CONFORMED COPY

LOAN NUMBER 3587 MOR

Loan Agreement

(Second Large Scale Irrigation Improvement Project)

between

KINGDOM OF MOROCCO

and

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Dated June 14, 1993

LOAN NUMBER 3587 MOR

LOAN AGREEMENT

AGREEMENT, dated June 14, 1993, between KINGDOM OF MOROCCO (the Borrower) and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (the Bank).

WHEREAS (A) the Borrower, having satisfied itself as to the feasibility and priority of the Project described in Schedule 2 to this Agreement, has requested the Bank to assist in the financing of the Project;

(B) Parts A, C and D of the Project will be carried out by the ORMVAs (as hereinafter defined) with the Borrower's assistance and, as part of such assistance, the Borrower will make available to the ORMVAs as a grant a portion of the proceeds of the Loan as provided for in this Agreement; and

WHEREAS the Bank has agreed, on the basis, inter alia, of the foregoing, to extend the Loan to the Borrower upon the terms and conditions set forth in this Agreement and in the Project Agreement of even date herewith between the Bank and the ORMVAs;

NOW THEREFORE the parties hereto hereby agree as follows:

ARTICLE I

General Conditions; Definitions

Section 1.01. The "General Conditions Applicable to Loan and

Guarantee Agreements" of the Bank, dated January 1, 1985, with the modifications set forth below (the General Conditions) constitute an integral part of this Agreement:

- (a) the last sentence of Section 3.02 is deleted; and
- (b) in Section 6.02, sub-paragraph (k) is re-lettered as sub-paragraph (l) and a new sub-paragraph (k) is added to read:
 - "(k) An extraordinary situation shall have arisen under which any further withdrawals under the Loan would be inconsistent with the provisions of Article III, Section 3 of the Bank's Articles of Agreement."
- Section 1.02. Unless the context otherwise requires, the several terms defined in the General Conditions and in the Preamble to this Agreement have the respective meanings therein set forth and the following additional terms have the following meanings:
- (a) "DER" means the Department of Rural Equipment within the Borrower's Ministry of Agriculture and Agrarian Reform;
- (b) "CNCP" means the National Project Coordinating Committee to be established pursuant to the provisions of Section B.1 of Schedule 5 to this Agreement;
- (c) "PMC" means the Performance Monitoring Committee to be established pursuant to the provisions of Section B.3 of Schedule 5 to this Agreement;
- (d) "CPE" means the Committee for Environmental Protection to be established pursuant to the provisions of Section D.1 of Schedule 5 to this Agreement;
- (e) "Doukkala ORMVA" means Office Regional de Mise en Valeur Agricole des Doukkala, a public enterprise established and operating pursuant to Decree (Decret) No. 827-66 of the Borrower, dated October 22, 1966;
- (f) "Gharb ORMVA" means Office Regional de Mise en Valeur Agricole du Gharb, a public enterprise established and operating pursuant to Decree (Decret) No. 830-66 of the Borrower, dated October 22, 1966;
- (g) "Haouz ORMVA" means Office Regional de Mise en Valeur Agricole du Haouz, a public enterprise established and operating pursuant to Decree (Decret) No. 831-66 of the Borrower, dated October 22, 1966;
- (h) "Loukkos ORMVA" means Office Regional de Mise en Valeur Agricole du Loukkos, a public enterprise established and operating pursuant to Law (Dahir) No. 1-74-238 of the Borrower, dated April 23, 1975;
- (i) "Moulouya ORMVA" means Office Regional de Mise en Valeur Agricole de la Moulouya, a public enterprise established and operating pursuant to Decree (Decret) No. 832-66 of the Borrower, dated October 22, 1966;
- (j) "Ouarzazate ORMVA" means Office Regional de Mise en Valeur Agricole de Ouarzazate, a public enterprise established and operating pursuant to Decree (Decret) No. 829-66 of the Borrower, dated October 22, 1966;
- (k) "Souss-Massa ORMVA" means Office Regional de Mise en Valeur Agricole du Souss-Massa, a public enterprise established and operating pursuant to Decree (Decret) No. 2-70-157 of the Borrower, dated October 8, 1970;
- (1) "Tadla ORMVA" means Office Regional de Mise en Valeur Agricole du Tadla, a public enterprise established and operating pursuant to Decree (Decret) No. 828-66 of the Borrower, dated

