the requirements set forth in paragraph 5.1 of the Consultant Guidelines may be procured under contracts awarded to individual consultants in accordance with the provisions of paragraphs 5.2 through 5.3 of the Consultant Guidelines. Under the circumstances described in paragraph 5.4 of the Consultant Guidelines, such contracts may be awarded to individual consultants on a sole-source basis

8. **Incremental Costs:** Consultancy for strategic plan shall make some recommendations for HR management and capacity building through trainings. Some of the trainings shall be conducted using incremental costs.

B. Assessment of the agency's capacity to implement procurement

9. Procurement activities will be carried out by Planning and Development Division (P&DD) of Karachi Prot Trust. General Manager (P&D) shall be responsible for the procurements, and he shall be supported by Project Manager (PM), Project Engineer (PE) and Executive Engineer (EE) in the procurement procedures.

10. An assessment of the capacity of the Implementing Agency to implement procurement actions for the project was carried out by the DPS in August 2009. The assessment reviewed the organizational structure for implementation of the project and the interaction between the project's staff responsible for procurement and the approving authorities.

11. The key issues and risks concerning procurement for implementation of the project have been identified, and corrective measures which have been agreed are described below:

(i) **Procedures and Capacity of Implementing Agency:** P&DD has an adequate number of staff with technical and procurement background of implementing large international contracts. Some staff have also worked on the Bank funded projects. There could however be a need of hiring additional staff if major works outside the project are to be implemented concurrently. KPT shall also have the assistance of a consultancy firm for evaluation of the major works contract. If any consultancies are required to provide services outside P&DD, the relevant staff from that Division shall have a representation in the evaluation committee, but the award responsibility shall reside with the General Manager (GM), P&DD. KPT has defined procurement approval procedures with cost ceilings, which stipulate that the evaluation report prepared and recommended by GM (P&D) shall be approved by the Chairperson and KPT Board. For all the identified project procurement, the Board is the authority. The Board resolution is sent to the Ministry of Ports and Shipping for information. . It is agreed that the evaluation report and recommendation for award shall be sent for the Bank's No Objection Letter (NOL) after the Board Approval. . KPT's internal approval procedures are documented in procurement SOP.

(ii) **Adequacy of the estimates:** The cost estimates have been prepared by an engineering consultancy firm selected by the KPT using its own procedures. KPT will ensure that the firm uses current market rates for preparing the cost estimates. In addition all the other estimates to be prepared by P&DD shall realistically draw from the market status.

(iii) **Transparency in Procurements:** SPN for the major civil works contract was published on UNDB on Sep 17, 2009 as well as KPT's website http://www. kpt.gov.pk. All ICB contracts and consultancies estimated to cost up to $ 200,000 shall be published on UNDB. All other contracts shall be widely published in the press and on the KPT's website. All awards shall be published on the websites as stipulated in the Bank's Consultants Guidelines 2.28 and Procurement Guidelines 2.60. A complaint redressal mechanism has been agreed with KPT in which a two tier system shall be indicated for handling complaints. The first tier shall be the office of the Chairperson KPT and second tier of appeals shall be the DG Ports and Shipping's office. The Bank will also agree with KPT on the process of blacklisting of firms. While for the project funded contracts, the Bank's procedures of sanctions shall be applicable, it is agreed that on KPT funded contracts, KPT will follow the contractual stipulations in case of a dispute, and shall inform any firm of their intent to blacklist them. After due deliberations, a recommendation to blacklist a firm shall be sent for

the Board approval. A formal protocol shall be developed under the Strategic Planning consultancy assignment.

(iv) **Contract Implementation Issues:** KPT shall hire a firm for construction supervision which would have the role of 'the Engineer' for the contract. The Bank shall technically review the TORs of the firm and, if required, suggest amendments to the contract to ensure adequate supervision. Within the P&DD, the staff responsible for procurements shall also be responsible for contract management of the consultancy firm and oversight on the works contracts. If the capacity thins out given other major assignments, additional staff shall be hired.

(v) **Market Response to Procurements:** Generally, market response is limited due to the country security situation. In case of the KPT, however, the recent experience of an ICB for the contiguous berths as well on the SPN for the pre-qualification on berths 15-17 has been very encouraging. The KPT will continue its practice of approaching the foreign missions in the country and country missions abroad to solicit responses to its various procurement invitations.

No.	Risk	Action	Responsibility	Status
1	Procurement procedures and capacity of the Implementing Agency	Approval sequence for seeking Bank NOL Procurement Training of P&DD staff	Bank and KPT Bank	Done at appraisal Done at appraisal
2	Inaccurate cost estimates	Estimates prepared by KPT's Consultants based on market rates	KPT	Before the issuance of the bidding documents
3.	Lack of transparency in Procurement	UNDB and website publications Setting up of a two tier complaint redressal mechanism Protocol developed for blacklisting of firms	KPT KPT KPT	Commenced and Ongoing Agreed at appraisal. documented in SOP. Dec 2010.
4.	Poor contract management capacity	Review of firms' TORs KPT's staff in place for adequate implementation	Bank/KPT KPT	Agreed with KPT at Appraisal, to be done before award of works contract In place; to continue
5.	Poor market response to procurement invitations	Web publications and adequate dissemination	KPT	In place; to continue

12. The overall project risk for procurement is substantial.

C. Procurement Plan

13. The KPT has developed a draft procurement plan at appraisal. The procurement plan will provide a basis for the procurement methods. This plan as soon as agreed shall be posted on the website. It will also be available in the project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. No procurement regardless the size of a contract shall be done unless included in the procurement plan and agreed by the Bank.

D. Review of Procurement by the Bank

14. Thresholds for a prior review are given below. These thresholds will be reviewed in 18 months and adjustments upwards or downwards will be made based on implementation experience.

(i) All ICB contracts for works and goods;
(ii) All single source selections or direct contracts;
(iii) First NCB and Shopping contracts for Goods, irrespective of the value;
(iv) First NCB contracts for works, irrespective of the value;
(v) The first Consultants' Services contract with consulting firms, irrespective of the value, and thereafter all contracts with firms estimated to cost US$100,000 equivalent or more;
(vi) First consulting services contract with individual consultants, irrespective of the value, awarded by the implementing agency, and thereafter all contracts with individuals estimated to cost US$50,000 equivalent or more.

15. All other contracts will be subject to post-review by the Bank. The implementing agency will send to the Bank a list of all contracts for post-review on a quarterly basis. Post-reviews as well as the implementation reviews will be done semi-annually. Such review of contracts below threshold will constitute a sample of about 20 percent of the contracts.

16. In addition to the prior review supervision to be carried out by the Bank, the capacity assessment of the Implementing Agency has recommended semi-annual supervision missions to visit the field to carry out post review of procurement actions.

E. Procurement Information and documentation – Filing and database

17. Procurement information will be recorded and reported as follows:

(i) Complete procurement documentation for each contract, including bidding documents, advertisements, bids received, bid evaluations, letters of acceptance, contract agreements, securities, related correspondence etc., will be maintained by the implementing agencies in an orderly manner, readily available for audit.

(ii) Contract award information will be promptly recorded and contract rosters as agreed will be maintained.

(iii) Comprehensive quarterly reports: (i) revised cost estimates, where applicable, for each contract; (ii) status of on-going procurement, including a comparison of originally planned and actual dates of the procurement actions, preparation of bidding documents, advertising, bidding, evaluation, contract award and completion time for each contract; and (iii) updated procurement plans, including revised dates, where applicable, for the procurement actions.

F. Details of the Procurement Arrangements Involving International Competition

1) Goods, Works, and Non Consulting Services

1	2	3	4	5	6	7	8	9
Ref. No.	Contract (Description)	Estimated Cost	Procurement Method	P-Q	Domestic Preference (yes/no)	Review by Bank (Prior / Post)	Expected Bid-Opening Date	Comments
1	Reconstructi on of berths 14-17	US $ 90	ICB	Y	No	Prior	Nov 2010	

2) Consulting Services

(i) Major contracts to be procured:

1	2	3	4	5	6	7
Ref. No.	Description of Assignment	Estimated Cost	Selection Method	Review by Bank (Prior / Post)	Expected Proposals Submission Date	Comments
1.	Construction supervision for rehabilitation of berths 15-17A	US$ 3.75m	QCBS	Prior	Dec 2010	
2.	Development of 5 year business plan and strategic development plan	US $ 2.5 m	QCBS	Prior	March 2011	
3.	ISO readiness assessment	US $ 180,000	CQS	Prior	March 2011	
4.	Study to move towards full compliance with IFRS	US $ 180,000	CQS	Prior	March 2011	

Annex 9: Economic and Financial Analysis

PAKISTAN: Karachi Port Improvement Project

Economic Analysis

A. Methodology

1. The economic analysis was carried out for the civil works plus the estimated cost of the equipment necessary to operate the terminals. It comprised an assessment of costs and benefits of the project investments for berths 15-17a as compared to a rational "without-project" scenario and covered a period of 20 years. A residual value was included to cover the remaining life of the facilities after the 20 year appraisal period.

