LOAN NUMBER 7900-PK

Loan Agreement

(Punjab Barrages Improvement Phase-II Project)

Between

ISLAMIC REPUBLIC OF PAKISTAN

and

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Dated December 18, 2010

LOAN AGREEMENT

AGREEMENT dated December 18, 2010, between the ISLAMIC REPUBLIC OF PAKISTAN ("Borrower") and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT ("Bank"). The Borrower and the Bank hereby agree as follows:

ARTICLE I — GENERAL CONDITIONS

- 1.01. The General Conditions (as defined in the Appendix to this Agreement) constitute an integral part of this Agreement.
- 1.02. Unless the context requires otherwise, the capitalized terms used in this Agreement have the meanings ascribed to them in the General Conditions or in the Appendix to this Agreement.

ARTICLE II — LOAN

- 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in this Agreement, the amount of one hundred forty five million six hundred thousand United States dollars (USD 145,600,000), as such amount may be converted from time to time through a Currency Conversion in accordance with the provisions of Section 2.07 of this Agreement ("Loan"), to assist in financing the project described in Schedule 1 to this Agreement ("Project").
- 2.02. The Borrower may withdraw the proceeds of the Loan in accordance with Section IV of Schedule 2 to this Agreement.
- 2.03. The Front-end Fee payable by the Borrower shall be equal to one quarter of one percent (0.25%) of the Loan amount.
- 2.04. The interest payable by the Borrower for each Interest Period shall be at a rate equal to LIBOR for the Loan Currency plus the Fixed Spread; provided, that upon a Conversion of all or any portion of the principal amount of the Loan, the interest payable by the Borrower during the Conversion Period on such amount shall be determined in accordance with the relevant provisions of Article IV of the General Conditions. Notwithstanding the foregoing, if any amount of the Withdrawn Loan Balance remains unpaid when due and such non-payment continues for a period of thirty days, then the interest payable by the Borrower shall instead be calculated as provided in Section 3.02 (d) of the General Conditions.
- 2.05. The Payment Dates are March 15 and September 15 in each year.

- 2.06. The principal amount of the Loan shall be repaid in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.
- 2.07. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management: (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, withdrawn or unwithdrawn, to an Approved Currency; (ii) a change of the interest rate basis applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding from a Variable Rate to a Fixed Rate, or vice versa; and (iii) the setting of limits on the Variable Rate applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on the Variable Rate.
 - (b) Any conversion requested pursuant to paragraph (a) of this Section that is accepted by the Bank shall be considered a "Conversion", as defined in the General Conditions, and shall be effected in accordance with the provisions of Article IV of the General Conditions and of the Conversion Guidelines.
 - (c) Promptly following the Execution Date for an Interest Rate Cap or Interest Rate Collar for which the Borrower has requested that the premium be paid out of the proceeds of the Loan, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and pay to itself the amounts required to pay any premium payable in accordance with Section 4.05 (c) of the General Conditions up to the amount allocated from time to time for the purpose in the table in Section IV of Schedule 2 to this Agreement.

ARTICLE III — PROJECT

- 3.01. The Borrower declares its commitment to the objectives of the Project. To this end, the Borrower shall cause the Project to be carried out by Punjab in accordance with the provisions of Article V of the General Conditions and the Project Agreement.
- 3.02. Without limitation upon the provisions of Section 3.01 of this Agreement, and except as the Borrower and the Bank shall otherwise agree, the Borrower shall ensure that the Project is carried out in accordance with the provisions of Schedule 2 to this Agreement.

ARTICLE IV — REMEDIES OF THE BANK

- 4.01. The Additional Event of Suspension consists of the following, namely, that Punjab has failed to implement, monitor and supervise, incurred substantial delays, or unjustifiably suspended the implementation, monitoring or supervision, whether in whole or in part, momentarily or definitively, of the SDAP, EMP and, if applicable, the LARF and RAPs, required for the mitigation of the social and environmental impact of Project activities.
- 4.02. The Additional Event of Acceleration consists of the following, namely, the event specified in Section 4.01 of this Agreement occurs.