- (m) "Tafilalet ORMVA" means Office Regional de Mise en Valeur Agricole du Tafilalet, a public enterprise established and operating pursuant to Decree (Decret) No. 833-66 of the Borrower, dated October 22, 1966;
- (n) "ORMVAs" means, collectively, Doukkala ORMVA, Gharb ORMVA, Haouz ORMVA, Loukkos ORMVA, Moulouya ORMVA, Ouarzazate ORMVA, Souss-Massa ORMVA, Tadla ORMVA and Tafilalet ORMVA; and "ORMVA" means any one of the ORMVAs;
- (o) "Project Agreement" means the agreement of even date herewith between the Bank and the ORMVAs acting severally, as the same may be amended from time to time, and such term includes all schedules and agreements supplemental to the Project Agreement;
- (p) "Special Account" means the account referred to in Section 2.02 (b) of this Agreement;
- (q) "Perimeter" means, in respect of each ORMVA, an irrigated perimeter which is under the jurisdiction of such ORMVA; and "Perimeters" means, in respect of each ORMVA, collectively, all of the irrigated perimeters which are under the jurisdiction of such ORMVA;
- (r) "Irrigation System" means, in respect of each ORMVA, the
 (i) irrigation networks, including distribution canals, pipes,
 drains and feeder roads; (ii) pumping stations; (iii) main canals;
 and (iv) miscellaneous structures located within such ORMVA's
 Perimeters, as the same may be extended and improved from time to
 time; and "Irrigation Systems" means all of the networks, stations,
 canals and structures referred to in sub-paragraphs (i), (ii), (iii)
 and (iv) of this paragraph located within the ORMVAs' Perimeters;
- (s) "Water Charges" means charges, including volume charges and pumping fees, owed to the ORMVAs for water distributed through the ORMVAs' Irrigation Systems for agricultural as well as nonagricultural purposes;
- (t) "Land Betterment Levies" means levies owed to the ORMVAs by farmers within the ORMVAs' Perimeters in reimbursement of part of the Borrower's investment in the Irrigation Systems;
- (u) "Management Improvement Plan" means such plan, as may be adopted from time to time by the Borrower and an ORMVA, setting out mutual obligations of the Borrower and such ORMVA, including acts to be carried out and measures to be taken to improve the management and financial performance of the ORMVA;
- (v) "LSIIU" means the Large Scale Irrigation Improvement Unit to be established in accordance with the provisions of Section A.1 of Schedule 5 to this Agreement; and
- (w) "Fiscal Year" means the fiscal year of the Borrower commencing on January 1 and ending on December 31.

ARTICLE II

The Loan

Section 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in this Agreement, various currencies that shall have an aggregate value equivalent to the amount of two hundred fifteen million dollars (\$215,000,000), being the sum of withdrawals of the proceeds of the Loan, with each withdrawal valued by the Bank as of the date of such withdrawal.

Section 2.02. (a) The amount of the Loan may be withdrawn from the Loan Account in accordance with the provisions of Schedule 1 to this Agreement for expenditures made (or, if the Bank shall so agree, to be made) in respect of the reasonable cost of goods and

services required for the Project described in Schedule 2 to this Agreement and to be financed out of the proceeds of the Loan.

- (b) The Borrower shall, for the purposes of the Project, open and maintain a special deposit account in a currency and a financial institution, both acceptable to the Bank, on terms and conditions satisfactory to the Bank. Deposits into, and payments out of, the Special Account shall be made in accordance with the provisions of Schedule 6 to this Agreement.
- Section 2.03. The Closing Date shall be December 31, 2000, or such later date as the Bank shall establish. The Bank shall promptly notify the Borrower of such later date.
- Section 2.04. The Borrower shall pay to the Bank a commitment charge at the rate of three-fourths of one percent (3/4 of 1%) per annum on the principal amount of the Loan not withdrawn from time to time.
- Section 2.05. (a) The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time, at a rate for each Interest Period equal to the Cost of Qualified Borrowings determined in respect of the preceding Semester, plus one-half of one percent (1/2 of 1%). On each of the dates specified in Section 2.06 of this Agreement, the Borrower shall pay interest accrued on the principal amount outstanding during the preceding Interest Period, calculated at the rate applicable during such Interest Period.
- (b) As soon as practicable after the end of each Semester, the Bank shall notify the Borrower of the Cost of Qualified Borrowings determined in respect of such Semester.
 - (c) For the purposes of this Section:
 - (i) "Interest Period" means a six-month period ending on the date immediately preceding each date specified in Section 2.06 of this Agreement, beginning with the Interest Period in which this Agreement is signed.
 - (ii) "Cost of Qualified Borrowings" means the cost, as reasonably determined by the Bank and expressed as a percentage per annum, of the outstanding borrowings of the Bank drawn down after June 30, 1982, excluding such borrowings or portions thereof as the Bank has allocated to fund: (A) the Bank's investments; and (B) loans which may be made by the Bank after July 1, 1989 bearing interest rates determined otherwise than as provided in paragraph (a) of this Section.
 - (iii) "Semester" means the first six months or the second six months of a calendar year.
- (d) On such date as the Bank may specify by no less than six months' notice to the Borrower, paragraphs (a), (b) and (c) (iii) of this Section shall be amended to read as follows:
 - "(a) The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time, at a rate for each Quarter equal to the Cost of Qualified Borrowings determined in respect of the preceding Quarter, plus one-half of one percent (1/2 of 1%). On each of the dates specified in Section 2.06 of this Agreement, the Borrower shall pay interest accrued on the principal amount outstanding during the preceding Interest Period, calculated at the rates applicable during such Interest Period."
 - "(b) As soon as practicable after the end of each Quarter, the Bank shall notify the Borrower of the

Cost of Qualified Borrowings determined in respect of such Quarter."

"(c) (iii) 'Quarter' means a three-month period commencing on January 1, April 1, July 1 or October 1 in a calendar year."

Section 2.06. Interest and other charges shall be payable semi-annually on June 15 and December 15 in each year.

Section 2.07. The Borrower shall repay the principal amount of the Loan in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

ARTICLE III

Execution of the Project

Section 3.01. (a) The Borrower declares its commitment to the objectives of the Project as set forth in Schedule 2 to this Agreement, and, to this end:

- (i) shall carry out Parts B and E of the Project through DER with due diligence and efficiency and in conformity with appropriate administrative and financial practices, and shall provide, promptly as needed, the funds, facilities, services and other resources required for such Parts of the Project;
- (ii) without limitation upon the provisions of paragraph (i) above, and except as the Borrower and the Bank shall otherwise agree, the Borrower shall carry out Parts B and E of the Project in accordance with the Implementation Program set forth in Schedule 5 to this Agreement; and
- (iii) without limitation or restriction upon any of its other obligations under the Loan Agreement, the Borrower shall cause the ORMVAs to perform their obligations set forth in the Project Agreement, shall take, or cause to be taken, all action, including the provision of funds, facilities, services and other resources, necessary or appropriate to enable the ORMVAs to perform their obligations, and shall not take or permit to be taken any action which would prevent or interfere with such performance.
- (b) The Borrower shall make available to the ORMVAs as a grant an amount equivalent to two hundred million dollars (\$200,000,000) out of the proceeds of the Loan under arrangements satisfactory to the Bank.