2. The flow of costs consisted of investment and operating costs of berths 15-17A. Investment costs included: (i) project costs, with physical contingencies, supervision and (ii) the costs of the necessary equipment. The main benefits considered in the analysis include: (a) a reduction in the cost of queuing for berths as a result of the provision of additional berths, and (b) reductions in the costs of ship time at berths as a result of faster handling equipment that will be installed by the new private operators.

B. Main assumptions

3. The assumptions underlying the Cost-benefit analysis are the following:

(i) Investment will take place in 2010 and 2011 and they are assumed to have a 40-year life;
(ii) A 20-year residual value is assumed using a linear depreciation rate;
(iii) Investment costs for berths 15-17a are estimated at USD 108.8 million including civil work, operation of consultants, and environmental management for an amount of US$94.65 million plus 15 percent for Physical/Price Contingencies. Equipment to be installed at the reconstructed berths will be undertaken by the private sector and specifications will not be known until the concessioning takes place. For the purpose of this economic analysis, the cost of equipment is estimated at US$50 million. Therefore, the total cost is estimated at US$158.8million;
(iv) In the absence of any appropriate conversion factor, a standard conversion factor of 0.9 has been applied for converting the financial costs into economic values. This conversion factor was used in similar projects in Pakistan[19];
(v) Maintenance and operating costs are estimated at 1 percent of the total cost valued at shadow prices (i.e. approximately US$1.1 million per year);
(vi) The main benefits considered in the analysis include: (a) a reduction in the cost of queuing for berths as a result of the provision of additional berths, and (b) reductions

[19]Punjab Barrages Improvement Phase II Project (PNIP-II)

in the costs of ship time at berths as a result of faster handling equipment that will be installed by the new private operators;

(vii) The development plans at KPT include deepening the channel and harbor to accommodate the increasing sizes of ships calling in the region. Given the uncertainties around the timing for this capital dredging, neither the costs nor benefits from the economies of size in shipping from the use of larger ships have been included in the analysis;

(viii) In the baseline scenario, the number of berths available to handle bulk and general cargo at the KPT are assumed to be 10 - i.e. berths 2, 3, 4, 5, 12, 13, 14, 18, 20 and 21

(ix) In the "with project" scenario, the number of berths available to handle bulk and general cargo are assumed to be 13 - i.e. 2, 3, 4, 5, 12, 13, 14, 15, 16, 17, 18, 20 and 21.

(x) The growth rates of the cargoes handled at KPT are forecast to average 8.1 percent per annum in the period 2009-2015, 4.4 percent per annum in the period 2015-2020 and 3.7 percent per annum in the period 2020-2030. These growth rates are well below that over the last five years, including the first year of the recession, 2008-9, which averaged 17 percent per annum;

(xi) The addition of berths 15-17A to the berths currently used for handling bulks will raise capacity from about 25 million tonnes to about 35 million tonnes.

C. Results

4. Based on the above described assumptions the project is estimated to yield a net present value (NPV) of USD 118 million (at an economic discount rate of 12 percent) and an economic internal rate of return of **23.2 percent.** The results from the sensitivity analysis show that these results are reasonably robust even given reductions in traffic forecasts and increased costs. Given that the benefits from economies of size have not been included in this analysis it can be concluded that economic viability from the investment is high.

Table 1: IERR Sensitivity analysis for berths 15-17A.

	Original Traffic Forecast	Traffic forecast (-10%)	Traffic forecast (-20%)
Original Cost	23.2%	20.1%	10.3%
Original Cost +20%	24.7%	18.4%	9.2%

Note: Shadow prices are used

D. Detailed Analysis

5. **Transport Demand.** In 2008-09 Pakistan's ports handled 65 million tonnes of cargo – with Karachi Port handling 39.7 million tonnes, Port Qasim 25.2 million tonnes and Gwadar Port 1.2 million tonnes. The growth rate over the last five years has been high at 8.6 percent p.a. (Table 2).

Table 2: Pakistan Port Traffic 2003/4 to 2008/9 (000 tonnes)

	2004/5	2005/6	2006/7	2007/8	2008/9	Growth p.a 2003/4-2008/9
KPT	27,207	29,026	32,509	37,191	38,730	9.2%
PQA	19,436	21,573	24,350	26,424	25,023	6.5%
Gwadar	0	0	0	0	1,200	
Total	46,643	50,599	56,859	63,615	64,953	8.6%

Source: KPT, PQA

6. Although Port Qasim was set up thirty years ago to be Pakistan's bulk port, the majority of the bulks are still handled at Karachi. The break-up of KPT traffic in 2008/9 is shown below.

Table 3: KPT Traffic 2008/9 (000 tonnes)

General Cargo	1,151
Dry Bulk	11,428
Liquid Bulk	11,773
Containerized Cargo	14,377
Total	38,730

Source: KPT

7. The cargoes that were handled at Berths 15-17 when the collapse occurred just over two years ago included coal, fertilizers, rice, sugar, wheat, iron and steel, and some conventional cargo and containers. Since then, significant volumes of wheat and cement have been handled there. These cargoes, and in particular the bulks, have been growing particularly rapidly. The combined growth rate of the main cargoes handled at Berths 15-17 was 17 percent p.a. over the last five years, which includes the first year of the recession, 2008-9 (see Table 3, Annex 1). The growth rate at Karachi was slightly higher than at Qasim, at 18 percent p.a.

8. **Forecast of cargos handled in Karachi.** Table 4 presents future growth prospects for these and some other potential cargoes, almost all of which are likely to return to berths 15-17 when the reconstruction is completed. The probable diversion of some traffic from Karachi to new bulk terminals being built at Qasim and elsewhere is taken into account. The future development of KPT cargo flows will closely follow developments in the industry, power generation, mining and agriculture sectors. More detailed forecast of these cargos is available in consultant's report filed in the project documents.

Table 4: Summary of Forecasts of the Bulk and General Cargoes Handled at KPT Berths (000 tonnes)

	Coal	Fertilisers	Wheat	Cement	Rice	Iron, Steel	Iron Scrap	Others	Total	Growth p.a.
2008/9	3,397	676	983	3,793	828	986	337	1,579	12,579	
2015	7,100	1,615	2,518	3,932	1,030	1,321	483	2,116	20,115	8.1%
2020	10,500	1,964	1,674	4,278	1,417	1,768	588	2,701	24,890	4.4%
2030	15,913	2,908	1,969	4,816	1,985	3,166	790	4,399	35,947	3.7%

Source: Consultant's Economic and Financial Analyses for KPIP; available in the project files

9. **Benefits.** The main benefits of the reconstruction of Berths 15-17A include *a) reductions in the costs of queuing for berths* as a result of the provision of additional berths, and *b) reductions in the costs of ship time at berths* as a result of faster handling equipment that will be installed by the new private operators.

a) Reductions in the costs of queuing for berths.

10. If no reconstruction is undertaken and only the limited number of berths is currently available for bulks with the present occupancy being already around 74 percent (see Table 5), queuing costs will continue increasing and the occupancy may rise to over 95 percent by 2012 given the forecast cargo growth rate of 9 percent per annum, and the waiting to service time ratio will increase from 0.54[20] to over 2.00.

Table 5: Handling Speeds and Estimated Berth Occupancy Available for Bulks in 2008/9

	Coal	Fertiliser	Wheat	Cement	Rice	Iron and Steel	Iron Scrap	Others	Total
Cargo Volumes 2008/8 (000 tonnes)	3397	676	983	3793	828	986	337	1579	12579
Handling speed (tonnes/day at berth) (a)	9,000	4,000	4,500	6,000	3,000	7,000	4,000	3,000	
Ships days at Berth	377	169	218	632	276	141	84	526	2,424
Total days at Berth	2,424								
Berth days available at 9 berths	3,285								
Berth Occupancy	74%								

11. The associated costs of ship waiting queuing for berth are estimated at USD74.3 million in 2013 (i.e. 4,958 days waiting x USD15,000 per day, see Table 6(a)).The table below shows berth occupancy and cost of ship waiting time with existing berths.

Table 6 (a): Estimated Costs of Ship Waiting Time 2009-2030 with Existing Bulk/General Cargo Berths.

	Ship Days at Berth	Berth Occupancy	Waiting to Service Time Ratio	Ship Days Waiting for Berths	Cost of Ship Waiting Time US$(000)
2010	1,898	74%	0.54	1,025	15,375
2011	2,092	82%	0.92	1,925	28,868
2012	2,286	89%	1.83	4,183	62,738
2013-2030	2,479	97%	2.00	4,958	74,377

[20] Based on the UNCTAD tables of waiting to service time ratios for random arrivals and service times conforming to an Erlang 2 distribution.

12. The reconstruction of berths 15-17A will reduce the occupancy to approximately 75 percent in 2013, and queuing costs to the USD40.2 million, giving a saving of USD34.1 million per annum (i.e. USD74.3 million minus USD40.2 million), see Table 6(b). The PV (at 12 percent discount rate) of the benefits of reduction in queuing cost is estimated to be US$ 217 million.