ARTICLE V — EFFECTIVENESS

5.01. The Effectiveness Deadline is the date ninety (90) days after the date of this Agreement.

ARTICLE VI — REPRESENTATIVE; ADDRESSES

- 6.01. The Borrower's Representative is the Secretary of the Economic Affairs Division, Ministry of Economic Affairs and Statistics, and/or any of the Additional Secretary, Joint Secretary, Deputy Secretary or Section Officer in that Division acting individually.
- 6.02. The Borrower's Address is:

The Secretary to the Government of Pakistan Economic Affairs Division Ministry of Economic Affairs and Statistics Islamabad, Pakistan

Phone: Facsimile:

92-51-9210629 92-51-9218976

6.03. The Bank's Address is:

International Bank for Reconstruction and Development 1818 H Street, N.W. Washington, D.C. 20433 United States of America

Cable address: Telex: Facsimile:

INTBAFRAD 248423(MCI) or 1-202-477-6391

Washington, D.C. 64145(MCI)

AGREED at Islamabad, Pakistan, $\,$ as of the day and year first above written.

ISLAMIC REPUBLIC OF PAKISTAN

By: /s/ Sibtain Fazal Halim

Authorized Representative

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By: /s/ Rachid Benmessaoud

Authorized Representative

SCHEDULE 1

Project Description

The objectives of the Project are to assist the Borrower in: (a) rehabilitating and modernizing Jinnah Barrage, and the carrying out of affiliated works, to enable reliable and uninterrupted supply of water for over 2.1 million acres of farmland benefiting about 600,000 farm families for irrigation and domestic water users; and (ii) building the institutional capacity of IPD to improve management of water resources and the irrigation system.

The Project consists of the following parts:

Part A: Rehabilitation and Modernization of Jinnah Barrage

- 1. Carrying out of civil works for the rehabilitation and modernization of Jinnah Barrage, including: (a) the construction of a subsidiary weir about 600 feet downstream of the barrage's main weir, and associated works to address retrogression and ineffective energy dissipation problems; (b) the repairs to the barrage floor, impact and friction blocks and guide banks; (c) alteration to the main barrage structure, such as extension of abutments and downstream divide walls; (d) the construction of river training works upstream to improve the river approach to the barrage; and (e) the preparatory works and renovation of the necessary building and management infrastructure.
- 2. Carrying out of mechanical and electrical works for the rehabilitation and modernization of Jinnah Barrage consisting of: (a) the renovation of the barrage gates and hoist system and automation of gate operation; and (b) the upgrading of the barrage monitoring system, and basic operation and maintenance facilities.
- 3. Implementation of the Social Development Action Plan, the Environmental Management Plan, the Land Acquisition and Resettlement Framework and, if necessary, any Resettlement Action Plans.
- 4. Management support and supervision of civil, electrical and mechanical works (including those in the Social Development Action Plan) for the rehabilitation and modernization of the Jinnah Barrage.

Part B: Improvement and Modernization of the Irrigation and Water Management Systems

1. (i) Upgrading and modernization of the Punjab Monitoring and Implementing Unit irrigation and water management systems, including: (a) development and implementation of modern databases with client interfaces; (b) update of monitoring and decision support systems through the adoption of GIS technology, and forecasting and planning models; (c)

installation or adoption of new water measurement, accounting and transmission systems at key locations in the Indus river, and link canal system and main and branch canals; and (d) establishment of modern control/management rooms for the operation and management of Punjab's canal systems.

- (ii) Provision of technical assistance, staff training and equipment, including hardware and software, discharge measurement equipment, echosounders with geo-positioning systems for taking cross section of rivers and canals; and equipment for measuring water flows, stage and velocities.
- 2. Preparation of feasibility studies and designs for prospective projects intended to further improve the irrigation and water management systems in Punjab.

