

CONFORMED COPY

LOAN NUMBER 2867 PO

(Technology Education Project)

between

REPUBLIC OF PORTUGAL

and

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

Dated November 6, 1987

LOAN NUMBER 2867 PO

LOAN AGREEMENT

AGREEMENT, dated November 6, 1987, between REPUBLIC OF PORTUGAL (the Borrower) and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (the Bank).

WHEREAS 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; 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;

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 last sentence of Section 3.02 deleted (the General Conditions) constitute an integral part of this Agreement.

Section 1.02. Unless the context otherwise requires, the several terms defined in the General Conditions have the respective meanings therein set forth:

(a) "Project Coordination Unit" means the unit established in the Borrower's Ministry of Education in accordance with the resolution of the Borrower's Council of Ministers dated October 31, 1979.

(b) "Special Account" means the account referred to in Section 2.02 (b) of the Agreement.

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 the Loan Agreement, an amount in various currencies equivalent to thirty-two million dollars (\$32,000,000).

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 (a) The amount of the Loan may be withdrawn from the Loan Account in accordance with the provisions of Schedule 1 to this Agreement for expenditures made (or, if the Bank shall so agree, to be made) in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 in dollars a special account in a financial institution 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 5 to this Agreement.

Section 2.03. The Closing Date shall be March 31, 1995, 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 ($\frac{3}{4}$ 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 per annum for each Interest Period equal to one-half of one percent per annum above the Cost of Qualified Borrowings for the last Semester ending prior to the commencement of 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 for such Semester.

(c) For purposes of this Section:

(i) "Interest Period" means the six-month period commencing on each date specified in Section 2.06 of this Agreement, including the Interest Period in which this Agreement is signed.

(ii) "Cost of Qualified Borrowings" means the cost of the outstanding borrowings of the Bank drawn down after June 30, 1982, expressed as a percentage per annum, as reasonably determined by the Bank.

(iii) "Semester" means the first six months or the second six months of a calendar year.

Section 2.06. Interest and other charges shall be payable semiannually on March 15 and September 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. The Borrower declares its commitment to the objectives of the Project as set forth in Schedule 2 to this Agreement, and, to this end, shall carry out the Project through its Ministry of Education with due diligence and efficiency and in conformity with appropriate education, engineering and administrative practices, and shall provide, promptly as needed, the funds, facilities, services and other resources required for the Project.

Section 3.02. Except as the Bank shall otherwise agree, procurement of the goods, works and consultants' services required for 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 Borrower shall maintain the Project Coordination Unit with adequate staff whose qualifications, experience and terms of reference are satisfactory to the Bank.

Section 3.04. For the purpose of strengthening collaboration between industry and university research, including the financing of such research, the Borrower shall:

(a) establish a board for each of the institutes for biotechnology research, materials science research and water resources research referred to under Part A (1) of the Project with appropriate representation on each such board from the industries concerned, the public sector and the universities; and

(b) upon the establishment of each such institute for biotechnology research, materials resources research and water resources research, carry out research programs for industry under contracts which provide for appropriate cost recovery of such research programs.

Section 3.05. The Borrower shall, for each of the two agricultural polytechnic institutes referred to under Part B (1) of the Project:

(a) recruit teachers on the basis of curriculum vitae analysis and interview evaluations and provide supplemental orientation seminars for all teachers;

(b) select about thirty percent (30%) of the students from applicants with farming backgrounds;

(c) include secondary school students with farming backgrounds in the recruitment process and provide appropriate remedial instruction as necessary for any of such students who are admitted through special entry procedures; and

(d) by December 31, 1988, prepare curricula, with emphasis on practical skills, and equipment lists for such curricula.

Section 3.06. For the purposes of carrying out Part C (3) of the Project the Borrower shall:

(a) by December 31, 1991, carry out an interim evaluation of

the program for the introduction of computers into the school system and by June 30, 1992, review with the Bank the results of such interim evaluation; and

(b) by December 31, 1994, carry out a summative evaluation of the program referred to in paragraph (a) hereof and by March 31, 1995, furnish to the Bank the conclusions and recommendations of such evaluation.

Section 3.07. The Borrower shall, by December 31, 1994, carry out a study on the feasibility of resupplying computer facilities in each school through replenishment funds and furnish to the Bank the conclusions and recommendations of such study.

Section 3.08. The Borrower shall, by March 31, 1988, furnish to the Bank evidence satisfactory to the Bank of the allocation of appropriate land to the agricultural polytechnic institute at Beja referred to under Part B(1) of the Project, together with a plan satisfactory to the Bank for the use and development of such land.

ARTICLE IV

Financial Covenants

Section 4.01. (a) The Borrower shall maintain or cause to be maintained 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 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 con-

tains 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.