Table 6(b): Estimated Costs of Ship Waiting Time 2009-2030 with Addition of Three Reconstructed Bulk/General Cargo Berths.

	Ship Days at Berth	Berth Occupancy	Waiting to Service Time Ratio	Ship Days Waiting for Berths	Cost of Ship Waiting Time US$(000)
2010	949	57%	0.34	547	8,206
2011	1,046	63%	0.55	1,024	15,367
2012	1,143	69%	1.02	2,204	33,061
2013-2030	1,240	75%	1.13	2,682	40,234

b) Reductions in the costs of ship time at berths as a result of faster handling equipment that will be installed by the new private operators.

13. The project will generate additional benefits from the faster handling speeds at the privately operated terminals which will reduce the cost of ship time at berth. The handling speeds for the main bulk cargoes at present are shown in Table 7. They range from about 3000 tonnes per ship day at berth for rice to 9,000 tonnes per ship day for coal. The future handling speeds assumed are those considered reasonable on the basis of private terminal operations elsewhere.

Table 7: Bulk Cargo Handling Speeds, Current and Future (tonnes per ship day in port)

	Current Handling Speeds	Handling Speeds at Privatized Berths
Coal	9000	15000
Fertilisers	4000	8000
Wheat	4500	12000
Steel	7000	10000
Rice	3000	5000
Cement	6000	10000

Source: KPT Traffic and Other Departments

14. On this basis, *the shipping costs with* and *without* the project are calculated in Table 8. The last lines of the table show the savings per tonne obtainable faster ship turnaround.

Table 8: Shipping Costs for Bulk Cargoes at Berths 10-17 with and without the Project (excluding Queuing Costs)

	Coal	Fertiliser	Wheat	Cement	Rice	Iron/ Steel	Iron Scrap	Others
WITHOUT PROJECT								
Handling Speed (tonnes/day)	9,000	4,000	4,500	6,000	3,000	7,000	4,000	3,000
Costs ($) per tonne								
Ship costs at berth	2.3	5.2	4.6	2.1	4.2	2.5	3.9	4.2
WITH PROJECT								
Handling Speed (tonnes/day)	15,000	8,000	12,000	10,000	5,000	10,000	6,000	4,000
Costs ($) per tonne								
Ship costs at berth	2.1	4.0	2.7	1.2	2.5	1.7	2.6	3.1
SAVINGS, $ per tone								
Ship costs at berth	0.2	1.2	1.9	0.8	1.7	0.7	1.3	1.0

15. The annual savings in shipping costs resulting from faster handling equipment at specialized terminals totals US$ 65 million.

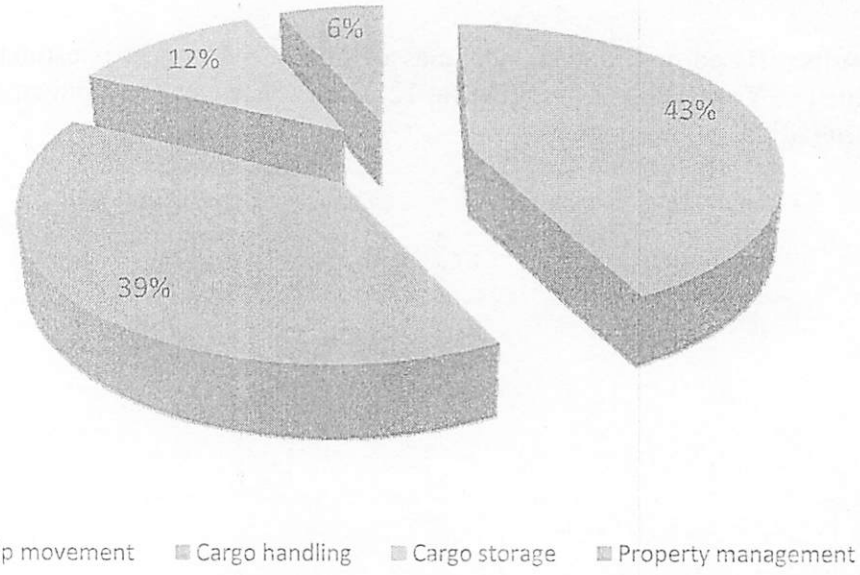
16. **Results:** Based on the made above assumptions, the project is estimated to yield a net present value (NPV) of USD 118 million (at 12 percent discount rate) and an economic internal rate of return (EIRR) of 23.2 percent

Financial Analysis

17. The financial analysis contained in this section examines the overall financial health of KPT and their ability to generate sufficient surpluses to repay the proposed loans from IFC[21] and IBRD.

18. **Tariff and Revenue Structure**: Based on the KPT Act, tolls, dues, rates and other charges collected at the port are set by the Board of Trustees, with the sanction of the federal government. The last notification of changes in tariffs is dated January 27, 2010. In addition to tariffs charges by KPT to port users, additional charges are levied by the private sector, such as terminal operators and stevedoring companies. In 2008-2009, out of the total revenue of PKR17.2 billion, the operating income accounted for PKR9.4 billion or 55 percent of total revenues. The four sources of the operating revenue are: (i) ship movement and services (PKR4.0 billion or 42.6 percent); (ii) cargo handling activities (PKR3.7 billion or 39.4 percent of operating revenues); (iii) cargo storage activities (PKR1.1 billion or 11.7 percent); and (iv) property management (PKR0.6 billion or 6.4 percent).

Figure 1: Structure of KPT's operating revenues 2008-2009



19. Over a half (PKR2.2 billion or 55 percent) of *ship movement and services* revenue (also referred by KPT as "wet charges[22]") is coming from the use of harbor facilities[23] and another 32.5 percent or PKR1.3 billion – from pilotage services. Hire of equipment (mainly tugboats) and other ship services account for the balance of PKR0.45 billion or 12.5 percent. These charges are paid by shipping lines, though in case of KICT/PICT are collected first by concessionaires and then transferred to KPT.

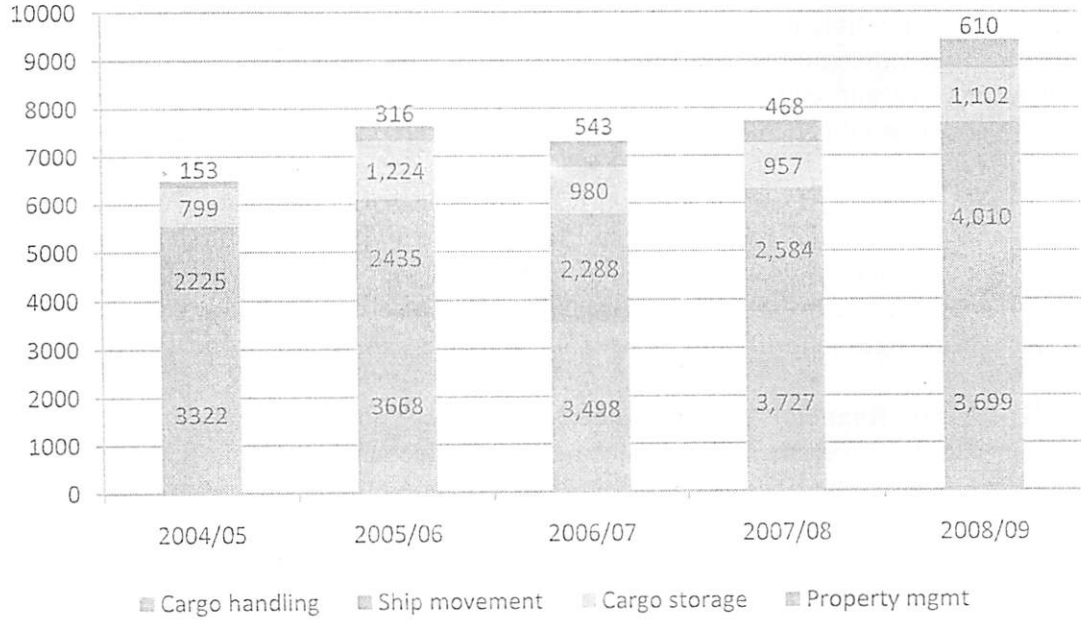
[21] This financial analysis has been undertaken by the IFC and includes for both their proposed investment and for IBRD.
[22] Tariffs are quoted in USD but paid in PKR
[23] Includes berth fees, port dues, mooring fees and other.

20. The majority of *cargo handling charges* is coming from wharfage charges (PKR2.7 billion or 73 percent). Wharfage rates are charged, typically on the basis of weight or volume, to all cargo landed, shipped or passed in or out of Karachi port bonded premises; there is a multitude of rates varying by type of cargo, export/import or service provided. The balance is split roughly equally between: (i) hire of equipment and royalties received from private terminal operators and stevedoring companies, and (ii) container yard charges, paid by terminal operators and shipping/clearing agents.

21. *Cargo storage* rates are charged, typically on the basis of the wharf area usage, for the storage of imported or exported bulk cargoes and some containers. Almost all revenues (97.5 percent) are coming from imported cargoes stored in the port area.