<u>Part C</u>: <u>Monitoring and Evaluation of the Project Impact and Implementation of Social and Environmental Management Plans</u>

Monitoring and evaluating the Project's impact including, *inter alia*: (a) the assessment of the Project's socio-economic impact on neighboring communities and their productive activities and level of employment; (b) the assessment of the environmental impact of construction activities in the Project affected area; (c) the estimation of the Project's overall benefits and economic rate of returns; (d) the phased transfer of operations and maintenance of irrigation assets to Farmers' Organizations; (e) the supervision of implementation of the SDAP, EMP and, if triggered, the LARF and RAPs; and (f) the preparation of various reports related thereto.

Part D: Project Management Coordination

Strengthening the institutional capacity of the IPD for the implementation and/or coordination of Project activities, in order to: (a) carry out the procurement and financial management processes under the Project; (b) implement the SDAP, EMP and, if triggered, the LARF and RAPs, as well as the communication strategies thereof; (c) operate the Project site and the provincial irrigation systems; (d) transform the Project Management Organization (PMO) into a barrages management organization; (e) improve Punjab's asset management planning and budgeting expertise, and strengthen its legal, engineering and financial management capabilities in the water sector; (f) establish and coordinate an independent Panel of Experts (PoE) to supervise/validate Project designs, quality of construction and safety enhancement mesures for the Jinnah Barrage; and (g) provide technical assistances, training and the carrying out of strategic studies and pilot projects that may be identified during Project implementation for the improvement of water management.

SCHEDULE 2

Project Execution

Section I. Implementation Arrangements

A. Subsidiary Agreement

- 1. To facilitate the carrying out of the Project, the Borrower shall make the proceeds of the Loan available to Punjab in accordance with the provision of this Agreement and the Borrower's on-lending policies and budgetary procedures, and under financial terms and conditions identical to those provided for under this Agreement.
- 2. Notwithstanding paragraph (1) above, in the event that any of the provisions of this Agreement, including the instructions that the Bank shall have specified by notice to the Borrower pursuant to Section IV.A.1 of this Schedule, were inconsistent with the budgetary procedures of the Borrower, the provisions of this Agreement shall govern.

B. Anti-Corruption

The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines.

C. Safeguards.

- 1. The Borrower shall ensure that Punjab shall:
 - (a) carry out the Project in accordance with sound technical designs and in compliance with the Social Development Action Plan, the Environmental Management Plan, the Land Acquisition and Resettlement Framework, and, in the event that the Project give raise to Displaced Persons, the applicable Resettlement Action Plans;
 - (b) commit its best efforts to maintain a constant and sufficient flow of water through the Thal Canal to meet the irrigation and household consumption requirements of the communities in the Thal Canal command area (other than the annual maintenance closure);
 - (c) ensure that the Thal Canal annual maintenance closure does not exceed the average historical pattern of closure period of approximately twenty one (21) days per year;
 - (d) implement a communication strategy, satisfactory to the Bank, to inform key stakeholders of constructions plans and advancement of civil works,

- any possible adverse effects, the remedial/mitigation measures to be implemented, and the stakeholders' entitlements pursuant to the SDAP, EMP and RAPs, as the case may be; and
- (e) establish a grievance redressal mechanism, satisfactory to the Bank, in order to receive and expeditiously handle any stakeholders' complaints related to the Project.

