

CONFORMED COPY

CREDIT NUMBER 3048 IN

Development Credit Agreement

(National Agricultural Technology Project)

between

INDIA

and

INTERNATIONAL DEVELOPMENT ASSOCIATION

Dated June 22, 1998

CREDIT NUMBER 3048 IN

DEVELOPMENT CREDIT AGREEMENT

AGREEMENT, dated June 22, 1998, between INDIA, acting by its President (the Borrower) and INTERNATIONAL DEVELOPMENT ASSOCIATION (the Association):

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 Association to assist in the financing of the Project;

(B) the Borrower has also requested the International Bank for Reconstruction and Development (the Bank) to provide additional assistance towards the financing of the Project and by an agreement of even date herewith between the Borrower and the Bank (the Loan Agreement), the Bank is agreeing to provide such assistance in an amount equal to ninety-six million eight hundred thousand dollars (\$96,800,000) (the Loan);

(C) the Borrower and the Association intend, to the extent practicable, that the proceeds of the Credit provided for in this Agreement be disbursed on account of expenditures in respect of the Project before disbursements of the proceeds of the Loan are made; and

(D) Parts A, B and C 1(d) of the Project will be carried out by the Indian Council of Agricultural Research (ICAR) with the Borrower's assistance and, as part of such assistance, the Borrower will make available to ICAR part of the proceeds of the Credit as provided in this Agreement, and part of the proceeds of the Loan as provided in the Loan Agreement; and

WHEREAS the Association has agreed, on the basis, inter alia, of the foregoing, to extend the Credit to the Borrower upon the terms and conditions set forth in this

Agreement and in the Project Agreement of even date herewith among the Association, the Bank and ICAR;

NOW THEREFORE the parties hereto hereby agree as follows:

#### ARTICLE I

##### General Conditions; Definitions

Section 1.01. The "General Conditions Applicable to Development Credit Agreements" of the Association, 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.
- (b) The second sentence of Section 5.01 is modified to read:

"Except as the Association and the Borrower shall otherwise agree, no withdrawals shall be made: (a) on account of expenditures in the territories of any country which is not a member of the Bank or for goods produced in, or services supplied from, such territories; or (b) for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Association, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations."

- (c) Section 6.03 is modified to read:

"Section 6.03. Cancellation by the Association. If (a) the right of the Borrower to make withdrawals from the Credit Account shall have been suspended with respect to any amount of the Credit for a continuous period of thirty days, or (b) at any time, the Association determines, after consultation with the Borrower, that an amount of the Credit will not be required to finance the Project's costs to be financed out of the proceeds of the Credit, or (c) at any time, the Association determines, with respect to any contract to be financed out of the proceeds of the Credit, that corrupt or fraudulent practices were engaged in by representatives of the Borrower or of a beneficiary of the Credit during the procurement or the execution of such contract, without the Borrower having taken timely and appropriate action to the Association to remedy the situation, and establishes the amount of expenditures in respect of such contract which would otherwise have been eligible for financing out of the proceeds of the Credit, or (d) at any time, the Association determines that the procurement of any contract to be financed out of the proceeds of the Credit is inconsistent with the procedures established set forth or referred to in the Development Credit Agreement and the amount of expenditures in respect of such contract which would otherwise have been eligible for financing out of the proceeds of the Credit, or (e) after the Closing Date, an amount of the Credit shall remain unwithdrawn from the Credit Account, the Association may, by notice to the Borrower, terminate the right of the Borrower to make withdrawals with respect to such amount. Upon the giving of such notice, such amount of the Credit shall be canceled."