22. *Property management* income of PKR0.6 billion includes rent income derived from the real estate inside of the port ("god own rent") and outside of the port ("ground rent"), roughly in equal proportions

Figure 2: Structure of KPT's operating revenues over time



23. Out of total operating revenues in 2008-2009, PKR2.1 billion or 22.3 percent was collected from private container terminal operators – KICT (63 percent) and PICT (37 percent). These payments were made for: (i) wharfage (55 percent); (ii) royalties (24 percent); (iii) container yard usage (11 percent); and (iv) cargo storage charges (10 percent).

24. Wet charges are quoted in US dollars and paid in rupees, while all other charges are both quoted and paid in rupees.

25. KPT's costs and charges are higher than those in many other regional ports, though major differences in the tariff structure would make itemized comparison less relevant. Higher tariffs do not significantly affect port's competitiveness as almost all traffic origins/destines in Pakistan there is no real transportation alternative.

26. The KPT Act gives KPT the power to set tolls, dues, rates and charges for landing and shipment of goods as well as for storing, keeping and removal of such goods at premises belonging to the Board. Tariffs are reviewed and updated every 2-3 years. The draft tariff proposal is prepared by the management team, approved by the Board and then sent to the Ministry of Ports and Shipping for final approval. Once approved, new tariffs are published in the official Gazette and on KPT's website. Prior to presenting a proposal to the Board, KPT management engages in consultations with the business community[24] that may be affected by such changes in tariffs to ensure that they provide their input/comments. Further input may be provided by the Trustees representing the private sector at the Board.

27. KPT's approach to tariffs is based on the total cost recovery principle: tariffs are to be held at the lowest possible level that would allow KPT to recover its operating expenses and fund necessary capital expenditures to maintain and improve port facilities. Based on the review of both operating cost and capital expenditure plans, tariffs in each category are proposed at the minimal level that would enable KPT to cover its costs and to implement its capex plans.

28. An increasing engagement of the private sector in port's operations has increased port's efficiency and allowed KPT reduce their tariffs, by about 30 percent in the last 4 years. The last tariff revision took place 3 years ago and currently a new set of tariffs, with an average reduction of about 10 percent is currently at the approval stage. Once new tariffs are adopted, KPT does not expect any changes in tariffs for the next 3 years, unless there is a financial gap.

29. **Historical financial performance**: KPT does not have any financial reporting requirements to the government, except for making its accounts available for regular audits and inspections. However, in 1990s KPT's management made a decision to start preparing audited financial statements in accordance with accounting principles recognized in Pakistan[25]. KPT is considering a transition to full IFRS that can be potentially supported by IBRD, in the next 2 years.

30. A summary of financial results of the KPT in the last 5 years is presented below. The last financial statements audited by Grant Thornton are in respect of FY2007 ended June 20, 2007. Financial statements in respect of FY2008 and FY2009 are not audited, but KPT's auditor does not expect any significant variations from current draft statements that were made available to IFC.

[24] E.g. shipping lines or Karachi Chamber of commerce

[25] Based on team's discussion with Grant Thornton, KPT's auditors, financial reporting standards in Pakistan follow IFRS very closely, except for few standards (e.g. inflationary accounting IAS29 or disclosure of information) that are not expected to have any material effect on KPT's financial position. A useful summary of financial reporting standards in Pakistan is provided at http://www.estandardsforum.org/pakistan/standards/international-financial-reporting-standards

Table 9: Summary of financial results for KPT for period 2005-2009

000 PKR	2005	2006	2007	2008	2009
Income Statement					
Total Revenues, incl:	10,782	13,187	13,563	15,321	17,214
Operational Revenues	6,499	7,643	7,310	7,736	9,418
Non-operational Revenues	4,284	5,544	6,253	7,585	7,796
EBITDA	3,645	4,586	3,910	3,974	4,543
Net Income	7,161	9,450	9,383	10,338	11,193
Balance Sheet					
Current Assets			43,686	54,767	61,441
incl cash			20,857	38,860	47,637
Long-term Assets			56,073	56,709	60,798
Total Assets			99,758	111,476	122,239
Current Liabilities			4,835	6,213	6,802
Long-term Liabilities, incl:			5,834	7,536	7,106
Long-Term Debt			581	443	304
Equity, incl:			93,924	103,939	115,132
Capital			30,787	30,787	30,787
Retained earnings			63,138	73,153	84,346
Financial Ratios					
Current Ratio			9.0	8.8	9.0
EBITDA Margin			0.5	0.5	0.5
Debt-to- EBITDA			0.1	0.1	0.1

31. For the period 2005-2009, KPT's financial performance was satisfactory. Total revenue grew from PKR 10.8 billion (US$181.2 million) in 2005 to PKR 17.2 billion (US$217.6 million) in 2009, a 14 percent average annual growth rate (4.7 percent in US$ terms). An increasing portion of revenues was attributed to non-operational income (45 percent in 2009) as KPT was accumulating significant reserves for future CAPEX needs that generated investment income. Operating revenue increased for this period from PKR 6.5 billion to PKR 9.4 billion (9.7 percent average annual increase).

32. KPT's expenditures grew during this period from PKR 3.4 billion in 2005 to PKR 5.9 billion (14.8 percent growth). *Salaries and Wages* was the largest single category accounting for 50-60 percent of total operating costs. *Depreciation Expense*, another relatively large item, doubled to about PKR 1 billion starting 2008 as KPT added some new dredgers to its flotilla. *Operating Materials and Expenses* has been gradually increasing to PKR 900 million in 2009 in line with increasing operations. KPT's operating margin was at the level of 40-50 percent and net margin (without investment income) was only slightly below that level[26].

33. In the first 7 months of 2009-2010, KPT's performance was strong and much better than budgeted. Total operating revenue was PKR 6.3 billion (38.6 percent higher than budgeted).

[26] The net margin is expected to drop since KPT is paying 35% income tax starting July 1, 2009

Total revenue (that also includes investment income) was of PKR10.2 billion (34.6 percent higher). Total expenditures increased only by 10.8 percent, resulting in net income for the period of PKR 6.9 billion or 78.6 percent above budget. This compares well with KPT's annual results for the previous year: operating revenue of PKR9.4 billion, total revenue of PKR 17.1 billion, and net income of PKR 11.2 billion.

34. As of June 30, 2009, KPT's balance sheet was PKR 122.2 billion (US$1,501 million). Non-current assets accounted for PKR 60.8 billion (US$747 million), including (i) PKR 39.9 billion[27] (US$490 million) in land, port-structures and flotilla; and (ii) PKR 14.7 billion (US$180 million) invested in long-term government bonds.

35. Out of total current assets of PKR 61.4 billion, 77.5 percent or US$568 million are represented by cash and bank deposits.

36. Equity of PKR 115 billion accounts for 94 percent of the total balance, with PKR 84.3 billion in retained earnings and the balance in various reserves, including the revaluation reserve. KPT's outstanding long-term debt, from IBRD and IDA, accounts is only PKR 304 million (US$3.6 million). Deposits, mainly from real estate customers, account for PKR 5 billion.

37. In summary, due to its competitive position and significant control over its tariffs, KPT is growing at healthy rates, is highly profitable, and has accumulated significant reserves. A high level of labor costs is an issue, especially given that operating expenses are growing at a higher rate than operating revenues. As KPT uses its cash reserves to finance its CAPEX program, non-operational revenue are expected to drop, quickly and substantially. Changes in taxation will put additional pressure on KPT's profitability in coming years.

38. **Projected financial performance**: Financial projections for the period of the expected life of the IFC loan (2010-2018) were prepared to assess KPT's capacity to service IFC debt while implementing a major capital expenditure program.

39. Base case projections used the following key assumptions and considerations: (i) due to a high level of uncertainty over Pakistan's inflation rates and PRK/US$ exchange rates and their effect of tariffs and costs, financial performance was projected in real 2009 PKR[28]; (ii) the principal terms of the new US$115 million IBRD loan are to include 20-year maturity, 3-year grace period and an 11 percent spread in PKR[29]; (iii) wharfage, cargo storage and ship movement tariffs are assumed, in line with KPT plans, to be reduced by real 10 percent in 2011; (iv) labor costs are increasing at 2 percent annually in real terms and no further decline in staff numbers is expected; (v) property management revenues are projected to grow at half of their historic real growth rate of 18.5 percent in the last 5 years; (vi) Administrative expenses are projected to grow at real 5 percent, higher than the average historic real growth rate of 3.9 percent; (vii) Operating

[27] Assets were revalued last time over 15 years ago and the current value is likely to be higher.
[28] In respect of the repayment of the IFC loan, projections use EIU's US$/PKR projections.
[29] In the past, IBRD financing was passed through the GoP to KPT in local currency at about 11% rate, but KPT is reluctant to take financing on these terms this time. IBRD is currently in discussion with the government on the model for providing the new loan (i.e. direct with GoP guarantees or through the GoP) and terms of such financing.

materials and expenses are expected to grow at real 5 percent (in the last 5 years real growth was slightly negative); (viii) KPT will start the simultaneous implementation of Cargo Village and Cargo Crossing projects in 2015; (ix) no additional transshipment container volumes or additional revenue to KPT are assumed as a result of the implementation of the PDWCP project; (x) return on deposits and long-term investments was assumed to be at the lowest nominal level in the last 3 years – 7.3 percent and 13.5 percent respectively.