Section 3.02. Except as the Bank shall otherwise agree, procurement of goods, works and consultants' services required for Parts B and E of the Project and to be financed out of the proceeds of the Loan shall be governed by the provisions of Schedule 4 to this Agreement.

Section 3.03. The Bank and the Borrower hereby agree that the obligations set forth in Sections 9.04, 9.05, 9.06, 9.07, 9.08 and 9.09 of the General Conditions (relating to insurance, use of goods and services, plans and schedules, records and reports, maintenance and land acquisition, respectively) in respect of Parts A, C and D of the Project shall be carried out by the ORMVAs pursuant to Section 2.03 of the Project Agreement.

ARTICLE IV

Financial and Other Covenants

Section 4.01. (a) The Borrower shall maintain records and accounts adequate to reflect in accordance with sound accounting practices the operations, resources and expenditures in respect of the Project of the departments or agencies of the Borrower responsible for carrying out the Project or any part thereof.

(b) The Borrower shall:

- (i) have the records and accounts referred to in paragraph (a) of this Section including those for the Special Account for each Fiscal Year audited, in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Bank;
- (ii) furnish to the Bank as soon as available, but in any case not later than six months after the end of each such Year, the report of such audit by said auditors, of such scope and in such detail as the Bank shall have reasonably requested; and
- (iii) furnish to the Bank such other information concerning said records and accounts and the audit thereof as the Bank shall from time to time reasonably request.
- (c) For all expenditures with respect to which withdrawals from the Loan Account were made on the basis of statements of expenditure, the Borrower shall:
 - (i) maintain, or cause to be maintained, in accordance with paragraph (a) of this Section, records and accounts reflecting such expenditures;
 - (ii) retain, until at least one year after the Bank has received the audit report for the Fiscal Year in which the last withdrawal from the Loan Account or payment out of the Special Account was made, all records (contracts, orders, invoices, bills, receipts and other documents) evidencing such expenditures;
 - (iii) enable the Bank's representatives to examine such records; and
 - (iv) ensure that such records and accounts are included in the annual audit referred to in paragraph (b) of this Section and that the report of such audit contains a separate opinion by said auditors as to whether the statements of expenditure submitted during such Fiscal Year, together with the procedures and internal controls involved in their preparation, can be relied upon to support the related withdrawals.

Section 4.02. (a) The Borrower shall, not later than December 31, 1993, prepare and furnish to the Bank a study designed to provide an analysis of the operation and maintenance costs of the ORMVAs' Irrigation Systems, other than those of Ouarzazate ORMVA and Tafilalet ORMVA, and, on the basis of the findings of said study, prepare and furnish to the Bank for its review and comments, not later than June 30, 1994, an action plan designed to ensure recovery by each of the ORMVAs referred to in this paragraph of 100% of the operation and maintenance costs (including overhead costs) and part of the depreciation costs of the ORMVA's Irrigation System.

(b) The Borrower and the Bank shall exchange views with respect to the above-mentioned plan and the Borrower shall, not later than June 30, 1995, implement said plan taking into account the Bank's comments thereon.

Section 4.03. The Borrower shall (a) prepare and furnish to the Bank for its review and comments, not later than June 30, 1994, a proposal to revise the Borrower's methodology for calculating Land Betterment Levies, such proposal to account for pumping energy costs currently borne by the Borrower; and (b) taking the Bank's comments on said proposal into account, adopt and put into effect a new methodology for calculating Land Betterment Levies not later than December 31, 1994.

Section 4.04. (a) The Borrower and the Bank shall, not later than December 31, 1996, or such other date as may be acceptable to the Bank, carry out a mid-term joint review to assess overall progress toward achieving the objectives of the Project.

(b) As part of the review referred to in the preceding paragraph, the Borrower and the Bank shall (i) take all measures necessary to reallocate the unwithdrawn proceeds of the Loan taking into account each ORMVA's individual implementation capability; and (ii) identify those ORMVAs, if any, which would be eligible for future direct Bank lending.

Section 4.05. Without limitation to the provisions of Section 3.01 of this Agreement, and for purposes of ensuring adequate funding for Parts A, C and D of the Project, the Borrower shall, each Fiscal Year until completion of the Project, take all measures necessary on its part to enable each ORMVA to meet its obligations under Section 4.04 of the Project Agreement.

ARTICLE V

Remedies of the Bank

Section 5.01. Pursuant to Section 6.02 (1) of the General Conditions, the following additional events are specified:

- (a) Any ORMVA shall have failed to perform any of its obligations under the Project Agreement.
- (b) As a result of events which have occurred after the date of the Loan Agreement, an extraordinary situation shall have arisen which shall make it improbable that an ORMVA will be able to perform its obligations under the Project Agreement.
- (c) Law (Dahir) No. 1-74-238 of the Borrower, dated April 23, 1975, or any one of the following Decrees (Decrets) of the Borrower shall have been amended, suspended, abrogated or repealed so as to affect materially and adversely the ability of an ORMVA to perform its obligations under the Project Agreement: No. 2-70-157, dated October 8, 1970, Nos. 827-66, 828-66, 829-66, 830-66, 831-66, 832-66 and 833-66, all dated October 22, 1966.
- (d) The Borrower or any other authority having jurisdiction shall have taken any action for the dissolution or disestablishment of an ORMVA or for the suspension of its operations.