ARTICLE V

Termination

Section 5.01. The date 60 days after the date of this Agreement is hereby specified for the purposes of Section 12.04 of the General Conditions.

ARTICLE VI

Representative of the Borrower; Addresses

Section 6.01. The Minister of the Borrower at the time responsible for Finance is designated as representative of the Borrower for the purposes of Section 11.03 of the General Conditions.

Section 6.02. The following addresses are specified for the purposes of Section 11.01 of the General Conditions:

For the Borrower:

Ministerio das Financas
Avenida Infante D. Henrique
1100 Lisboa
Portugal

Cable address:

DIRECCAO - GERAL
DO TESOURO
Lisboa

Telex:

12 764 TRESOR P

For the Bank:

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

Cable address:

INTBAFRAD
Washington, D.C.

Telex:

440098 (ITT),
248423 (RCA) or
64145 (WUI)

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

REPUBLIC OF PORTUGAL

By /s/ Joao Eduardo Pereira Bastos
Authorized Representative

INTERNATIONAL BANK FOR

RECONSTRUCTION AND DEVELOPMENT

By /s/ Eugenio F. Lari
 Acting Regional Vice President
 Europe, 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		40%
(a) for all items (except for bio-technical research institute)	3,700,000	
(b) for bio-technical research institute	1,900,000	20%
(2) Goods	10,600,000	100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 85% of local expenditures for other items procured locally

Category	Amount of the Loan Allocated (Expressed in Dollar Equivalent)	% of Expenditures to be Financed
(3) Consultants' services (including fellowships)	12,900,000	100%
(4) Unallocated	2,900,000	
TOTAL	32,000,000	

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:

(a) payments made for expenditures prior to the date of this Agreement, except that withdrawals, in an aggregate amount not exceeding the equivalent of \$1,600,000, may be made in respect of Categories (1)(a) and (b) on account of payments made for expenditures for the design (\$400,000) of the three applied research institutes referred to under Part A (1) of the Project and minor construction (\$200,000) of such applied research institutes and in respect of Category (2) on account of payments made for research equipment (\$1,000,000), before that date but after September 30, 1986; and

(b) payments made for expenditures in respect of Categories (2) and (3) on account of payments made for expenditures under Part C (1) of the Project until the Bank has received satisfactory evidence of the establishment by the Borrower of an administrative support group, reporting to the existing central steering committee of the Borrower's Ministry of Education, for purposes of carrying out such Part C (1) of the Project.

SCHEDULE 2

Description of the Project

The objectives of the Project are to assist the Borrower in adapting its education and training system to evolving structural and technological conditions in the economy by (1) rationalizing and strengthening university applied research and training to improve their relevance and meet the technological needs of industry and agriculture; (2) expanding agricultural polytechnic education, with an emphasis on practical skills content of training; and (3) introducing the use of computers in primary and secondary education.

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: Applied Research Institutes

(1) Establishment of three applied research institutes and regional branches, with about 110 post-graduate research training posts, in the fields of biotechnology, materials science, and water resources with main centers located in Lisbon, Porto and Coimbra, respectively; and the provision of equipment and furniture for each such applied research institute.

(2) Provision of technical assistance to about 160 university research staff through training, fellowships, institutional exchange programs and collaboration with industry.

Part B: Agricultural Polytechnic Institutes

(1) Establishment of an agricultural polytechnic institute at Ponte de Lima and an agricultural polytechnic institute at Beja with about 200 students places each, and the provision of equipment and furniture for the purpose.

(2) Provision of technical assistance for instructor training, curriculum development and project planning and management.

Part C: Program for Information Technology in Schools

(1) Strengthening of the Borrower's pilot program for information technology in about 40 secondary and about 10 primary schools, and the provision of computers, software, books, and equipment for the development of the information technology program for about an additional 100 secondary schools and 20 primary schools.

(2) Provision of in-service training to about 1,430 school

teachers and administrators in the use of computers in education.

(3) Carrying out of evaluations of the Borrower's program for the introduction of computers into the school system.

* * * *

The Project is expected to be completed by September 30, 1994.

SCHEDULE 3

Amortization Schedule

Date Payment Due	Payment of Principal (expressed in dollars)*
On each March 15 and September 15 beginning March 15, 1991 through March 15, 2002	1,335,000
On September 15, 2002	1,295,000

* The figures in this column represent dollar equivalents determined as of the respective dates of withdrawal. See General Conditions, Sections 3.04 and 4.03.