40. During the first 5 years the total revenue is projected to stay relatively flat, at the PKR 14.5-15 billion (about US$170-175 million) level as growth in operational revenue due to higher traffic is set-off by a decline in non-operational revenue (interest income and coupon payments). Non-operational revenue decline as KPT uses up its cash reserves to finance its CAPEX program.

41. Operations, however, are expected to generate strong cash flow as EBITDA is projected to increase by about 25 percent over the next 8 years from PKR 5 billion to PKR 6.2 billion. Due to the combined effect of the new corporate tax, increased interest expense and decreased interest income, KPT's net income is projected to decline but will remain positive. EBITDA margin is projected to decline from 49 percent to 45 percent and stabilize at this level. Over this period, KPT is projected to pay to the GoP PKR 8 billion in taxes.

Table 10: Summary of KPT base case projected performance

Million of 2009 PKR	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Operational										
Traffic, tons	38,729	40,320	41,982	44,440	46,983	49,347	51,773	54,250	56,767	59,311
Number of ships	2,386	2,413	2,536	2,693	2,857	3,018	3,184	3,355	3,531	3,710
Income Statement										
Total Revenues, incl:	17,214	15,515	14,397	14,597	14,329	14,483	15,032	15,154	14,858	14,450
Operational Revenues	9,418	10,112	9,682	10,271	10,878	11,466	12,058	12,666	13,289	13,924
Non-operational Revenues	7,796	5,403	4,715	4,326	3,451	3,017	2,974	2,488	1,569	526
EBITDA	4,543	4,964	4,272	4,510	4,764	5,080	5,440	5,739	5,979	6,227
Net Income	11,193	6,469	6,072	4,913	3,706	3,471	3,785	3,502	2,565	1,425
Balance Sheet										
Current Assets	61,441	56,297	53,175	42,746	38,803	42,195	36,042	22,283	23,084	23,901
incl cash	47,637	41,600	39,031	27,845	23,121	25,757	18,842	5,000	5,000	5,000
Long-term Assets	60,798	72,345	92,880	113,876	120,854	119,463	127,830	143,523	145,939	153,163
Total Assets	122,239	128,642	146,055	156,623	159,657	161,658	163,872	165,806	169,023	177,064
Current Liabilities	6,802	6,941	6,950	8,291	9,181	9,343	9,429	9,605	12,068	19,288
Long-term Liabilities	304	100	11,432	15,745	14,184	12,552	10,895	9,150	7,339	6,735
Total Liabilities	7,106	7,041	18,381	24,036	23,365	21,895	20,324	18,755	19,407	26,023
Equity	115,132	121,601	127,673	132,586	136,292	139,763	143,548	147,051	149,616	151,041
Financial Ratios										
Current Ratio	9.0	8.1	7.7	5.2	4.2	4.5	3.8	2.3	1.9	1.2
EBITDA Margin	48%	49%	44%	44%	44%	44%	45%	45%	45%	45%
Debt-to- EBITDA	0.1	0.1	2.7	3.7	3.3	2.8	2.3	1.9	1.9	2.9
Debt-to Equity	0.4%	0.2%	9.0%	12.7%	11.7%	10.2%	8.8%	7.5%	7.6%	11.8%
DSCR	15.3	10.7	5.6	3.6	1.9	1.6	1.8	1.9	2.1	2.2

42. Current Assets are declining due to the investment of accumulated cash; cash however was assumed not to decline below PKR 5 billion. Current ratio is projected to be no lower than 1.2. Long-term debt peaks at PKR 15.7 billion in 2012 when both IFC and IBRD loans are expected to be disbursed. The level of debt of 3.7 times EBITDA is at its maximum in 2012

though cash reserves of PKR 28 billion provide a comfortable cushion. KPT is projected not to take any additional loans and will finance all new CAPEX by its own cash generation/reserves, except for a short-term loan in 2017-2018.

43. During the projected period, KPT is expected to invest about PKR 130 billion (US$1.5 billion). This CAPEX is projected to be financed by existing cash reserves (currently about US$580 million) and loans from IFC and IBRD (about US$185 million). In a quite conservative IFC base case scenario, KPT's internal cash generation of US$550 million in 2010-2018 will not be sufficient to finance the balance and it is assumed that KPT will have to borrow about PKR 11 billion (US$130 million) in 2017-2018. It is likely that in such case KPT's CAPEX will be modified or rescheduled. If IFC and/or IBRD loans do not materialize, KPT will have to delay the implementation of its major CAPEX program by a longer period.

44. The estimated financial nominal internal rate of return in the base scenario is 20 percent. Debt Service Coverage Ratio ("DSCR") defined as EBITDA net of taxes divided by the total financial debt service is strong, with the minimum of 1.6 in 2014.

Sensitivity analysis

45. A sensitivity analysis was made to analyze sensitivity of projections to key assumptions and the effect on the Project of the following scenarios:

Table 11: Summary of examined scenarios

Scenario	Change in key assumptions:
Scenario 1	- Traffic stays at the level of 2009 throughout the projected period - KPT does not implement its Cargo Village and Harbor Crossing projects
Scenario 2	Labor costs grow at a real 5% rate
Scenario 3	The nominal interest rate and coupon rate on KPT's liquid assets is zero.

46. The sensitivity analysis shows that even without relying to its cash reserves, KPT can comfortably service its debt even in case of seriously adverse scenarios.

Table 12: Summary of the sensitivity analysis:

	Min DSCR	Year of Min DSCR
Base Case	*1.6*	*2014*
Scenario 1	1.2	2014-2016
Scenario 2	1.5	2014
Scenario 3	1.4	2018

Annex 10: Social Development Issues

PAKISTAN: Karachi Port Improvement Project

1. No social or resettlement issues are expected. The design consultant team has carried out site screening for possible land acquisition and resettlement impacts, including the spoil deposit areas. The screening concluded that the project, to be reconstructed at the existing site, will not have any adverse impact. The Bank task team carried out its own screening and confirmed this conclusion.

Annex 11: Safeguard Policy Issues

PAKISTAN: Karachi Port Improvement Project

1. **Process.** The Environmental Impact Assessment (EIA) has been carried out by the Karachi Port Trust in compliance with the Pakistan Environmental Protection Act, 1997, the Pakistan Environmental Protection Agency Review of IEE and EIA Regulations, 2000, and the Bank's Operational Policies on Environmental and Social Safeguards. The EIA consisted of the following steps: (i) screening to identify key environmental issues that may require detailed assessment, (ii) consultation with the community and stakeholders to be affected by the project, (iii) identification and assessment of all major and minor impacts during pre-construction, construction and operation stages, (iv) development of mitigation measures to minimize, eliminate or to compensate the potential adverse impacts of the project, (v) preparation of Environmental Management Plan (EMP) and, and (vi) preparation of an EIA report for submission to Pakistan Environmental Protection Agency (EPA), Islamabad. The World Bank conducted a review to confirm that the preparation of EIA had complied with the GOP and WB requirements. In view of the location of the project and extent of construction activities and their subsequent impacts the project is categorized as **Environmental Category "B".**

2. **Environmental Parameters Assessed.** Key parameters assessed during screening included: topography, hydrographic condition, weather, seismology, hydrology and sedimentation; management and disposal of solid waste; baseline levels for seawater quality, air quality, noise and vibration; subsea soil, flora and fauna; pre-dominant land use; presence of sites of archaeological, cultural, historical or religious significance, and presence of sensitive receptors such as schools and hospitals at the project site.

3. **Results of Screening.** The main findings from the screening include: (i) potential impacts are expected during construction and operational phases, but most of the impacts will be site specific and they will need to be carefully assessed and mitigated; (ii) no major dredging activity is planned under the project except limited dredging/excavation for piling work and foundations; (iii) backwaters of Karachi Harbor house large forests of mangroves, which are essential component of the food chain, but these mangrove forests are located at a considerable distance from the project site; (iv) there are no sites of archaeological, cultural, historical or religious significance (graveyard, shrine, mosque, archaeological site) in the project area; (v) there are no schools and hospitals at the project site; there is only a Karachi Port Trust Hospital in the close vicinity to the area, providing services to KPT workers, but it will not affected.

4. **Environmental Impacts.** During the construction stage potential impacts may include noise, dust, air pollution, soil contamination, camp effluent, vehicle and equipment exhaust, oil/chemical spills generated from the construction machinery and labor camps, workers' health and safety issues. Although there will be no major dredging, limited dredging/excavation is expected for piling work and foundations and it may cause disturbance to bed sediments with a short-term adverse impact on the seawater quality including turbidity plumes, release of contaminants and oxygen depletion.