Section 5.02. Pursuant to Section 7.01 (h) of the General Conditions, the following additional events are specified:

- (a) the event specified in paragraph (a) of Section 5.01 of this Agreement shall occur and shall continue for a period of sixty days after notice thereof shall have been given by the Bank to the Borrower; and
- (b) any event specified in paragraphs (c) or (d) of Section 5.01 of this Agreement shall occur.

Section 5.03. If the Bank shall suspend in part the right of the Borrower to make withdrawals from the Loan Account pursuant to Section 6.02 of the General Conditions as a result of the failure of any ORMVA to perform any of its obligations under the Project Agreement, the Bank shall take into account the part of the Loan allocated to such ORMVA in determining the portion of the Loan

affected by said suspension.

ARTICLE VI

Effective Date; Termination

Section 6.01. The following events are specified as additional conditions to the effectiveness of the Loan Agreement within the meaning of Section 12.01 (c) of the General Conditions:

- (a) LSIIU has been established in accordance with the provisions of Section A.1 of Schedule 5 to this Agreement;
- (b) CNCP has been established in accordance with the provisions of Section B.1 of Schedule 5 to this Agreement; and
- (c) PMC has been established in accordance with the provisions of Section B.3 of Schedule 5 to this Agreement.

Section 6.02. The following is specified as an additional matter, within the meaning of Section 12.02 (c) of the General Conditions, to be included in the opinion or opinions to be furnished to the Bank, namely, that the Project Agreement has been duly authorized or ratified by each ORMVA and is legally binding upon each ORMVA in accordance with its terms.

Section 6.03. The date ninety (90) days after the date of this Agreement is hereby specified for the purposes of Section 12.04 of the General Conditions.

ARTICLE VII

Representatives of the Borrower; Addresses

Section 7.01. The Ministry of Finance of the Borrower is designated as representative of the Borrower for the purposes of Section 11.03 of the General Conditions.

Section 7.02. The following addresses are specified for the purposes of Section 11.01 of the General Conditions:

For the Borrower:

Ministry of Finance Rabat Kingdom of Morocco

Cable address: Telex:

MINSTERE DES FINANCES 31936 M

For the Bank:

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

Cable address:

Telex:

INTBAFRAD 248423 (RCA)
Washington, D.C. 82987 (FTCC)
64145 (WUI) or
197688 (TRT)

IN WITNESS WHEREOF, the parties hereto, acting through their duly authorized representatives, have caused this Agreement to be signed in their respective names in Rabat, Kingdom of Morocco, as of the day and year first above written.

KINGDOM OF MOROCCO

By /s/ Mohamed Berrada Authorized Representative

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By /s/ Harinder Kohli

Acting Regional Vice President

Middle East and North Africa

SCHEDULE 1

Withdrawal of the Proceeds of the Loan

1. The table below sets forth the Categories of items to be financed out of the proceeds of the Loan, the allocation of the amounts of the Loan to each Category and the percentage of expenditures for items so to be financed in each Category:

	Category	Amount of the Loan Allocated (Expressed in Dollar Equivalent)	% of Expenditures to be Financed
(1)	Civil works	120,000,000	60%
(2)	Equipment and vehicles	57,000,000	100% of foreign expenditures and 70% of local expenditures
(3)	Training and consultants' services	19,000,000	100%
(4)	Unallocated	19,000,000	
	TOTAL	215,000,000	

- 2. For the purposes of this Schedule:
- (a) the term "foreign expenditures" means expenditures in the currency of any country other than that of the Borrower for goods or services supplied from the territory of any country other than that of the Borrower; and
- (b) the term "local expenditures" means expenditures in the currency of the Borrower or for goods or services supplied from the territory of the Borrower.
- 3. Notwithstanding the provisions of paragraph 1 above, no withdrawals shall be made in respect of payments made for expenditures prior to the date of this Agreement, except that withdrawals, in an aggregate amount not exceeding the equivalent of \$7,000,000, may be made in respect of Categories (1), (2) and (3) on account of payments made for expenditures before that date but after April 30, 1993.

Description of the Project

The objectives of the Project are to assist the Borrower in (i) enhancing the effectiveness of water distribution within the ORMVAs' Irrigation Systems; (ii) preserving the Borrower's investments in large scale irrigation; (iii) reducing large scale irrigation subsidies; and (iv) monitoring and mitigating the environmental impact of Project-related activities.

The Project consists of the following parts, subject to such modifications thereof as the Borrower and the Bank may agree upon from time to time to achieve such objectives:

Part A: ORMVAs

Provision of civil works, equipment, materials, vehicles, office and housing facilities, technical assistance and training for purposes of rehabilitating the Irrigation Systems, improving the ORMVAs' technical and financial management and enhancing the efficiency of on-farm water management. Specifically, this Part shall consist of the following:

1. Doukkala ORMVA

- a. Irrigation System Rehabilitation
 - i. Rehabilitation of the Faregh Perimeter irrigation network.
 - ii. Upgrading of the lower main canal.
 - iii. Replacement of equipment at 10 pumping stations in Doukkala ORMVA's Perimeters.
 - iv. Miscellaneous repairs of irrigation networks in Doukkala ORMVA's Perimeters.
 - v. Carrying out of the activities included in Section F.1 of the Annex to this Schedule in respect of Doukkala ORMVA's Irrigation System.
- b. Improvement of ORMVA Management and Irrigation System Management

Carrying out of the activities included in Sections A.1, A.2, A.3, B, C, D, G and H of the Annex to this Schedule in respect of Doukkala ORMVA's Irrigation System.

