Loan Agreement

(Additional Financing for the Irrigation Rehabilitation Emergency Project)

between

REPUBLIC OF ARMENIA

and

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Dated November 1, 2011

LOAN AGREEMENT

Agreement dated November 1, 2011, between REPUBLIC OF ARMENIA ("Borrower") and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT ("Bank") for the purpose of providing additional financing for activities related to the Original Project (as defined in the Appendix to this Agreement). The Borrower and the Bank hereby agree as follows:

ARTICLE I — GENERAL CONDITIONS; DEFINITIONS

- 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 Original Loan Agreement 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 eighteen million Dollars (\$18,000,000), 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 the Reference Rate for the Loan Currency plus the Variable 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 Notwithstanding the foregoing, if any amount of the Withdrawn Loan Balance remains unpaid when due and such non-payment continues for a period of thirty days, then the interest payable by the Borrower shall instead be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 (e) 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; and (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, or from a Variable Rate based on a Variable Spread to a Variable Rate based on a Fixed Spread.
 - (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.

ARTICLE III — PROJECT

- 3.01. The Borrower declares its commitment to the objectives of the Project. To this end, the Borrower shall carry out the Project through the SCWM under the MOTA of the Borrower in accordance with the provisions of Article V of the General Conditions.
- 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 —TERMINATION

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

ARTICLE V — REPRESENTATIVE; ADDRESSES

- 5.01. Except as provided in Section 2.02 of this Agreement, the Borrower's Representative is its Minister of Finance.
- 5.02. The Borrower's Address is:

Ministry of Finance of the Republic of Armenia 1 Melik-Adamyan Street Yerevan 0010 Republic of Armenia

Facsimile: + 374 10 524282

5.03. 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 Yerevan, Republic of Armenia, as of the day and year first above written.

REPUBLIC OF ARMENIA

By /s/ Vache Gabrielyan

Authorized Representative

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By /s/ Jean-Michel Happi

Authorized Representative

SCHEDULE 1

Project Description

The objectives of the Project are to: (a) improve water use efficiency in the selected irrigation schemes; and (b) foster immediate rural employment.

The Project consists of the following additional parts to the Original Project:

Part A: Rehabilitation of Identified Stretches of Canals in the Selected Irrigation Schemes

- 1. Provision of works for the rehabilitation of the main and secondary canals in Aragatsotn, Kotyak, Shirak, Lori, Ararat, and Armavir marzes.
- 2. Provision of consultants' services for supervision of rehabilitation works under Part A.1 of the Project.

Part B: Rehabilitation of Tertiary Irrigation Networks

- 1. Provisions of works for the rehabilitation of tertiary irrigation networks in communities of Lori, Shirak, Gegharkunik and Armavir marzes.
- 2. Provision of consultants' services for supervision of rehabilitation works under Part B.1 of the Project.

Part C: Project Management and Institutional Activities

- 1. Provision of Incremental Operating Costs to the PIU and WUAs Support Group in the Project implementation and management, and provision of technical assistance, including training.
- 2. Financing of Project audit and audits of WSAs and WUAs.
- 3. Provision of technical assistance, including studies on construction of a gravity scheme in the Meghri region.

SCHEDULE 2

Project Execution

Section I. Implementation Arrangements

A. Institutional Arrangements

- 1. The Borrower, through SCWM, shall designate the PIU with the responsibility for procurement planning, monitoring and reporting, disbursement and implementation of internal financial controls, maintenance of Project accounts and preparation of Project Reports, and shall ensure that PIU at all times shall have adequate staff and resources to fulfill its responsibilities with respect to Project implementation and management.
- 2. The Borrower shall update the Operational Manual by October 20, 2011 and maintain the updated Operational Manual in form and content satisfactory to the Bank, shall duly perform all its obligations under the updated Operational Manual and shall not assign, amend, abrogate or waive the updated Operational Manual without obtaining the prior approval of the Bank.
- 3. Until completion of the Project the Borrower shall maintain the WUAs' Support Group under the PIU, which will assist in the implementation of the Project.
- 4. The Borrower shall ensure that necessary budgetary resources for adequate operation and maintenance of irrigation systems are made available to the irrigation sector in the Borrower's annual budget.

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. Except as the Bank shall otherwise agree, the Borrower, through SCWM, shall: (a) apply for the activities under Parts A and B of the Project the criteria, policies, procedures and arrangements set out in the EIA and RPF; and (b) not amend or waive, or permit to be amended or waived the EIA and RPF, or any provision thereof, in a manner which, in the opinion of the Bank, may materially and adversely affect the implementation of the Project.
- 2. The Borrower, through SCWM, shall:
 - (a) ensure that: (i) civil works on any particular section of the canal selected under Part A and B of the Project will not start, unless an EMP for that canal section, satisfactory to the Bank, has been prepared by the Borrower and disclosed locally, and on the SCWM website, not later than thirty (30) days before the

beginning of the works; (ii) the arrangements are made for public review and comment of the EMP, any comments received have been responded to in a manner acceptable to the Bank, and the final approved version of the EMP has been disclosed locally; and (iii) any provision of EMPs is not assigned, amended, abrogated or waived without prior review and approval of the Bank;