5. The potential adverse impacts of the port's future daily operations may include food waste, packaging material, paper and organic waste from the entering ships and on-land

facilities. As a result of the improved project berth capacity, the number of boats/ships/cargos may grow which may lead to increased pollution. Accidental oil spills may cause a long-term irreversible negative impact on the sea flora and fauna, including the adjacent mangroves and green turtles. In addition, the future channel dredging, first to 14 m and eventually to 16 m, although not part of the project activity will have some adverse impacts. Dredging of the channel which is deemed as an essential requirement for the optimum future use of the project berths is a routine activity of the port's operation. However, the KPT will ensure safe disposal of the dredged material as per the recommendations of the waste management plan.

6. In the long term, the project is likely to make significantly positive economic and environmental impacts as a result of improved structures and operational facilities at the project berths. The project will bring in more employment and business opportunities for the local people that will not only have a positive impact on the local economy but will also help improve the quality of life. The project will improve the safety aspects of the operations being carried out at the berths through improving and modernizing the operation and management system.

Table 1. Overview of potential impacts on the project

No	Impacts	Negative Impact		Positive Impact		No Impact
		Short Term	Long Term	Short-term	Long Term	
1	**Project Siting**					
1.1	Displacement of people					√
1.2	Change of land use					√
1.3	Loss of flora and fauna					√
1.4	Shifting of utilities					√
1.5	Impact on marine turtles					√
2	**Construction Stage**					
2.1	Pressure on local infrastructure	√				
2.2	Contamination of soils	√				
2.3	Impact on surface and ground water quality		√			
2.4	Impact on air quality		√			
2.5	Noise and vibration pollution		√			
2.6	Impact on flora and fauna		√			
2.7	Marine Traffic congestion	√				
2.8	Staking and disposal of construction material	√				
2.9	Public health and safety	√				
2.10	Social impact	√				
2.11	Solid waste	√				
3	**Operational Stage**					

No	Impacts	Negative Impact		Positive Impact		No Impact
		Short Term	Long Term	Short-term	Long Term	
3.1	Air environment		√			
3.2	Noise environment		√			
3.3	Traffic congestion				√	
4	Positive Impacts of the project					
4.1	Time savings in loading and unloading				√	
4.2	Access to goods				√	
4.3	Improvement in import and export of goods facilities				√	
4.4	Employment and business opportunities				√	
4.4	Increase in revenue				√	
4.5	Reducing the existing load on other berths				√	

7. **Public Consultations.** In accordance with applicable country regulations and Bank policies, public consultations were arranged with different project stakeholders, including different government departments, educational institutions, NGOs and communities to discuss the project and its environmental impacts. The communities were informed that the project would be implemented within the KPT area where neither residential nor commercial activities are permitted. Neither land acquisition nor resettlement is anticipated under the project and, thus, no direct impact is anticipated on communities. No observations were recorded in contradiction or opposition of the proposed project. The local communities residing the near the project site felt positive about the project because they were of an opinion that there would be more job opportunities for them during the construction and operational phases. The communities expressed a concern about safety of residents due to increase in vehicle movement during the construction. They also indicated that the KPT should be doing more for the protection of mangroves and for mitigation of the effects of storms. The EIA report was submitted to the EPA as per Government requirements. It will be subject to a public hearing in compliance with the process of its review for the issuance of no objection to the project.

8. **Environmental Management Plan.** All plausible risks and significant adverse aspects of construction and operational phases have been reviewed, analyzed and appropriate mitigation measures have been proposed in the EIA report. Based on the findings of the EIA and suggestions of the stakeholder consultations an environmental management plan (EMP) has been developed for the project to mitigate, minimize, and compensate any negative environmental effects and to enhance the overall benefits of the project.

9. The construction activities will be carried out in compliance with the EMP, which is to be included in the bidding documents. An environmental monitoring mechanism has also been

developed along with the clarification of roles and responsibilities of the client, the contractor, and the supervision consultants.

10. **Environmental Management and Monitoring.** The responsibility for the environmental management aspects of the project has been assigned to the KPT's Marine Pollution Control Division (MPCD). The MPCD has well-qualified staff, but will hire additional experts such as environmentalist and health and safety manager for this project. The Project Manager of the KPT will be in charge of monitoring of the contractor's performance with respect to implementation of the EMP, which is to be part the contract documents.

11. The KPT Environmental Manager will carry out monitoring of the project as per the developed Environmental Monitoring Plan for both construction and operational phases which covers all environmental parameters, standards to be followed, frequency of implementation, responsibilities. A senior member of the on-site management staff will lead the monitoring team. Environmental monitoring is normally undertaken during both the construction and operational phases to ensure the effectiveness of the proposed mitigation measures. In order to respond to unanticipated environmental concerns at an early stage and to determine the accuracy of impact, predictions are also required. The inspector will carry out frequent round/surveillance of the area to timely detect pollutants/polluter and to determine if remedial measures have been/are being applied. The inspector will also ensure compliance with procedures that are part of mitigating measures, such as low-speed, no engine-idling and no-horn disciplines on the access road.

12. **Capacity Building for Environmental Management.** The Institutional Strengthening Component will support the strengthening of the KPT's environmental management and procedures to reach compliance with certification schemes such as ISO 14001 and OHSAS 18001. The MPCD jointly with Safety Department under the umbrella of Training and Education Department will also provide additional training to the project personnel in the following areas:

(i) Use of safety equipment, including protective clothing and,
(ii) Hearing protection, wherever applicable,
(iii) Fire fighting and emergency response for accidents like oil spills,
(iv) Sampling of wastewater and other effluents,
(v) Air monitoring, noise and vibration monitoring ,
(vi) Road safety practices,
(vii) Project/terminal safety practices,
(viii) Preparation against natural disaster, such as earthquakes and storms,
(ix) Solid waste management,
(x) Pollution incident and oil spill reporting system.

Annex 12: Project Preparation and Supervision

PAKISTAN: Karachi Port Improvement Project

	Planned	Actual
PCN review		11/5/2009
Initial PID to PIC	11/25/2009	11/25/2009
Initial ISDS to PIC	12/04/2009	12/04/2009
Appraisal	05/19/2010	05/19/2010
Negotiations	05/24/2010	07/30/2010
Board/RVP approval	09/9/2010	
Planned date of effectiveness		
Planned date of mid-term review		
Planned closing date		

Key institutions responsible for preparation of the project:
Government of Pakistan (GOP)/Karachi Port Trust (KPT)

Responsible Implementing Agency:
Karachi Port Trust

Bank staff and consultants who worked in the project included:

Name	Title	Unit
Simon David Ellis	Sr. Transport Economist, Co-Task Team Leader	SASDT
Hasan Afzal Zaidi	Transport Specialist, Co-Task Team Leader	SASDT
Amer Zafar Durrani	Sr. Transport Specialist	SASDT
Reynaldo Bench	Senior Port Specialist	ETWTR
Uzma Sadaf	Sr. Procurement Specialist	SARPS
Hasan Saqib	Senior Financial Management Specialist	SARFM
Javaid Afzal	Environmental Specialist	SASDI
Sameer Akbar	Senior Environmental Specialist	ENV
Viqar Zakaria Husain	Environmental Consultant	SASDI
Abid Hussain Chaudhry	Program Assistant	SASDO
Comfort Olatunji	Program Assistant	SASDO
Farooque Chadhry	Port Engineering Consultant	SASDT
Sameena Dost	Sr. Counsel	LEGES
Edward Laing	Shipping, Ports Policy and Economic	SASDT
Farooque Chaudhry	Ports & Shipping Consultant	SASDT
Natalya Stankevich	Governance/Operations Analyst	SASDT
Ernesto Sanchez-Triana	Sr. Environment Specialist	SASDI
Gylfi Palsson	Peer Reviewer, Lead Transport Specialist	AFTTR
Gerald Ollivier	Peer Reviewer, Senior Infrastructure Specialist	ECSSD
Baher El-Hifnawi	Peer Reviewer, Lead Transport economist	EASIN
Shahid Lutfi	Environment Consultant, IFC	CES12
Chau-Ching Shen	Senior Finance Officer	CTRFC
Fernanda Ruiz Nuñez	Economist	SASDT

Bank funds expended to date on project preparation:

1. Bank resources:	US$215,404.81
2. Trust funds:	
3. Total:	US$215,404.81

Estimated Approval and Supervision costs:

1. Remaining costs to approval:	US$50,000.00
2. Estimated annual supervision cost:	USD150,000.00

Annex 13: Documents in the Project File

PAKISTAN: Karachi Port Improvement Project

1. --------- Economic Survey of Pakistan 2008-09. "Overview of the Economy." http://www.finance.gov.pk/admin/images/survey/chapters/overview09.pdf

2. --------- Government of Pakistan: Karachi Port Trust - Detailed Design: Design Engineering Services for the Reconstruction of Berths 10-27A, East Wharf: Phase 1-Berths 14-17A, June, 2007

3. --------- Government of Pakistan: The Karachi Port Trust Act, 1886 and the scales of rates, dues and charges notified there under

4. --------- Government of Pakistan: "Medium Term Development Framework 2005-10." Chapter 29: Transport Development. Planning Commission. http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/mtdf/29-Transport%20Development/29-Transport%20Dev.pdf

5. --------- Government of Pakistan: Karachi Port Trust, Financial statements and auditors' report period ended June 30, 2004 – 2006

6. -------- Government of Pakistan: Karachi Port Trust, PC-1, Reconstruction of Berth 15-17A and SRB's on East Wharves at Karachi Port Trust, December 2009

7. --------- Government of Pakistan: Karachi Port Trust Financial Statement, 2006-2007

8. --------- Pakistan Country Assistance Strategy (CAS) 2006 – 2009, April 14, 2006 http://www.worldbank.org.pk/external/default/main?pagePK=51187349&piPK=51189435&theSitePK=293052&menuPK=64187510&searchMenuPK=4962329&theSitePK=293052&entityID=000094946_02071604142058&searchMenuPK=4962329&theSitePK=293052

9. --------- Scott Wilson Ltd: Detailed Design Report, Design Engineering Services for the reconstruction of Berths 10-17, East Wharf: Phase 1-Berths 14-17A, June 2007.