2. Gharb ORMVA

- a. Irrigation System Rehabilitation
 - i. Rehabilitation of (x) about 5,000 hectares at the Beht Perimeter irrigation network; and (y) the main canal of said Perimeter.
 - ii. Improvement of the subsurface drainage system at the Beht Perimeter.
 - iii. Rehabilitation of about 900 hectares at the flood-damaged irrigation network.
 - iv. Replacement of equipment at 7 pumping stations within Gharb ORMVA's Perimeters.
 - v. Rehabilitation of about 155 km of feeder roads throughout Gharb ORMVA's Perimeters.
 - vi. Carrying out of the activities included in Sections F.1 and F.2 of the Annex to this

Schedule in respect of Gharb ORMVA's Irrigation System.

b. Improvement of ORMVA Management and Irrigation System Management

Carrying out of the activities included in Sections A.1, A.2, A.3, B, C, D, G and H of the Annex to this Schedule in respect of Gharb ORMVA's Irrigation System.

3. Haouz ORMVA

a. Irrigation System Rehabilitation

Rehabilitation of about 3,300 hectares at the Tessaout Amont Perimeter irrigation network, about 2,600 hectares at the Nfis Perimeter irrigation network and about 280 hectares at the Timiris Perimeter irrigation network.

b. Improvement of ORMVA Mangement and Irrigation System Management

Carrying out of the activities included in Sections A.2, B, C, D, E, G and H of the Annex to this Schedule in respect of Haouz ORMVA's Irrigation System.

4. Loukkos ORMVA

- a. Irrigation System Rehabilitation
 - i. Replacement of equipment at eight pumping stations within Loukkos ORMVA's Perimeters.
 - ii. Rehabilitation of about 120 km of feeder roads throughout Loukkos ORMVA's Perimeters.
 - iii. Carrying out of the activities included in Section F.2 of the Annex to this Schedule in respect of Loukkos ORMVA's Irrigation System.
- b. Improvement of ORMVA Management and Irrigation System Management

Carrying out of the activities included in Sections A.1, A.2, A.3, B, C, D, G and H of the Annex to this Schedule in respect of Loukkos ORMVA's Irrigation System.

5. Moulouya ORMVA

- a. Irrigation System Rehabilitation
 - i. Rehabilitation of about 5,200 hectares at the Triffa Perimeter irrigation network.
 - ii. Upgrading of the Triffa main canal.
 - iii. Improvement of the subsurface drainage network at the Bou Areg Perimeter.
 - iv. Replacement of equipment at 12 pumping stations within Moulouya ORMVA's Perimeters.
 - v. Rehabilitation of about 160 km of feeder roads throughout Moulouya ORMVA's Peri-

meters.

- vi. Miscellaneous repairs of irrigation networks in Moulouya ORMVA's Perimeters.
- vii. Carrying out of the activities included in Sections F.1 and F.2 of the Annex to this Schedule in respect of Moulouya ORMVA's Irrigation System.
- b. Improvement of ORMVA Management and Irrigation System Management

Carrying out of the activities included in Sections A.1, A.2, A.3, B, C, D, E, G and H of the Annex to this Schedule in respect of Moulouya ORMVA's Irrigation System.

6. Ouarzazate ORMVA

- a. Irrigation System Rehabilitation
 - Rehabilitation of irrigation networks at ten of Ouarzazate ORMVA's Perimeters.
 - ii. Rehabilitation of ten diversion structures within Ouarzazate ORMVA's Perimeters.
 - iii. Flood protection of about 1,300 hectares in the Draa Valley Perimeters.
- b. Improvement of ORMVA Management and Irrigation System Management

Carrying out of the activities included in Sections A.2, B, C, D, E, G and H of the Annex to this Schedule in respect of Ouarzazate ORMVA's Irrigation System.

7. Souss-Massa ORMVA

- a. Irrigation System Rehabilitation
 - Rehabilitation of the irrigation network at the Oughzifen Perimeter.
 - ii. Rehabilitation of irrigation structures and networks in 3 of Souss-Massa ORMVA's flood irrigation Perimeters.
 - iii. Installation of 12 tubewells and related pumping equipment at Souss-Amont.
 - iv. Replacement of equipment at 20 pumping
 stations within the Souss-Massa ORMVA's
 Perimeters.
 - v. Rehabilitation of about 108 km of feeder roads throughout Souss-Massa ORMVA's Perimeters.
 - vi. Miscellaneous repairs of irrigation networks in Souss-Massa ORMVA's Peri-
- b. Irrigation System Management

Carrying out of the activities included in Sections A.2, A.3, B, C, D, E, G and H of the Annex to this Schedule in respect of Souss-Massa ORMVA's Irrigation System.