- (b) ensure that all activities undertaken for the purpose of carrying out of Parts A and B of the Project comply with environmental standards and guidelines satisfactory to the Bank;
- (c) ensure that the selection of any canal section under Parts A and B of the Project is carried out in accordance with the provisions of the EMP;
- (d) ensure the complete implementation of the EMPs in a manner acceptable to the Bank, including all necessary measures to minimize and to mitigate any adverse environmental impacts caused by the implementation of Parts A and B of the Project; and
- (e) maintain the SCWM, and ensure that it has appointed competent staff in adequate numbers and with such responsibilities and functions acceptable to the Bank as shall enable the SCWM to manage, coordinate and monitor the implementation of the EMPs.

3. The Borrower, through SCWM, shall:

- (a) ensure that RPF is implemented in a manner acceptable to the Bank, including all necessary measures to minimize and to mitigate any adverse impacts caused to affected people by implementation of Parts A and B of the Project. Where the need for land acquisition or resettlement arises along respective canal section/s, an RAP acceptable to the Bank, will be prepared, disclosed to the public and implemented, to the extent required by the RPF, not later than thirty (30) days before the beginning of civil works on respective canal section/s;
- (b) maintain or cause to be maintained and publicize or cause to be publicized, the availability of grievance procedures to hear and determine fairly and in good faith, in accordance with the RPF, all complaints raised in relation to the implementation of the RAPs by those being affected and/or resettled (as that term is defined in the RAP) or by those communities who are adversely affected by the implementation of the RPF, as the case may be, and take all measures necessary to implement the determinations made under such grievance procedures; and
- (c) take all such other actions as the Bank may consider necessary or desirable, including, without limitations: (i) furnish promptly to the Bank the findings and recommendations for follow up action resulting from each such review; (ii) implement all such recommendations for follow-up action as agreed with the Bank; and (iii) ensure that terms of reference for the supervision under Parts A

and B of the Project include a requirement to conduct an ex-post review of resettlement implementation of the RAPs, satisfactory to the Bank.

Section II. Project Monitoring Reporting and Evaluation

A. Project Reports

- 1. The Borrower shall monitor and evaluate the progress of the Project and prepare Project Reports in accordance with the provisions of Section 5.08 of the General Conditions and on the basis of the indicators agreed with the Bank. Each Project Report shall cover the period of one calendar semester, and shall be furnished to the Bank not later than one month after the end of the period covered by such report.
- 2. For purposes of Section 5.08 (c) of the General Conditions, the report on the execution of the Project and related plan required pursuant to that Section shall be furnished to the Bank not later than six (6) months after the Closing Date.

B. Financial Management, Financial Reports and Audits

- 1. The Borrower shall maintain or cause to be maintained a financial management system in accordance with the provisions of Section 5.09 of the General Conditions.
- 2. The Borrower shall 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 the quarter, in form and substance satisfactory to the Bank.
- 3. The Borrower shall have its Financial Statements and those of the irrigation institutions financed under the Project 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. The audited Financial Statements for each such period shall be furnished to the Bank not later than six (6) months after the end of such period.

Section III. Procurement

A. General

- 1. **Works.** 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 Sections II and III of the Procurement Guidelines, or Sections II, III, IV and V of the Consultant Guidelines, as the case may be.

B. Particular Methods of Procurement of Works

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

Procurement Method

- (a) National Competitive Bidding of the Borrower may be used for procurement of works for the Project, provided that the following provisions are complied with:
 - (i) entities in which the Republic of Armenia owns a majority shareholding shall not be invited to participate in tenders for the Government unless they are, and can be shown to be, legally and financially autonomous and operate under commercial law:
 - (ii) pre-qualification shall be conducted for large and complex works projects;
 - (iii) pre- and post-qualification criteria shall only pertain to past contract performance, financial, managerial and technical capabilities of bidders;
 - (iv) joint venture partners shall be jointly and severally liable for their obligations;
 - (v) no bids shall be rejected at bid opening;
 - (vi) bids can be cancelled and new bids invited, only if the conditions of clause 2.61 and 2.64 of the Procurement Guidelines are met;
 - (vii) all bid evaluation criteria shall be quantifiable in monetary terms or expressed as a pass/fail criteria;
 - (viii) advance Bank's approval is required for any substantial modifications in the contract scope/conditions during implementation; and
 - (ix) the Recipient shall use standard bidding documents, satisfactory to the Bank.