Section 1.02. Unless the context otherwise requires, the several terms defined in the Preamble to this Agreement and in the General Conditions have the respective meanings therein set forth, and the following additional terms have the following meanings:

- (a) "DAC" means Department of Agriculture and Co-operation under the Ministry of Agriculture (MOA);
- (b) "DARE" means Department of Agricultural Research and Education under MOA;
- (c) "ICAR" means the Indian Council of Agricultural Research, a society registered under the Societies Registration Act, 1860;
- (d) "KVK" means Krishi Vigyan Kendra (Agricultural Science Centers), at the district level in each of the Project States;
- (e) "Line departments" means the Departments of Agriculture, Horticulture, Animal Husbandry, Soil and Water Conservation, and Fisheries, of the Project States;

(f) "Loan Agreement" means the agreement of even date herewith between the Borrower and the Bank for the Project, as such agreement may be amended from time to time; and such term includes the "General Conditions Applicable to Loan and Guarantee Agreements for Single Currency Loans" of the Bank, dated May 30, 1995, as applied to such agreement, and all schedules and agreements supplemental to the Loan Agreement;

(g) "MANAGE" means the National Institute of Agricultural Extension Management, under DAC;

(h) "MOA" means the Borrower's Ministry of Agriculture, or any successor thereto;

(i) "NARS" means National Agricultural Research System in India, comprised of ICAR institutions, SAUs (as hereinafter defined) and other agencies involved in agricultural research;

(j) "NGOs" means non-governmental organizations;

(k) "Participation Agreement" means the agreement to be entered into between the Borrower and each Project State (as hereinafter defined), satisfactory to the Association, for purposes of enabling such Project State to participate in the carrying out of Part C 2 of the Project, and defining the rights and obligations of the Borrower and each such Project State, all in accordance with the terms and conditions described or referred to in Section 3.02 of this Agreement;

(l) "PIU" means the Project Implementation Unit established within ICAR for assisting in carrying out of the Project;

(m) "PMC" means the Project Management Committee, established within ICAR, with representatives from ICAR and MOA, for the purpose of overall management of the Project;

(n) "Project Agreement" means the agreement among the Association, the Bank and ICAR of even date herewith, as the same may be amended from time to time, and such term includes all schedules and agreements supplemental to the Project Agreement;

(o) "Project Implementation Plan" means the implementation plan for the Project prepared by ICAR, dated January 18, 1998, and, including time-bound action plans, procedures and criteria agreed with the Association;

(p) "Project States" means the States of Andhra Pradesh, Bihar, Himachal Pradesh, Maharashtra, Orissa and Punjab of the Borrower, and the term "State" means any of those States;

(q) "Rules" means the rules and bylaws of ICAR dated April 3, 1975, as amended to date;

(r) "SAUs" means the state agricultural universities in India participating in Part B of the Project;

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

(t) "TDMC" means the Technology Dissemination Management Committee within DAC; and

(u) "TDU" means the Technology Dissemination Unit within DAC.

## ARTICLE II

### The Credit

Section 2.01. The Association agrees to lend to the Borrower, on the terms and conditions set forth or referred to in the Development Credit Agreement, an amount in various currencies equivalent to seventy-three million eight hundred thousand Special Drawing Rights (SDR 73,800,000).

Section 2.02. (a) The amount of the Credit may be withdrawn from the Credit Account in accordance with the provisions of Schedule 1 to this Agreement for expenditures made (or, if the Association shall so agree, to be made) in respect of the reasonable cost of goods and services required for the Project and to be financed out of the proceeds of the Credit.

(b) The Borrower may, for the purposes of the Project, open and maintain in Dollars a special deposit account in the Reserve Bank of India on terms and conditions satisfactory to the Association. Deposits into, and payments out of, the Special Account shall be made in accordance with the provisions of Schedule 4 to this Agreement.

Section 2.03. The Closing Date shall be December 31, 2003 or such later date as the Association shall establish. The Association shall promptly notify the Borrower of such later date.

Section 2.04. (a) The Borrower shall pay to the Association a commitment charge on the principal amount of the Credit not withdrawn from time to time at a rate to be set by the Association as of June 30 of each year, but not to exceed the rate of one-half of one percent (1/2 of 1%) per annum.

(b) The commitment charge shall accrue: (i) from the date sixty days after the date of this Agreement (the accrual date) to the respective dates on which amounts shall be withdrawn by the Borrower from the Credit Account or canceled; and (ii) at the rate set as of the June 30 immediately preceding the accrual date or at such other rates as may be set from time to time thereafter pursuant to paragraph (a) above. The rate set as of June 30 in each year shall be applied from the next payment date in that year specified in Section 2.06 of this Agreement.