8. Tadla ORMVA

- a. Irrigation System Rehabilitation
 - i. Rehabilitation of about 7,700 hectares at the Beni-Amir Perimeter irrigation network and about 5,000 hectares at the Beni Moussa Perimeter irrigation network.
 - ii. Upgrading of the main canals at the Beni-Moussa Perimeter.
 - iii. Improvement of the subsurface drainage systems at the Beni Amir and Beni Moussa Perimeters.
 - iv. Replacement of equipment at Timoulit pumping station.
 - v. Miscellaneous repairs of irrigation networks in Tadla ORMVA's Perimeters.
 - vi. Carrying out of the activities included in Sections F.1 and F.2 of the Annex to this Schedule in respect of Tadla ORMVA's Irrigation System.
- b. Improvement of ORMVA Management and Irrigation System Management

Carrying out of the activities included in Sections A.2, B, C, D, G and H of the Annex to this Schedule in respect of Tadla ORMVA's Irrigation System.

9. Tafilalet ORMVA

- a. Irrigation System Rehabilitation
 - i. Rehabilitation of irrigation networks in Tafilalet ORMVA's Perimeters.
 - ii. Rehabilitation of irrigation networks in four of Tafilalet ORMVA's flood Perimeters.
 - iii. Upgrading of the transfer canal in the Gheris Perimeter.
- b. Improvement of ORMVA Management and Irrigation System Management

Carrying out of the activities included in Sections A.2, B, C, D, E, G and H of the Annex to this Schedule in respect of Tafilalet ORMVA's Irrigation System.

Part B: Institutional Strengthening

- 1. Provision of equipment and technical assistance to DER, and training of the staff of DER and the Borrower's Ministry of Finance responsible for Project monitoring and supervision.
- 2. Carrying out of a study designed to identify pricing options for large scale irrigation water.
- 3. Preparation of Management Improvement Plans.
- 4. Preparation of an action plan to improve delivery of irrigation water to farmers within the ORMVA's Perimeters.
- 5. Preparation and carrying out of an action plan to revise Water

Charges.

- 6. Carrying out of a study to identify long-term options for the physical rehabilitation of the ORMVAs' Irrigation Systems.
- 7. Carrying out of a study to strengthen the institutional framework of the Borrower's large scale irrigation sector.
- Part C: Water Use Efficiency Improvement
- 1. Carrying out of a pilot demonstration program on modern techniques for surface and drip irrigation.
- 2. Providing access to credit to farmers within the ORMVAs' Perimeters to acquire the equipment required for the carrying out of the program referred to in C.1 above.
- 3. Provision of equipment to the ORMVAs to rehabilitate farm water metering systems in sprinkler-irrigated areas.
- Part D: Water User Associations
- 1. Carrying out of a program to promote organization of water user associations and support therefor.
- 2. Construction of field offices for use by the water user associations and housing facilities for use by ORMVA staff, and provision of the equipment required to carry out the program referred to in D.1 above.
- Part E: Flood Damage Repairs

Repair of the ORMVAs' flood-damaged Irrigation Systems, including repair and maintenance of the irrigation networks and all other supplemental maintenance.

* * *

The Project is expected to be completed by December 31, 1999.

ANNEX TO SCHEDULE 2

- A. Maintenance of the ORMVA's Irrigation System
 - Development, installation and application of computer-assisted procedures for the maintenance of pumping stations.
 - Development, installation and application of appropriate procedures for the maintenance of irrigation networks, main canals and miscellaneous structures.
 - Carrying out of operational audits of the maintenance activities of the ORMVAs' Irrigation Systems.
- B. Operation of the ORMVA's Irrigation System

Development, installation and application of appropriate procedures for water resource management and operations of the ORMVAs' Irrigation Systems.

C. Private Sector Role in the Maintenance of the Irrigation Systems

Preparation and implementation of an action program to gradually increase the number of sub-contracts to private sector contractors in respect of selected maintenance activities of the ORMVAs' Irrigation Systems.

D. Environmental Protection

Development and implementation of an action plan to monitor the environmental impact of Project-related activities.

E. Management Information System

Design and installation of a computerized management information system and provision of necessary equipment therefor.

- F. Studies and Supervision of Rehabilitation Activities
 - Provision of consultants' services to carry out engineering studies and supervise the carrying out of rehabilitation activities under the Project.
 - Provision of consultants' services to carry out technical studies to identify existing and potential problems affecting the ORMVAs' subsurface drainage systems.

G. Training

Carrying out of a program to train ORMVA staff in the areas of management information systems and operation and maintenance of the Irrigation Systems.

H. ORMVA Operation and Maintenance

Provision of machinery, vehicles and equipment, and construction of office and housing facilities, to strengthen the operation and maintenance activities of the ORMVAs.

SCHEDULE 3

Amortization Schedule

Date Payment Due	Payment of Principal (expressed in dollars)*
December 15, 1998 June 15, 1999 December 15, 1999 June 15, 2000 December 15, 2000 June 15, 2001 December 15, 2001 June 15, 2002	4,020,000 4,170,000 4,325,000 4,485,000 4,650,000 4,825,000 5,005,000 5,190,000 December 15, 2002
5,380,000 June 15, 2003	5,580,000
December 15, 2003 June 15, 2004 December 15, 2004 June 15, 2005 December 15, 2005 June 15, 2006 December 15, 2006 June 15, 2007 December 15, 2007	5,790,000 6,005,000 6,225,000 6,460,000 6,700,000 6,945,000 7,205,000 7,475,000 7,750,000
June 15, 2008 December 15, 2008 June 15, 2009 December 15, 2009 June 15, 2010 December 15, 2010 June 15, 2011 December 15, 2011 June 15, 2012	8,040,000 8,335,000 8,645,000 8,970,000 9,300,000 9,645,000 10,005,000 10,375,000 10,760,000