Section II. Project Monitoring Reporting and Evaluation

A. Project Reports

- 1. The Borrower shall monitor and evaluate the progress of the Project and cause Punjab to prepare Project Reports in accordance with the provisions of Section 5.08 of the General Conditions and on the basis of indicators agreed with the Bank. Each Project Report shall cover the period of one calendar quarter, and shall be furnished to the Bank not later than forty five (45) days after the end of the period covered by such report.
- 2. Notwithstanding the provisions of paragraphs (1) above, the Borrower shall cause Punjab to prepare, by no later than March 31 of each year, commencing on March 31, 2011, and furnish to the Borrower and the Bank, an annualized Project Report, in a manner and substance satisfactory to the Bank, integrating the Project Reports prepared under paragraph (1) above, covering the preceding calendar year, and comprising, *inter alia*: (i) an explanation of the progress achieved in Project implementation by component and sub-component; (ii) the implementation of the SDAP, EMP, LARF and RAPs, as the case may be; (iii) the status of key performance indicators and the operations of Jinnah Barrage, Thal Canal and other Project facilities; and (iv) the Annual Work Plan.
- 3. Notwithstanding the provisions of paragraph (1) and (2) above, the Borrower shall cause Punjab to:
 - (a) prepare, by no later than October 31, 2013, and furnish to the Borrower and the Bank, a mid-term review report, in a manner and substance satisfactory to the Bank, integrating the results of the monitoring and evaluation activities performed pursuant to paragraphs (1) and (2) above on the progress achieved in the carrying out of the Project during the period preceding the date of such report, and setting out the measures recommended to ensure the efficient carrying out of the Project and the achievement of the objectives thereof during the period following such date; and
 - (b) review with the Bank, by December 31, 2013, or such later date as the Bank shall request, the mid-term review report referred in sub-paragraph (a) above, and, thereafter, cause Punjab to take all measures required to

ensure the efficient completion of the Project and the achievement of the objectives thereof, based on the conclusions and recommendations of the said report and the Bank's views on the matter.

B. Financial Management, Financial Reports and Audits

- 1. The Borrower shall maintain and cause Punjab to maintain a financial management system in accordance with the provisions of Section 5.09 of the General Conditions.
- 2. Without limitation on the provisions of Part A of this Section, the Borrower shall prepare, or cause Punjab to prepare, and furnish to the Bank, not later than forty five (45) days after the end of each calendar quarter, interim unaudited financial reports for the Project covering said quarter of Project expenditures in form and substance satisfactory to the Bank.
- 3. The Borrower shall have the Financial Statements for the Project's operations resources and expenditures referred to above audited in accordance with the provisions of Section 5.09 (b) of the General Conditions. Each audit of the Financial Statements shall cover the period of one fiscal year of the Borrower and Punjab, commencing with the fiscal year in which the first withdrawal was made under the Project. The audited Financial Statements for each such period shall be furnished to the Bank not later than six months after the end of such period.

Section III. Procurement

A. General

- 1. **Goods and Works.** All goods and works required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in Section I of the Procurement Guidelines, and with the provisions of this Section.
- 2. **Consultants' Services.** All consultants' services required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in Sections I and IV of the Consultant Guidelines and with the provisions of this Section.
- 3. **Definitions.** The capitalized terms used below in this Section to describe particular procurement methods or methods of review by the Bank of particular contracts refer to the corresponding method described in the Procurement Guidelines, or Consultant Guidelines, as the case may be.

B. Particular Methods of Procurement of Goods and Works

- 1. **International Competitive Bidding.** Except as otherwise provided in paragraph 2 below, goods and works shall be procured under contracts awarded on the basis of International Competitive Bidding,
- 2. **Other Methods of Procurement of Goods and Works**. The following table specifies the methods of procurement, other than International Competitive Bidding, which may be used for goods and works. The Procurement Plan shall specify the circumstances under which such methods may be used.

Procurement Method

- (a) National Competitive Bidding (subject to the additional procedures set forth in the attachment to this Schedule)
- (b) Community Participation (subject to the additional procedures set forth in the attachment to this Schedule)
- (c) Shopping
- (d) Direct Contracting

C. Particular Methods of Procurement of Consultants' Services

- 1. **Quality- and Cost-based Selection.** Except as otherwise provided in paragraph 2 below, consultants' services shall be procured under contracts awarded on the basis of Quality and Cost-based Selection.
- 2. **Other Methods of Procurement of Consultants' Services**. The following table specifies the methods of procurement, other than Quality and Cost-based Selection, which may be used for consultants' services. The Procurement Plan shall specify the circumstances under which such methods may be used.