Premiums on Prepayment

The following premiums are specified for the purposes of Section 3.04 (b) of the General Conditions:

Time of Prepayment	Premium
	The interest rate (expressed as a percentage per annum) applicable to the balance outstanding on the Loan on the day of prepayment multiplied by:
Not more than three years before maturity	0.20
More than three years but not more than six years before maturity	0.40
More than six years but not more than eleven years before maturity	0.73
More than eleven years but not more than thirteen years before maturity	0.87
More than thirteen years	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, equipment and works shall be procured under contracts awarded in accordance with pro-

cedures 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 1985 (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 Portugal 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 for the agricultural polytechnic institute at Ponte de Lima referred to under Part B(1) of the Project estimated to cost the equivalent of \$3,700,000 or less; civil works for minor upgrading of existing buildings required for the installation of computers estimated to cost the equivalent of \$800,000 or less; and goods estimated to cost the equivalent of \$150,000 or less per contract up to an aggregate amount of the equivalent of \$3,000,000, may be procured under contracts awarded on the basis of competitive bidding, advertised locally, in accordance with procedures satisfactory to the Bank.

2. Items or groups of items estimated to cost the equivalent of \$75,000 or less per contract, up to an aggregate amount not to exceed the equivalent of \$2,000,000, may be procured under contracts awarded on the basis of comparison of price quotations solicited from at least three suppliers eligible under the Guidelines, in accordance with procedures satisfactory to the Bank.

3. Books, journals and computer software estimated to cost less than the equivalent of \$2,500,000 in the aggregate may be procured through direct contracting with the prior approval of 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 each contract, 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) The bidding documents for the first three contracts to be awarded on the basis of competitive bidding, locally advertised, are to be furnished to the Bank in accordance with paragraph 2 of Appendix 1 to the Guidelines. The bidding documents for all other contracts to be awarded on the basis of competitive bidding, locally advertised, are to be in accordance with those reviewed by the Bank as heretofore provided.

(c) With respect to each contract not governed by the preceding subparagraphs (a) and (b), 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, said 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 5 to this Agreement.

(d) The provisions of the preceding subparagraphs (a), (b) and (c) shall not apply to contracts on account of which the Bank

has authorized withdrawals from the Loan Account on the basis of statements of expenditure. Such contracts shall be retained in accordance with Section 4.01 (c)(ii) of this Agreement.

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 training under 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

Special Account

1. For the purposes of this Schedule:

(a) the term "eligible Categories" means the Categories set forth in the table in paragraph 1 of Schedule 1 to this Agreement;

(b) the term "eligible expenditures" means expenditures in respect of the reasonable cost of goods and services required for the Project and to be financed out of the proceeds of the Loan allocated from time to time to the eligible Categories in accordance with the provisions of Schedule 1 to this Agreement; and

(c) the term "Authorized Allocation" means an amount equivalent to \$2,000,000 to be withdrawn from the Loan Account and deposited in the Special Account pursuant to paragraph 3 (a) of this Schedule.

2. Except as the Bank shall otherwise agree, 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 may be made as follows:

(a) On the basis of a request or requests by the Borrower for a deposit or deposits which add up to the aggregate amount of the Authorized Allocation, 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) The Borrower shall furnish to the Bank requests for replenishment of the Special Account at such intervals as the Bank shall specify. On the basis of such requests, the Bank shall withdraw from the Loan Account and deposit into the Special Account such amounts as shall be required to replenish the Special Account with amounts not exceeding the amount of payments made 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 the evidence supporting the request for such deposit furnished pursuant to paragraph 4 of this Schedule.

4. For each payment made by the Borrower out of the Special Account for which the Borrower requests replenishment pursuant to paragraph 3 (b) of this Schedule, the Borrower shall furnish to the Bank, prior to or at the time of such request, such documents

and other evidence as the Bank shall reasonably request, showing that such payment was made for eligible expenditures.

5. (a) Notwithstanding the provisions of paragraph 3 of this Schedule, no further deposit into the Special Account shall be made by the Bank when either of the following situations first arises:

- (i) 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
- (ii) the total unwithdrawn amount of the Loan allocated to the eligible Categories minus the amount of any outstanding special commitment entered into by the Bank pursuant to Section 5.02 of the General Conditions with respect to the Project, shall be equal to the equivalent of twice the amount of the Authorized Allocation.

(b) Thereafter, withdrawal from the Loan Account of the remaining unwithdrawn amount of the Loan allocated to the eligible Categories shall follow such procedures as the Bank shall specify by notice to the Borrower. Such further withdrawals shall be made only after and to the extent that the Bank shall have been satisfied that all such amounts remaining on deposit in the Special Account as of the date of such notice will be utilized in making payments for eligible expenditures.

6. (a) If the Bank shall have determined at any time that any payment out of the Special Account (i) was made for any expenditure or in any amount not eligible pursuant to paragraph 2 of this Schedule, or (ii) was not justified by the evidence furnished pursuant to paragraph 4 of this Schedule, the Borrower shall, promptly upon notice from the Bank, 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. No further deposit by the Bank into the Special Account shall be made until the Borrower has made such deposit or refund.

(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 for crediting to the Loan Account.