Annex 14: Statement of Loans and Credits

PAKISTAN: Karachi Port Improvement Project

			Original Amount in US$ Millions						Difference between expected and actual disbursements	
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P115638	2010	Social Safety Nets DPC	0.00	200.00	0.00	0.00	0.00	50.86	-158.91	0.00
P114508	2009	3rd Partnership for Polio Eradication	0.00	74.68	0.00	0.00	0.00	14.70	-26.48	0.00
P107300	2009	SINDH EDUCATION SECTOR PROJECT (SEP)	0.00	300.00	0.00	0.00	0.00	192.48	63.23	0.00
P101684	2009	Second Trade and Transport Facilitation	0.00	25.00	0.00	0.00	0.00	24.48	-1.37	0.00
P105075	2009	PPAF III	0.00	250.00	0.00	0.00	0.00	218.65	-36.30	0.00
P102608	2009	Punjab Education Sector Project	0.00	350.00	0.00	0.00	0.00	216.73	72.55	0.00
P103160	2009	Social Safety Net Technical Assistance	0.00	60.00	0.00	0.00	0.00	53.69	-5.96	0.00
P095982	2008	Electricity Distribution and Transmissio	173.60	83.10	0.00	0.00	0.00	215.96	55.20	0.00
P089378	2008	Balochistan SSIP	0.00	25.00	0.00	0.00	0.00	21.63	10.08	0.00
P084302	2008	Sindh Water Sector Improvement Project	0.00	150.20	0.00	0.00	0.00	143.00	7.49	0.00
P110099	2008	Water Sector Capacity Buidling Project	0.00	38.00	0.00	0.00	0.00	33.73	4.15	0.00
P090501	2007	Land Records Mgmt & Information Systems	0.00	45.65	0.00	0.00	0.00	44.01	13.15	0.00
P099110	2006	Pakistan Earthquake ERC	0.00	400.00	0.00	0.00	0.00	16.31	-1.86	0.00
P094086	2006	Balochistan Education Support Project	0.00	22.00	0.00	0.00	0.00	12.81	6.86	0.00
P076872	2006	PIFRA II	0.00	84.00	0.00	0.00	0.00	25.15	22.63	0.00
P083929	2006	Punjab Municipal Services Improvement	50.00	0.00	0.00	0.00	0.00	30.88	29.54	22.21
P077306	2005	Tax Administration Reform Project	24.40	78.50	0.00	0.00	0.00	75.01	70.70	0.00
P078997	2004	Sindh On-Farm Water Management Project	0.00	111.14	0.00	0.00	0.00	41.25	-8.21	0.00
P082977	2004	Second Poverty Alleviation Fund Project	0.00	551.00	0.00	0.00	4.35	17.61	-312.23	-1.89
P010556	2004	HIGHWAYS REHAB	215.00	150.00	0.00	0.00	0.00	50.76	-125.66	-3.68
P071454	2003	AJK Community Infrastructure & Services	0.00	50.00	0.00	0.00	1.43	8.13	-26.50	3.50
		Total:	463.00	3,048.27	0.00	0.00	5.78	1,507.83	-347.90	20.14

PAKISTAN
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

		Committed				Disbursed			
		IFC				IFC			
FY Approval	Company	Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2005	ABAMCO FUND	0.00	3.46	0.00	0.00	0.00	3.46	0.00	0.00
1995	AES Lal Pir	12.42	9.50	0.00	0.00	12.42	9.50	0.00	0.00
1996	AES Pak Gen	9.20	9.50	0.00	5.37	9.20	9.50	0.00	5.37
1995	Abamco Mgmt	0.00	0.29	0.00	0.00	0.00	0.29	0.00	0.00
1991	BRRIM	0.00	0.23	0.00	0.00	0.00	0.23	0.00	0.00
1993	Crescent Bahuman	0.00	0.31	0.00	0.00	0.00	0.31	0.00	0.00
1997	Crescent Bahuman	0.00	0.20	0.00	0.00	0.00	0.20	0.00	0.00
2001	Crescent Bahuman	2.72	0.00	2.50	1.50	2.72	0.00	2.40	1.50
2006	Dewan Petroleum	15.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	Dewan SME	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00
2003	Dewan Salman	25.00	0.00	5.00	0.00	25.00	0.00	4.00	0.00
1991	Engro Chemical	0.00	1.95	0.00	0.00	0.00	1.95	0.00	0.00
2006	Engro Chemical	0.00	0.64	0.00	0.00	0.00	0.64	0.00	0.00
2001	Eni Pakistan	12.00	0.00	0.00	0.00	12.00	0.00	0.00	0.00
1990	FIIB	0.00	0.27	0.00	0.00	0.00	0.27	0.00	0.00
1992	FIIB	0.00	0.40	0.00	0.00	0.00	0.40	0.00	0.00
2004	First UDL	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GTFP Metropolita	2.54	0.00	0.00	0.00	2.08	0.00	0.00	0.00
1996	Gul Ahmed	8.10	4.10	0.00	5.22	8.10	4.10	0.00	5.22
2006	Habib Bank Li...	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00
2003	KCT	6.46	0.00	1.50	0.00	6.46	0.00	1.50	0.00
1995	Kohinoor	6.25	6.30	0.00	2.03	6.25	6.30	0.00	2.03
2002	Micro Bank	0.00	2.43	0.00	0.00	0.00	2.43	0.00	0.00
2004	NBFI Credit	6.50	0.00	0.00	0.00	6.50	0.00	0.00	0.00
	Orix Finance	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2006	Orix Leasing	17.00	0.00	0.00	0.00	17.00	0.00	0.00	0.00
2005	PICT	6.00	0.00	0.00	0.00	6.00	0.00	0.00	0.00
2006	PICT	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1983	PPL	0.00	1.33	0.00	0.00	0.00	1.33	0.00	0.00
2002	PPL	0.00	5.63	0.00	0.00	0.00	5.63	0.00	0.00
1965	Packages	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.00
1987	Packages	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
1991	Packages	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
1994	Packages	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
1995	Packages	0.00	0.26	0.00	0.00	0.00	0.26	0.00	0.00
2005	Packages	25.00	5.43	0.00	0.00	0.00	1.47	0.00	0.00
2006	Paktel 2005	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	Sarah Textiles	1.12	0.00	0.00	0.00	1.12	0.00	0.00	0.00
2004	TRG Pakistan	0.00	4.16	0.00	0.00	0.00	4.16	0.00	0.00
2007	TRG Pakistan	0.00	2.50	0.00	0.00	0.00	2.50	0.00	0.00

2006	Tameer Bank	0.00	1.01	0.00	0.00	0.00	1.01	0.00	0.00
1996	Uch Power	29.60	0.00	0.00	0.00	19.68	0.00	0.00	0.00
	Total portfolio:	239.91	72.98	59.00	14.12	134.53	56.04	7.90	14.12

		Approvals Pending Commitment			
FY Approval	Company	Loan	Equity	Quasi	Partic.
2004	CSIBL	0.04	0.00	0.00	0.00
2006	IHFL II	0.01	0.00	0.00	0.00
2004	Dewan SME	0.00	0.00	0.00	0.00
2006	JSPE Fund	0.00	0.02	0.00	0.00
2006	Habib Bank	0.00	0.05	0.00	0.00
2006	Paktel 2005	0.00	0.00	0.00	0.03
2006	Orix SME OLP	0.02	0.00	0.00	0.00
2006	Tameer Bank	0.00	0.00	0.00	0.00
2006	Dewan Petroleum	0.00	0.00	0.00	0.03
	Total pending commitment:	0.07	0.07	0.00	0.06