Procurement Method

- (a) Selection Based on Consultants' Qualifications
- (b) Individual Consultants
- (c) Single Source Selection
- (d) Selection under Fixed Budget
- (e) Least-Cost Selection
- (f) Quality-Based Selection

D. Review by the Bank of Procurement Decisions

Except as the Bank shall otherwise determine by notice to the Borrower, the following contracts shall be subject to Prior Review by the Bank: (a) each contract for goods or works procured on the basis of International Competitive Bidding or Direct Contracting, regardless its value; (b) the first contract for works to be procured on the basis of National Competitive Bidding by both each

implementing agency, regardless its value; (c) each contract for works procured on the basis of National Competitive Bidding estimated to cost the equivalent of USD200,000 or more; (d) the first contract for goods and the first contract for works procured on the basis of Shopping and Community Participation procedures, regardless their value; (e) the first consultancy contract to be entered with a firm, irrespective of its value, and thereafter all consultants' services contracts to entered with firms estimated to costs USD100,000 or more; (f) each contract for consultants' services provided by a firm and procured on the basis of Single Source Selection, regardless its value; and (g) the first consultancy contract to be entered with an individual consultant, irrespective of its value, and thereafter all consultants' service contracts with individual consultants estimated to cost USD50,000 or more. All other contracts shall be subject to Post Review by the Bank.

Section IV. Withdrawal of Loan Proceeds

A. General

- 1. The Borrower may withdraw the proceeds of the Loan in accordance with the provisions of Article II of the General Conditions, this Section, and such additional instructions as the Bank shall specify by notice to the Borrower (including the "World Bank Disbursement Guidelines for Projects" dated May 2006, as revised from time to time by the Bank and as made applicable to this Agreement pursuant to such instructions), to finance Eligible Expenditures as set forth in the table in paragraph 2 below.
- 2. The following table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Loan ("Category"), the allocation of the amounts of the Loan to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category.

Category	Amount of the Loan Allocated (expressed in USD)	Percentage of Expenditures to be financed (inclusive of Taxes)
(1) Works for:		
(a) Part A.1 and A.2 of the Project:	80,000,000	90%
(b) Part A.3 of the Project:	2,000,000	100%
(2) Goods and services other than Consultants' Services	8,000,000	100%

(3) Consultants' Services	18,000,000	100%
(4) Incremental Operating Costs, Workshops and Training	8, 000,000	100%
(5) Front-end Fee	364,000	Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 2.07 (b) of the General Conditions
(6) Interest during construction	18,636,000	Amounts payable pursuant to Section 2.04 of this Agreement in accordance with Section 2.07(c) of the General Conditions, until December 31, 2015
(7) Premia for Interest Rate Caps and Interest Rate Collars	0	Amount payable pursuant to Section 2.07 of this Agreement, in accordance with Section 4.04(c) of the General Conditions
(8) Unallocated	10,600,000	
TOTAL AMOUNT	145,600,000	

B. Withdrawal Conditions; Withdrawal Period

- 1. Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made for payments made prior to the date of this Agreement, except that withdrawals up to an aggregate amount not to exceed USD5,000,000 equivalent may be made for payments made prior to this date but on or after January 1, 2010, for Eligible Expenditures under Categories (1), (2), (3) and (4).
- 2. The Closing Date is June 30, 2016.