December 15, 2012 11,160,000 June 15, 2013 11,580,000

Premiums on Prepayment

Pursuant to Section 3.04 (b) of the General Conditions, the premium payable on the principal amount of any maturity of the Loan to be prepaid shall be the percentage specified for the applicable time of prepayment below:

Time of Prepayment

Premium

The interest rate (expressed as a percentage per annum) applicable to the Loan on the day of prepayment multiplied by:

Not more than three years before maturity	0.15
More than three years but not more than six years before maturity	0.30
More than six years but not more than 11 years before maturity	0.55
More than 11 years but not more than 16 years before maturity	0.80
More than 16 years but not more than 18 years before maturity	0.90
More than 18 years before maturity	1.00

SCHEDULE 4

Procurement and Consultants' Services

Section I. Procurement of Goods and Works

Part A: International Competitive Bidding

Except as provided in Part C hereof, goods and works shall be procured under contracts awarded in accordance with procedures consistent with those set forth in Sections I and II of the "Guidelines for Procurement under IBRD Loans and IDA Credits" published by the Bank in May 1992 (the Guidelines).

Part B: Preference for Domestic Manufacturers

In the procurement of goods in accordance with the procedures described in Part A hereof, goods manufactured in the Kingdom of Morocco may be granted a margin of preference in accordance with, and subject to, the provisions of paragraphs 2.55 and 2.56 of the Guidelines and paragraphs 1 through 4 of Appendix 2 thereto.

Part C: Other Procurement Procedures

1. Civil works estimated to cost the equivalent of \$1,000,000 in total, and items or groups of items of equipment and vehicles estimated to cost the equivalent of \$500,000 or less per contract, but not less than \$30,000 each, up to an aggregate amount not to exceed the equivalent of \$1,000,000, may be procured under contracts awarded on the basis of competitive bidding, advertised locally, in accordance with procedures satisfactory to the Bank.

- 2. Miscellaneous items of equipment and vehicles estimated to cost the equivalent of less than \$30,000 each may be procured under contracts awarded on the basis of comparison of price quotations obtained from at least three suppliers eligible under the Guidelines, in accordance with procedures acceptable to the Bank.
- Part D: Review by the Bank of Procurement Decisions
- 1. Review of invitations to bid and of proposed awards and final contracts:
- (a) With respect to (i) each contract for equipment and vehicles estimated to cost the equivalent of \$400,000 or more; (ii) each contract for automatic hydraulic control equipment; and (iii) each contract for computer equipment, the procedures set forth in paragraphs 2 and 4 of Appendix 1 to the Guidelines shall apply. Where payments for such contract are to be made out of the Special Account, such procedures shall be modified to ensure that the two conformed copies of the contract required to be furnished to the Bank pursuant to said paragraph 2 (d) shall be furnished to the Bank prior to the making of the first payment out of the Special Account in respect of such contract.
- (b) With respect to each contract not governed by the preceding paragraph, the procedures set forth in paragraphs 3 and 4 of Appendix 1 to the Guidelines shall apply. Where payments for such contract are to be made out of the Special Account, such procedures shall be modified to ensure that the two conformed copies of the contract together with the other information required to be furnished to the Bank pursuant to said paragraph 3 shall be furnished to the Bank as part of the evidence to be furnished pursuant to paragraph 4 of Schedule 6 to the Loan Agreement.
- (c) The provisions of the preceding sub-paragraph (b) shall not apply to contracts on account of which the Bank has authorized withdrawals on the basis of statements of expenditures.
- 2. The figure of 15% is hereby specified for purposes of paragraph 4 of Appendix 1 to the Guidelines.

Section II. Employment of Consultants

In order to assist the Borrower in carrying out Parts B and E of the Project, the Borrower shall employ consultants whose qualifications, experience and terms and conditions of employment shall be satisfactory to the Bank. Such consultants shall be selected in accordance with principles and procedures satisfactory to the Bank on the basis of the "Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency" published by the Bank in August 1981.

SCHEDULE 5

Implementation Program

- A. Project Coordination
- 1. The Borrower shall establish LSIIU within DER with permanent staff in adequate numbers whose qualifications and experience shall be acceptable to the Bank. Functions of LSIIU shall include, inter alia, responsibility for (i) maintaining Project records and accounts; (ii) coordinating ORMVA procurement operations; (iii) preparing withdrawal applications; and (iv) preparing Project progress reports.
- B. Project Monitoring
- 1. For purposes of ensuring effective monitoring and coordination of the Project, the Borrower shall establish CNCP with membership and terms of reference satisfactory to the Bank. The secretariat of CNCP shall be assumed by DER. CNCP shall meet at least once a year.

- 2. Functions of CNCP shall include, inter alia, the monitoring of progress in the implementation of the Project and the preparation of the institutional measures necessary for the carrying out of Part B of the Project.
- 3. For purposes of ensuring effective monitoring of the ORMVAs' financial performance, the Borrower shall establish PMC with membership and terms of reference satisfactory to the Bank. The secretariat of PMC shall be assumed by DER. PMC shall meet at least once a year.

C. Management Improvement Plans

- 1. In order to achieve the objectives of Part B.3 of the Project, the Borrower shall, not later than December 31, 1995, furnish to the Bank for its review and comments draft Management Improvement Plans for Gharb ORMVA, Haouz ORMVA, Moulouya ORMVA, Loukkos ORMVA, Souss-Massa ORMVA, Ouarzazate ORMVA and Tafilalet ORMVA.
- 2. The Bank shall exchange views with the Borrower and each of the above-mentioned ORMVAs with respect to said draft Plans and the Borrower shall, not later than December 31, 1996, take all measures necessary to adopt Management Improvement Plans for each of the above-mentioned ORMVAs taking into account the Bank's comments thereon.