(c) The commitment charge shall be paid: (i) at such places as the Association shall reasonably request; (ii) without restrictions of any kind imposed by, or in the territory of, the Borrower; and (iii) in the currency specified in this Agreement for the purposes of Section 4.02 of the General Conditions or in such other eligible currency or currencies as may from time to time be designated or selected pursuant to the provisions of that Section.

Section 2.05. The Borrower shall pay to the Association a service charge at the rate of three fourths of one percent (3/4 of 1%) per annum on the principal amount of the Credit withdrawn and outstanding from time to time.

Section 2.06. Commitment charges and service charges shall be payable semi-annually on March 1 and September 1 in each year.

Section 2.07. (a) Subject to paragraphs (b) and (c) below, the Borrower shall repay the principal amount of the Credit in semi-annual installments payable on each March 1 and September 1 commencing September 1, 2008 and ending March 1, 2033. Each installment to and including the installment payable on March 1, 2018 shall be one and one-fourth percent (1-1/4%) of such principal amount, and each installment thereafter shall be two and one-half percent (2-1/2%) of such principal amount.

(b) Whenever: (i) the Borrower's per capita gross national product (GNP), as determined by the Association, shall have exceeded for three consecutive years the level established annually by the Association for determining eligibility to access the Association's resources; and (ii) the Bank shall consider the Borrower creditworthy for Bank lending, the Association may, subsequent to the review and approval thereof by the Executive Directors of the Association and after due consideration by them of the development of the Borrower's economy, modify the repayment of installments under paragraph (a) above by: (A) requiring the Borrower to repay twice the amount of each such installment not yet due until the principal amount of the Credit shall have been repaid; and (B) requiring the Borrower to commence repayment of the principal amount of the Credit as of the first semi-annual payment date referred to in paragraph (a) above falling six months or more after the date on which the Association notifies the Borrower that the events set out in this paragraph (b) have occurred, provided, however, that there shall be a grace period of a minimum of five years on such repayment of principal.

(c) If so requested by the Borrower, the Association may revise the modification referred to in paragraph (b) above to include, in lieu of some or all of the increase in the amounts of such installments, the payment of interest at an annual rate agreed with the Association on the principal amount of the Credit withdrawn and outstanding from time to time, provided that, in the judgment of the Association, such revision shall not change the grant element obtained under the above-mentioned repayment modification.

(d) If, at any time after a modification of terms pursuant to paragraph (b) above, the Association determines that the Borrower's economic condition has deteriorated significantly, the Association may, if so requested by the Borrower,

further modify the terms of repayment to conform to the schedule of installments as provided in paragraph (a) above.

Section 2.08. The currency of the United States of America is hereby specified for the purposes of Section 4.02 of the General Conditions.

### ARTICLE III

#### Execution of the Project

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

- (i) carry out Parts C 1 (a), (b) and (c) of the Project through DAC, and cause the Project States to carry out Part C 2 of the Project, all with due diligence and efficiency and in conformity with appropriate administrative, financial and agricultural technology practices, and shall provide promptly as needed the funds and services required for Parts C 1 (a), (b) and (c), and Part C 2 of the Project; and
- (ii) without any limitation or restriction upon any of its other obligations under the Development Credit Agreement, shall cause ICAR to perform in accordance with the provisions of the Project Agreement all the obligations of ICAR therein set forth, shall take and cause to be taken all actions, including the provision of funds, facilities, services and other resources, necessary or appropriate to enable ICAR to perform such 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 part of the proceeds available to: (i) ICAR in accordance with the Borrower's standard arrangements; and (ii) the Project States in accordance with arrangements agreed with the Association.

Section 3.02. (a) The Borrower shall enter into a Participation Agreement with each Project State for the purposes of enabling such Project State to participate in the carrying out of Part C 2 of the Project under terms and conditions which shall have been approved by the Association, which shall include, inter alia, those set forth or referred to in Schedule 5 to this Agreement.