ATTACHMENT TO SCHEDULE 2

Improvement of Bidding Procedures under National Competitive Bidding and Community Participation

The following improvements in bidding procedures will apply to all procurements of Goods and Works under National Competitive Bidding and Community Participation, in order to ensure economy, efficiency, transparency and broad consistency with the provisions of Section 1 of the Guidelines:

(a) For National Competitive Bidding:

- (i) Invitations to bid shall be advertised in at least one national newspaper with a wide circulation, at least 30 days prior to the deadline for the submission of bids;
- (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 works contracts shall be awarded on the basis of unit prices;
- (x) Contracts shall not be awarded on the basis of nationally negotiated rates;
- (xi) Single bid shall also be considered for award;
- (xii) Contracts shall be awarded to the lowest evaluated and qualified bidder;

- (xiii) Post-bidding negotiations shall not be allowed with the lowest evaluated or any other bidders;
- (xiv) draft NCB contracts shall be reviewed by the Bank in accordance with the prior review procedures;
- (xv) State-owned enterprises shall be eligible to bid only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not a dependent agency of the Recipient;
- (xvi) A firm declared ineligible by the Bank, based on a determination by the Bank that the firm has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for or in executing a Bank-financed contract, shall be ineligible to be awarded a Bank-financed contract during the period of time determined by the Bank.
- (xvii) The Bank shall declare a firm ineligible, either indefinitely or for a stated period, to be awarded a contract financed by the Bank, if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a contract financed by the Bank; and
- (xviii) Each contract financed from the proceeds of a Loan shall provide that the suppliers, contractors and subcontractors shall permit the Bank, at its request, to inspect their accounts and records relating to the performance of the contract and to have said accounts and records audited by auditors appointed by the Bank. The deliberate and material violation by the supplier, contractor or subcontractor of such provision may amount to obstructive practice.

(b) For Community Participation:

- (i) works estimated to cost less than USD30,000 equivalent per contract may be procured under lump-sum, fixed-price contracts awarded to organizations of communities benefiting from these works; and
- (ii) the basic form of agreement acceptable to the Bank to be executed for each such contract shall include a detailed description of the works, including basic specifications, the apportionment of costs, the execution of the work, the required completion date, and relevant drawings, where applicable.

SCHEDULE 3

Amortization Schedule

1. The following table sets forth the Principal Payment Dates of the Loan and the percentage of the total principal amount of the Loan payable on each Principal Payment Date ("Installment Share"). If the proceeds of the Loan have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined by the Bank by multiplying: (a) Withdrawn Loan Balance as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayable amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

Principal Payment Date	Installment Share	
	(Expressed as a Percentage)	
On each March 15 and September		
15		
Beginning September 15, 2016	3.33%	
through September 15, 2030		
On March 15, 2031	3.43%	

- 2. If the proceeds of the Loan have not been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:
 - (a) To the extent that any proceeds of the Loan have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the Withdrawn Loan Balance as of such date in accordance with paragraph 1 of this Schedule.
 - (b) Any amount withdrawn after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by the Bank by multiplying the amount of each such withdrawal by a fraction, the numerator of which is the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date ("Original Installment Share") and the denominator of which is the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such amounts repayable to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

- 3. (a) Amounts of the Loan withdrawn within two calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.
 - (b) Notwithstanding the provisions of sub-paragraph (a) of this paragraph, if at any time the Bank adopts a due date billing system under which invoices are issued on or after the respective Principal Payment Date, the provisions of such sub-paragraph shall no longer apply to any withdrawals made after the adoption of such billing system.
- 4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the Withdrawn Loan Balance to an Approved Currency, the amount so converted in the Approved Currency that is repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by the Bank by multiplying such amount in its currency of denomination immediately prior to the Conversion by either: (i) the exchange rate that reflects the amounts of principal in the Approved Currency payable by the Bank under the Currency Hedge Transaction relating to the Conversion; or (ii) if the Bank so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.
- 5. If the Withdrawn Loan Balance is denominated in more than one Loan Currency, the provisions of this Schedule shall apply separately to the amount denominated in each Loan Currency, so as to produce a separate amortization schedule for each such amount.