D. Environmental Protection

- 1. In order to monitor implementation by the ORMVAs of the activities provided for under Section D of the Annex to Schedule 2 to this Agreement, the Borrower shall establish, and thereafter maintain, CPE with membership and terms of reference satisfactory to the Bank.
- 2. The function of CPE shall be to evaluate progress by the ORMVAs toward attaining the targets set out in the environmental monitoring and management plans to be prepared by the ORMVAs pursuant to the provisions of Section I of Schedule 2 of the Project Agreement. To that end, CPE shall review the progress reports prepared by the ORMVAs which reports shall provide a description of the implementation of said plans. The secretariat of CPE shall be assumed by DER.
- 3. The Borrower shall convene, on a semi-annual basis, a CPE meeting to review implementation of the environmental monitoring plans to be prepared by the ORMVAs pursuant to the provisions of Section I of Schedule 2 of the Project Agreement, including progress achieved by each ORMVA toward attaining the targets set out in its own environmental monitoring plan, and, not later than July 31 of each year until completion of the Project, furnish a report to the Bank, of such scope and in such detail as the Bank may reasonably request, containing CPE's conclusions and recommendations.

E. Souss Aquifer

- 1. In order to implement the objectives of Part A.7.a (iii) of the Project, the Borrower shall, not later than December 31, 1994, furnish to the Bank for its review and comments a plan to improve the management of the Souss aquifer, and shall, after exchanging views with the Bank with respect to said plan, promptly commence implementation thereof.
- 2. The Borrower shall take all necessary measures to ensure that contracts for replacement of the tubewells referred to under Part A.7.a (iii) of the Project shall be awarded only after the Borrower has commenced implementation of the above-mentioned plan.

SCHEDULE 6

- 1. For the purposes of this Schedule:
- (a) the term "eligible Categories" means Categories (1), (2) and (3) set forth in the table in paragraph 1 of Schedule 1 to this Agreement;
- (b) the term "Authorized Allocation" means an amount equivalent to \$10,000,000 to be withdrawn from the Loan Account and deposited in the Special Account pursuant to paragraph 3 (a) of this Schedule.
- 2. Payments out of the Special Account shall be made exclusively for eligible expenditures in accordance with the provisions of this Schedule.
- 3. After the Bank has received evidence satisfactory to it that the Special Account has been duly opened, withdrawals of the Authorized Allocation and subsequent withdrawals to replenish the Special Account shall be made as follows:
- (a) For withdrawals of the Authorized Allocation, the Borrower shall furnish to the Bank a request or requests for a deposit or deposits which do not exceed the aggregate amount of the Authorized Allocation. On the basis of such request or requests, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit in the Special Account such amount or amounts as the Borrower shall have requested.
 - (b) (i) For replenishment of the Special Account, the Borrower shall furnish to the Bank requests for deposits into the Special Account at such intervals as the Bank shall specify.
 - (ii) Prior to or at the time of each such request, the Borrower shall furnish to the Bank the documents and other evidence required pursuant to paragraph 4 of this Schedule for the payment or payments in respect of which replenishment is requested. On the basis of each such request, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account such amount as the Borrower shall have requested and as shall have been shown by said documents and other evidence to have been paid out of the Special Account for eligible expenditures.

All such deposits shall be withdrawn by the Bank from the Loan Account under the respective eligible Categories, and in the respective equivalent amounts, as shall have been justified by said documents and other evidence.

- 4. For each payment made by the Borrower out of the Special Account, the Borrower shall, at such time as the Bank shall reasonably request, furnish to the Bank such documents and other evidence showing that such payment was made exclusively for eligible expenditures.
- 5. Notwithstanding the provisions of paragraph 3 of this Schedule, the Bank shall not be required to make further deposits into the Special Account:
- (a) if, at any time, the Bank shall have determined that all further withdrawals should be made by the Borrower directly from the Loan Account in accordance with the provisions of Article V of the General Conditions and paragraph (a) of Section 2.02 of this Agreement; or
- 6. (a) If the Bank shall have determined at any time that any payment out of the Special Account: (i) was made for an expenditure or in an amount not eligible pursuant to paragraph 2 of this Schedule; or (ii) was not justified by the evidence furnished to the

Bank, the Borrower shall, promptly upon notice from the Bank: (A) provide such additional evidence as the Bank may request; or (B) deposit into the Special Account (or, if the Bank shall so request, refund to the Bank) an amount equal to the amount of such payment or the portion thereof not so eligible or justified. Unless the Bank shall otherwise agree, no further deposit by the Bank into the Special Account shall be made until the Borrower has provided such evidence or made such deposit or refund, as the case may be.

- (b) If the Bank shall have determined at any time that any amount outstanding in the Special Account will not be required to cover further payments for eligible expenditures, the Borrower shall, promptly upon notice from the Bank, refund to the Bank such outstanding amount.
- (c) The Borrower may, upon notice to the Bank, refund to the Bank all or any portion of the funds on deposit in the Special Account.
- (d) Refunds to the Bank made pursuant to paragraphs 6 (a), (b) and (c) of this Schedule shall be credited to the Loan Account for subsequent withdrawal or for cancellation in accordance with the relevant provisions of this Agreement, including the General Conditions.