(b) The Borrower shall exercise its rights under each Participation Agreement in such manner as to protect the interests of the Borrower and the Association, comply with its obligations under this Agreement, and accomplish the purposes of the Credit, and except as the Association shall otherwise agree, the Borrower shall not assign, amend, abrogate or waive any Participation Agreement or any provision thereof.

Section 3.03. Except as the Association shall otherwise agree, procurement of the goods, works and services required for the Project and to be financed out of the proceeds of the Credit shall be governed by the provisions of Schedule 3 to this Agreement.

Section 3.04. The Borrower and the Association hereby agree that the obligations set forth in Sections 9.03, 9.04, 9.05, 9.06, 9.07 and 9.08 of the General Conditions (relating to insurance, use of goods and services, plans and schedules, records and reports, maintenance and land acquisition, respectively) shall be carried out by ICAR pursuant to Section 2.03 of the Project Agreement in respect of Parts A, B and C 1(d) of the Project.

Section 3.05. The Borrower shall engage, not later than June 30, 1999, in accordance with the provisions of Section II of Schedule 3 to the Development Credit Agreement, consultants to undertake, in consultation with the Association, an institutional review of the Directorate of Extension within DAC, and shall immediately thereafter agree with the Association on a plan for implementation of the recommendations.

### ARTICLE IV

#### Financial Covenants

Section 4.01. (a) The Borrower shall maintain, and cause the Project States to maintain, records and accounts adequate to reflect in accordance with sound accounting

practices the operations, resources and expenditures, in respect of Parts C 1(a), (b) and (c) and C 2 of the Project, of the departments or agencies of the Borrower responsible for carrying out such Parts of the Project.

(b) The Borrower shall:

- (i) have the records and accounts referred to in paragraph (a) of this Section audited for each fiscal year in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Association;
- (ii) furnish to the Association 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 Association shall have reasonably requested; and
- (iii) furnish to the Association such other information concerning said records, accounts and financial statements as well as the audit thereof, as the Association shall from time to time reasonably request.

(c) For all expenditures with respect to which withdrawals from the Credit Account were made on the basis of statements of expenditure, the Borrower shall:

- (i) maintain or cause to be maintained in accordance with sound accounting practices, records and accounts reflecting such expenditures;
- (ii) ensure that all records (contracts, orders, invoices, bills, receipts and other documents) evidencing such expenditures be retained until at least one year after the Association has received the audit report for the fiscal year in which the last withdrawal from the Credit Account was made;
- (iii) enable the Association'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. The Borrower shall, in collaboration with ICAR, and with the assistance of financial management consultants selected in accordance with the provisions of Section II of Schedule 3 to the Development Credit Agreement, prepare, not later than December 31, 1998, a manual for accounting, auditing and internal financial control practices for the Project acceptable to the Association, and shall thereafter commence a training program on such practices for ICAR and the other institutions participating in the implementation of the Project.

#### ARTICLE V

##### Remedies of the Association

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

(a) ICAR 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 Development Credit Agreement, an extraordinary situation shall have arisen which shall make it improbable that ICAR will be able to perform its obligations under the Project Agreement.

(c) The Rules shall have been amended, suspended, abrogated, repealed or waived so as to materially and adversely affect the ability of ICAR to perform any of its obligations under the Project Agreement.

(d) Any Participation Agreement shall have been amended, suspended, abrogated, repealed or waived without the prior approval of the Association.

(e) Any Project State shall have failed to perform any of the obligations under its Participation Agreement.

(f) As a result of events which have occurred after the date of the Development Credit Agreement, an extraordinary situation shall have arisen which shall make it improbable that any Project State will be able to perform its obligations under its Participation Agreement.

Section 5.02. Pursuant to Section 7.01 (d) of the General Conditions, the following additional event is specified, namely, that any event specified in 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 Association to the Borrower.