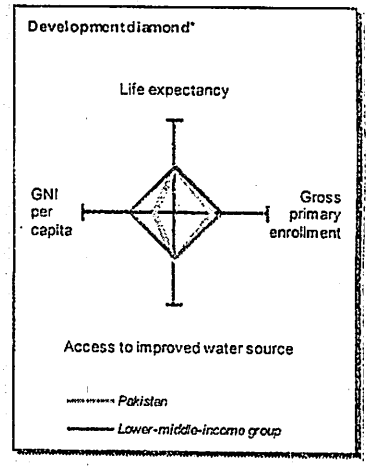
Annex 15: Country at a Glance

PAKISTAN: Karachi Port Improvement Project

Pakistan at a glance

12/9/09

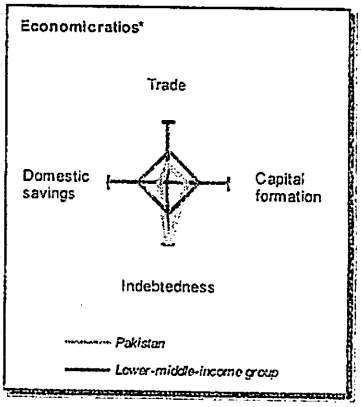
POVERTY and SOCIAL	Pakistan	South Asia	Lower-middle-income
2008			
Population, mid-year *(millions)*	166.1	1,543	3,702
GNI per capita *(Atlas method, US$)*	950	986	2,078
GNI *(Atlas method, US$ billions)*	157.3	1,522	7,692
Average annual growth, 2002-08			
Population *(%)*	2.3	1.5	1.2
Labor force *(%)*	4.1	2.2	1.6
Most recent estimate (latest year available, 2002-08)			
Poverty *(% of population below national poverty line)*	..	..	..
Urban population *(% of total population)*	35	30	41
Life expectancy at birth *(years)*	67	65	68
Infant mortality *(per 1,000 live births)*	72	59	46
Child malnutrition *(% of children under 5)*	..	41	26
Access to an improved water source *(% of population)*	90	87	86
Literacy *(% of population age 15+)*	54	63	83
Gross primary enrollment *(% of school-age population)*	85	108	109
Male	93	111	112
Female	77	104	106



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

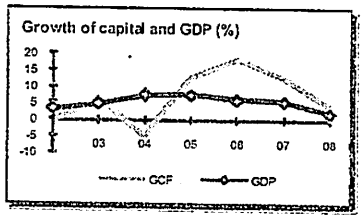
	1988	1998	2007	2008
GDP *(US$ billions)*	38.5	62.2	143.2	164.5
Gross capital formation/GDP	18.0	17.7	22.5	22.0
Exports of goods and services/GDP	13.6	16.5	14.2	12.6
Gross domestic savings/GDP	9.9	16.7	15.4	11.0
Gross national savings/GDP	21.5	21.3	24.6	20.0
Current account balance/GDP	-3.0	-2.7	-4.8	-8.3
Interest payments/GDP	1.8	1.4	0.8	0.6
Total debt/GDP	44.4	51.9	28.4	30.0
Total debt service/exports	25.3	19.8	9.3	9.3
Present value of debt/GDP	..	..	22.9	21.9
Present value of debt/exports	..	..	117.6	113.2

(average annual growth)	1988-98	1998-08	2007	2008	2008-12
GDP	4.2	5.0	5.7	2.0	3.5
GDP per capita	1.7	2.6	3.4	-0.2	1.2
Exports of goods and services	5.2	9.3	2.3	-5.3	0.2

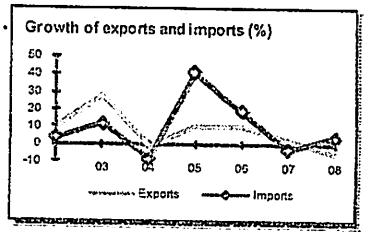


STRUCTURE of the ECONOMY

(% of GDP)	1988	1998	2007	2008
Agriculture	26.0	27.3	20.5	20.4
Industry	24.4	23.8	26.9	26.9
Manufacturing	16.8	15.8	19.0	19.7
Services	49.6	48.9	52.6	52.7
Household final consumption expenditure	74.6	72.1	75.5	76.6
General gov't final consumption expenditure	15.5	11.3	9.2	12.4
Imports of goods and services	21.7	17.5	21.3	23.8



(average annual growth)	1988-98	1998-08	2007	2008
Agriculture	4.5	3.1	4.1	1.1
Industry	4.7	6.6	8.8	1.7
Manufacturing	4.2	8.5	8.3	4.8
Services	4.7	5.7	7.0	6.6
Household final consumption expenditure	4.7	4.0	4.7	-1.3
General gov't final consumption expenditure	1.2	8.0	-9.6	39.0
Gross capital formation	3.7	5.2	12.9	3.9
Imports of goods and services	4.4	6.7	-3.5	3.6



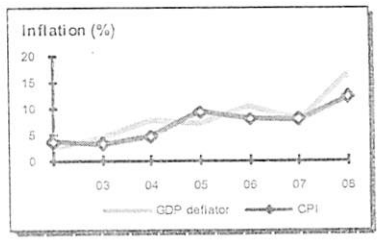
Note: 2008 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

*The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

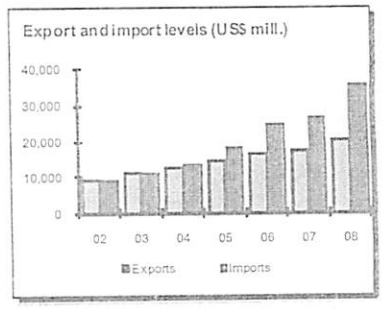
PRICES and GOVERNMENT FINANCE

	1988	1998	2007	2008
Domestic prices				
(% change)				
Consumer prices	..	7.8	7.8	12.0
Implicit GDP deflator	9.6	7.5	7.7	16.3
Government finance				
(% of GDP, includes current grants)				
Current revenue	17.3	15.8	15.0	14.6
Current budget balance	-2.5	-3.8	-0.9	-3.5
Overall surplus/deficit	-8.5	-7.7	-4.4	-7.6



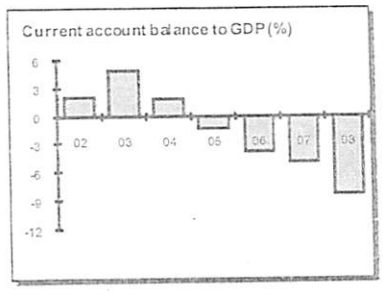
TRADE

	1988	1998	2007	2008
(US$ millions)				
Total exports (fob)	4,362	8,433	17,278	20,427
Cotton	610	126	134	87
Rice	363	562	1,035	1,585
Manufactures	3,362	4,866	10,011	10,354
Total imports (cif)	6,919	10,301	26,989	35,472
Food	..	1,685	2,420	3,526
Fuel and energy	977	1,750	7,346	10,496
Capital goods	..	..	4,476	11,695
Export price index *(2000=100)*	..	105	135	139
Import price index *(2000=100)*	..	100	121	93
Terms of trade *(2000=100)*	..	106	112	150



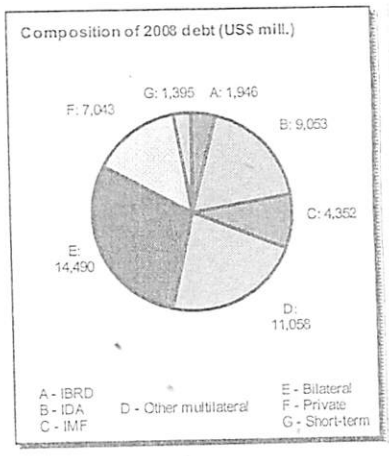
BALANCE of PAYMENTS

	1988	1998	2007	2008
(US$ millions)				
Exports of goods and services	5,227	10,018	21,418	24,004
Imports of goods and services	8,337	12,819	35,299	45,306
Resource balance	-3,110	-2,801	-13,881	-21,302
Net income	-828	-2,330	-3,582	-3,909
Net current transfers	2,776	3,430	10,585	11,476
Current account balance	-1,162	-1,701	-6,878	-13,735
Financing items (net)	1,162	1,420	10,608	7,947
Changes in net reserves	0	281	-3,730	5,788
Memo:				
Reserves including gold *(US$ millions)*	1,326	1,552	15,022	9,365
Conversion rate *(DEC, local/US$)*	17.6	43.1	60.6	62.5



EXTERNAL DEBT and RESOURCE FLOWS

	1988	1998	2007	2008
(US$ millions)				
Total debt outstanding and disbursed	17,065	32,261	40,737	49,337
IBRD	1,108	3,136	2,086	1,946
IDA	1,842	3,800	9,075	9,053
Total debt service	1,856	2,298	2,600	2,940
IBRD	151	379	398	386
IDA	31	73	197	226
Composition of net resource flows				
Official grants	424	175	1,006	987
Official creditors	950	849	1,339	1,328
Private creditors	-154	369	481	652
Foreign direct investment (net inflows)	186	506	5,590	5,438
Portfolio equity (net inflows)	6	-22	1,276	-270
World Bank program				
Commitments	570	250	1,210	336
Disbursements	456	348	1,176	241
Principal repayments	80	244	418	446
Net flows	376	105	758	-205
Interest payments	102	209	177	166
Net transfers	274	-104	581	-371



Note: This table was produced from the Development Economics LDB database.

12/9/09

Annex 16: Maps IBRD PAK 37752

PAKISTAN: Karachi Port Improvement Project