APPENDIX

Section I. Definitions

- "Annual Work Plan" means the time-bound program of Project activities, to be 1. prepared on an annual basis pursuant to sub-paragraph 3(a) of Section I.B of the Project Agreement.
- 2. "Anti-Corruption Guidelines" means the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006.
- "Category" means a category set forth in the table in Section IV of Schedule 4 to 3. this Agreement.
- 4. "Consultant Guidelines" means the "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" published by the Bank in May 2004 and revised in October 2006.
- 5. "Displaced Persons" means persons who, on account of the execution of the Project, have experienced or would experience direct economic and social impacts caused by: (a) the involuntary taking of land, resulting in: (i) relocation or loss of shelter: (ii) loss of assets or access to assets: or (iii) loss of income sources or means of livelihood, whether or not such persons must move to another location; or (b) the involuntary restriction of access to legally designated parks and protected areas, resulting in adverse impacts on the livelihood of such persons.
- 6. "Environmental Management Plan" and the acronym "EMP" means Punjab's action plan, dated November 2009, setting out mitigation measures, including, inter alia, monitoring, communication and documentation, waste disposal, traffic management, and emergency response and contingency plans, in order to address any adverse environmental impacts that might originate from the Project.
- 7. "Farmers' Organizations" means the organizations formed, or to be formed, at the level of a distributary/minor canal, and registered under the Punjab Irrigation and Drainage Authority Act (1997) (No. XI of 1997, dated July 2, 1997), as amended and/or regulated to the date of this Agreement.
- 8. "Financial Management Manual" means the manual dated February 28, 2010, setting forth, inter alia, the policies and procedures for funds and asset management, withdrawal applications and settlement of payments, accounting, maintenance of records, reporting regimes, security protocols, and auditing requirements applicable to the Project.

- 9. "General Conditions" means the "International Bank for Reconstruction and Development General Conditions for Loans", dated July 1, 2005 (as amended through February 12, 2008) with the modifications set forth in Section II of this Appendix.
- 10. "GIS" means a geographic information system integrating software and hardware for capturing, managing, analyzing and displaying geographically referenced information.
- "Incremental Operating Costs" means the reasonable costs of the incremental expenditures incurred by Punjab in relation to the Project, which expenditures would not have been incurred absent the Project, including, *inter alia*: (i) office rental and utilities fees; (ii) office staples, and office equipment's operation and maintenance; (iii) vehicles rental, operation and maintenance; (iv) in-country travel allowance for the PSC and PMO staff; (v) banking services and insurance costs; (vi) advertisement, communication and dissemination expenses; (vii) translation and printing costs; and (viii) salaries, allowances and other emoluments of incremental Project staff. However, the term "Incremental Operating Costs" does not include salaries or salary supplements of the Borrower's or Punjab's civil servants.
- 12. "IPD" means the Irrigation and Power Department of the Province of Punjab, and any successor thereto.
- 13. "Jinnah Barrage" means the barrage located across the Indus river in the Mianwali District of the Province of Punjab, at 32° 55.1846' North and 71° 31.1812' East.
- 14. "Land Acquisition and Resettlement Framework" and the acronym "LARF" mean Punjab's framework document, dated November 2009, setting out the institutional arrangements, policy principles and objectives, and protocols for: (i) screening Project activities in order to determine if the implementation thereof might give rise to Displaced Persons; (ii) determining the eligibility for compensatory measures; (iii) preparing Resettlement Action Plans and supervising and evaluating the implementation thereof; and (iv) establishing and administering a grievance settlement mechanisms.
- 15. "M&E Consultants" means the monitoring and evaluation consulting firms to be hired by Punjab pursuant to paragraph 4 of Section I.A of the Schedule to the Project Agreement.
- 16. "Panel of Experts" and the acronym "PoE" mean the independent panel to be established pursuant to paragraph 2 of Section I.A of the Schedule to the Project Agreement.