#### ARTICLE VI

##### Effective Date; Termination

Section 6.01. The following are specified as additional conditions to the effectiveness of the Development Credit Agreement within the meaning of Section 12.01 (b) of the General Conditions:

(a) Each of the Participation Agreements has been executed on behalf of the Borrower and the respective Project State.

(b) All the conditions precedent to the effectiveness of the Loan Agreement have been fulfilled, other than those related to the effectiveness of this Agreement.

Section 6.02. The following are specified as additional matters, within the meaning of Section 12.02 (b) of the General Conditions to be included in the opinion or opinions to be furnished to the Association, namely, that:

(a) the Project Agreement has been duly authorized or ratified by ICAR and is legally binding upon ICAR in accordance with its terms; and

(b) each Participation Agreement has been duly authorized or ratified by the Borrower and the respective Project State, and is legally binding upon the Borrower and such Project State 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 Secretary, Additional Secretary, Joint Secretary, Director, Deputy Secretary, and Under Secretary of the Department of Economic Affairs in the Ministry of Finance of the Borrower are each 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:

The Secretary to the Government of India  
Department of Economic Affairs  
Ministry of Finance  
New Delhi, PIN 110001  
India

Cable address:

Telex:

ECOFAIRS  
New Delhi

953-3166175

For the Association:

International Development Association

1818 H Street, N.W.  
Washington, D.C. 20433  
United States of America  
Cable address:

Telex:

INDEVAS  
Washington, DC

248423 (MCI)  
64145 (MCI)

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.

INDIA

By /s/ Sudhakar Rao

Authorized Representative

INTERNATIONAL DEVELOPMENT ASSOCIATION

By /s/ Edwin R. Lim

Acting Regional Vice President  
South Asia

#### SCHEDULE 1

#### Withdrawal of the Proceeds of the Credit and the Loan

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

Category	Amount of the Credit Allocated (Expressed in SDR Equivalent)	Amount of the Loan Allocated (Expressed in Dollars)	% of Expenditures to be Financed
(1) Civil works	3,800,000	5,200,000	80%
(2) Equipment, materials and vehicles	19,400,000	26,400,000	100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 80% of local expen- ditures for other purchased items locally
(3) Consultants' services (including NGOs' services) and training	21,400,000	28,900,000	100%
(4) Research services:			80%
(i) under Part B 1	11,800,000	15,900,000	



	of the Project			
	(ii) under Part B.2 of the Project	5,700,000	7,700,000	
(5)	Incremental operating costs	7,100,000	9,600,000	80% through March 31, 2000, 60% through March 31, 2002, and 40% thereafter
(6)	Unallocated	4,600,000	3,100,000	
	TOTAL	73,800,000	96,800,000	

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;

(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; and

(c) the term "incremental operating costs" means the incremental costs of operation and maintenance of additional buildings, equipment and vehicles, and salaries of additional staff, incurred for the purposes of carrying out the Project.

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 to exceed SDR 3,700,000 may be made on account of payments made for expenditures before that date but after July 31, 1997.

4. The Association may require withdrawals from the Credit Account to be made on the basis of statements of expenditure for expenditures for: (a) goods or works under contracts not exceeding \$200,000 equivalent; (b) services under contracts not exceeding \$100,000 equivalent for employment of consulting firms and \$50,000 equivalent for employment of individual consultants, respectively; (c) training and fellowships; (d) works procured under force account; and (e) incremental operating costs, all under such terms and conditions as the Association shall specify by notice to the Borrower.

## SCHEDULE 2

### Description of the Project

The objectives of the Project are to: (i) improve the efficiency of ICAR's Organization and Management system; (ii) enhance the performance and effectiveness of priority research programs and of scientists in responding to technological needs of farmers; and (iii) develop models to improve effectiveness and financial sustainability of the technology dissemination system with greater accountability to, and participation by, the farming community.