(b) Shopping

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)	Quality-based Selection		
(b)	Fixed-Budget Selection		
(c)	Least Cost Selection		
(d)	Selection Based on Consultants Qualification		
(e)	Single Source Selection		
(f)	Procedures set forth in paragraphs 5.1 through 5.4 of the Consultants Guidelines for the		
	Selection of Individual Consultants		

D. Review by the Bank of Procurement Decisions

The Procurement Plan shall set forth those contracts which shall be subject to the Bank's Prior Review. 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
(1) Works under Part A of the Project, consultants' services, Training, Incremental Operating Costs and audit under the Project	14,880,000	85%
(2) Works under Part B of the Project	3,075,000	76%
(3) Front-end Fee	45,000	Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 2.07 (b) of the General Conditions
TOTAL AMOUNT	18,000,000	

B. Withdrawal Conditions; Withdrawal Period

- 1. Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made: (a) for payments made prior to the date of this Agreement; (b) for payments for works under Parts A and B of the Project in Categories (1) and (2) above, unless a consultant firm for carrying out of technical supervision under Parts A and B of the Project, satisfactory to the Bank, has been selected by the Borrower; and (c) for payments for works under Part B of the Project in Category (2) above, unless a Beneficiary Contribution Account at the State Treasury for Part B. 1 of the Project has been opened by the Borrower and an amount of \$210,000 equivalent has been deposited into it for the purposes of Part B.1 of the Project.
- 2. The Closing Date is June 30, 2013.

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 March 15, 2022 through March 15, 2036	3.33%
On September 15, 2036	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.

APPENDIX

Definitions

- 1. "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 and revised in January 2011.
- 2. "Beneficiary Contribution Account" means an account at the State Treasury to be opened by the Borrower, through the PIU, pursuant to Section IV.B.1 (c) of Schedule 2 to this Agreement, for the purposes of implementation of Part B.1 of the Project.
- 3. "Category" means a category set forth in the table in Section IV of Schedule 2 to this Agreement.
- 4. "Consultant Guidelines" means the "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011.
- 5. "EIA" means the Environmental Impact Assessment of the Concept Paper for the Millennium Challenge Account Assistance prepared and approved by the Borrower on October 28, 2005, outlining the procedures for the environmental screening, management, consultation and disclosure of activities involving environment which are applicable to the Project.
- 6. "EMP/s" means the environmental management plans for selected canal section/s under Parts A and B of the Project to be prepared and approved by the Borrower pursuant to Section I.C.2 (a) (i) of Schedule 2 to this Agreement, describing the environmental mitigation and monitoring measures under the Project, satisfactory to the Bank.
- 7. "General Conditions" means the "International Bank for Reconstruction and Development General Conditions for Loans", dated July 31, 2010.
- 8. "Incremental Operating Costs" means operating expenditures incurred by the PIU and its WUAs' Support Group and the site supervisors on account of the Project implementation, management and monitoring, including operation and maintenance of vehicles, social charges, office equipment operation and supplies, communication costs, support for information systems, translation costs, bank charges, travel and per diem costs and other reasonable expenditures directly associated with the implementation of the Project activities, all based on an annual budget acceptable to the Bank.
- 9. "MOTA" means the Ministry of Territorial Administration of the Borrower or any successor or successors thereto.
- 10. "Original Loan Agreement" means the Loan Agreement for the Irrigation Rehabilitation Emergency Project between the Borrower and the Bank, dated July 31, 2009, as amended to the date of this Agreement (Loan No. 7768-AM).

- 11. "Original Project" means the Project described in the Original Loan Agreement.
- 12. "Operational Manual" means the manual under the Original Project to be updated by the Borrower pursuant to Section I.A.2 of Schedule 2 to this Agreement, describing procedures for the implementation of the Project, consistent with the provisions of this Agreement and with the national laws and regulations of the Borrower, including procedures governing administrative, procurement, accounting, financial management, monitoring and evaluation arrangements for the Project; as the same may be amended from time to time with the agreement of the Bank.
- 13. "PIU" means the Water Sector Projects Implementation Unit operating within the SCWM under the MOTA of the Borrower.
- 14. "Procurement Guidelines" means the "Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011.
- 15. "Procurement Plan" means the Borrower's procurement plan for the Project, dated September 14, 2011 and referred to in paragraph 1.18 of the Procurement Guidelines and paragraph 1.25 of the Consultant Guidelines, as the same shall be updated from time to time in accordance with the provisions of said paragraphs.
- 16. "RAP/s" means the resettlement action plan/s to be prepared and approved by the Borrower pursuant to Section I.C.3 (a) of Schedule 2 to this Agreement as implementing recommendation of the RPF for selected canal section/s under the Project.
- 17. "RPF" means the resettlement policy framework, prepared and approved by the Borrower on July 28, 2011, defining the modalities for land acquisition (including compensation for, or reconstruction of, lost or affected assets), resettlement and rehabilitation of displaced persons under Parts A and B of the Project.
- 18. "SCWM" means the State Committee for Water Management under the MOTA of the Borrower which will be responsible for overall implementation of the Project.
- 19. "Training" means expenditures incurred on account of Project related study tours, training courses, seminars, workshops and other training activities, including travel and per diem costs of trainees and trainers.
- 20. "WSAs" means the Water Supply Agencies of the Borrower, the state owned closed joint stock companies, responsible for maintaining and operating the upper level irrigation system, established pursuant to the Decree No. 1301, dated December 29, 2001, or any legal successors thereto.
- 21. "WUAs" means the Water Users Associations defined in the Borrower's WUA Law dated October 10, 2002.
- 22. "WUAs Support Group" means the working group within the PIU of the SCWM of the Borrower.