- 17. "Procurement Guidelines" means the "Guidelines: Procurement under IBRD Loans and IDA Credits" published by the Bank in May 2004 and revised in October 2006.
- 18. "Procurement Manual" means the manual dated April 9, 2010, setting out, *inter alia*: (i) the processing and approval procedures to be followed by the implementing agencies in the procurement of goods, works and services under the Project; (ii) the allocation of procurement responsibilities, including the constitution of evaluations committees and designation of appointing authorities; and (iii) the timeframe and criteria for procurement approvals/reviews, as such manual shall be updated from time to time with the prior concurrence of the Bank.
- 19. "Procurement Plan" means the Borrower's procurement plan for the Project, dated February 28, 2010 and referred to in paragraph 1.16 of the Procurement Guidelines and paragraph 1.24 of the Consultant Guidelines, as the same shall be updated from time to time in accordance with the provisions of said paragraphs.
- 20. "Project Implementing Entity" and "Punjab" mean the Borrower's Province of Punjab.
- 21. "Project Management Organization" and the acronym "PMO" mean project management unit established and operating within the IPD pursuant to letter from the Secretary (IDP) No. DEV-8-S.O(Prog.)/2000, dated June 26, 2004, in accordance with the Chief Minister's approval No. 5604, dated June 22, 2004, and referred to in sub-paragraph 1.(b) of Section I.A of the Schedule to the Project Agreement.
- 22. "Program Monitoring and Implementation Unit" and the acronym "PMIU" mean the unit established and operating within the IPD pursuant to letter from the Secretary IPD No. S.O (B)(I&P)/2005-06, dated October 27, 2005, in accordance with the Chief Miniter's approval No. 9631, dated October 21, 2005, and referred to in sub-paragraph 1.(c) of Section I.A o the Schedule to the Project Agreement.
- 23. "Project Steering Committee" and the acronym "PSC" mean the committee to be established and operating to paragraph 1.(a) of Section I.A of the Schedule to the Project Agreement.
- 24. "Punjab" mean the Borrower's Province of Punjab, and the Project Implementing Entity for purposes of the General Conditions.

- 25. "Resettlement Action Plans" and the acronym "RAPs" mean collectively the resettlement plans to be prepared in accordance with the LARF and the provision of Section I.D.1(b) of the Schedule to the Project Agreement, which plans set out the principles and procedures governing land acquisition, resettlement and compensation, as well as reporting and monitoring arrangements to ensure compliance therewith.
- 26. "Social Development Action Plan" and the acronym "SDAP" mean Punjab's action plan, dated November 2009, setting out mitigation measures and a program of social development assistance (including minor infrastructure development, a seed distribution program, protection of physical cultural property and public health plans) in order to address any adverse social impacts that might originate from the Project and/or enhance the benefits derived from the Project.
- 27. "Thal Canal" means the canal off taking from Jinnah Barrage providing water for irrigation and household consumption to the districts of Mianwali, Khushab, Bhakkar, Layyah, Muzaffargarh.
- 28. "Training and Workshops" means the reasonable costs of training, workshops and conferences conducted in the territory of the Borrower, or attended abroad by implementing agencies' officials and staff, including purchase and publication of materials, rental of facilities, course fees and travel and subsistence of trainees.

Section II. Modifications to the General Conditions

The modifications to the General Conditions are as follows:

1. Paragraph (1) of Section 7.02 is modified to read as follows:

"Section 7.02. Suspension by the Bank

... (1) *Ineligibility*. The Bank or the Association has declared the Borrower (other than the Member Country) or Punjab ineligible to receive proceeds of any financing made by the Bank or the Association or otherwise to participate in the preparation or implementation of any project financed in whole or in part by the Bank or the Association, as a result of a determination by the Bank or the Association that the Borrower or Punjab has engaged in fraudulent, corrupt, coercive or collusive practices in connection with the use of the proceeds of any financing made by the Bank or the Association."

2. The following terms and definitions set forth in the Appendix are modified or deleted as follows, and the following new terms and definitions are added in alphabetical order to the Appendix as follows, with the terms being renumbered accordingly:

The definition of the term "Conversion Date" is modified to read as follows:

"Conversion Date' means, in respect of a Conversion, the Execution Date (as herein defined) or such other date as requested by the Borrower and accepted by the Bank, on which the Conversion enters into effect, and as further specified in the Conversion Guidelines."