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

Part A: Development of ICAR's Organization and Management (O&M) System

1. Support for ICAR's O&M Reforms

Strengthening ICAR's organization and management reforms, including: (i) improvement of staff selection and performance assessment and review of the organization and management of a sample of ICAR's institutes to introduce actions for improved efficiency and effectiveness through provision of consultants' services and training; (ii) improving the operational capacity of ICAR's headquarters through provision of civil works, equipment, consultants' services, and training; (iii) institutionalization of research priority setting and improvement of the monitoring

and evaluation arrangements through establishment of a policy planning and reforms division within ICAR, and provision of incremental operating costs, vehicles, consultants' services, training and pilot testing of new concepts; and (iv) expansion of ICAR's earnings from products and services, including activities of ICAR's Directorate of Publications, through provision of consultants' services and training.

2. Human Resource Development for Research Management

Enhancement of the managerial skills of NARS' staff through provision of study tours and training.

3. Information Systems Development

(a) Expanding information network, including electronic connections between and among the concerned units of ICAR, SAUs, DAC and the agencies participating in the Project, through the provision of equipment, including software, consultants' services and training.

(b) Upgrading the libraries of ICAR and SAUs through improved access to international databases and scientific literature and provision of books, scientific periodicals and journals and library equipment and software.

(c) Development of ICAR's agricultural management information system through provision of equipment, software, consultants' services and training.

4. Strengthening of PIU and Agro-Ecosystem Directorates

Strengthening implementation capabilities, including monitoring and evaluation capabilities, of PIU and Agro-ecosystem Directorates of ICAR, through provision of civil works, office equipment, vehicles, consultants' services, training, and incremental operating costs.

Part B: Support for Agro-Ecosystems Research

1. Sponsored Research

Carrying out of production systems research, including selected zonal research stations of SAUs, and technology assessment and refinement activities, cross-cutting research in mission mode, and strategic research through teams/centers of excellence, in areas crucial to achieving the objectives of food security, sustainability, economic growth and rural welfare, through provision of consultants' services, workshops and seminars, office and research equipment, vehicles, training, civil works, incremental operating costs, and strengthening of international linkages.

2. Competitive Grants Program

Establishment of a competitive agricultural research grants program: (i) open to all public and private institutions to undertake agricultural research for improvement of productivity and sustainability of production systems and pre-commercial technical development; and (ii) on market development and market research of products or processes jointly with the private sector.

Provision of study tours, workshops and training for the scientists of ICAR and the other agencies involved in implementation of the agro-ecosystem research.

Part C: Innovations in Technology Dissemination

1. Support to National Level Technology Dissemination Agencies

(a) Strengthening TDU's coordination and monitoring and evaluation roles for technology dissemination through provision of consultants' services, equipment, vehicles, civil works, workshops, publications and incremental operating costs.

(b) Strengthening of the Directorate of Extension within DAC through provision of office equipment, consultants' services, computer hardware and software, and vehicles, and carrying out a study on the long-term role of the Directorate and implementation of any reform program arising therefrom.

(c) Strengthening MANAGE through upgrading the quality and skills of its faculty and provision of equipment, materials, consultants' services and training and incremental operating costs, and remodeling of buildings, to enable it to: (i) expand

its program in extension management and training; and (ii) assist the Project States in developing their technology dissemination capacity.

(d) Strengthening of ICAR's Extension Division, including its Zonal Coordination Units, and Directorates of Extension of SAUs to enable them to: (i) coordinate and monitor technology validation and farmers' training activities of KVKs through provision of computer hardware and software, consultants' services and staff training; (ii) expand the role of the zonal research stations under the SAUs to include functions assigned to KVKs in districts where KVKs have not yet been established; and (iii) establish Agricultural Technology Information Centers to disseminate research findings and to supply products on a cost recovery basis.

## 2. State Level Pilot Program for Technology Dissemination

(a) Establishment and operation of an interdepartmental working group within each Project State to provide a mechanism for interaction with TDMC, guide the human resource development activity and monitor the district level technology dissemination program.

(b) Establishment of a district level Agricultural Technology Management Agency (ATMA) within each Project district for coordination and management of technology dissemination to farmers, and strengthening the operational capacity of KVK, line departments, SAUs zonal research stations and NGOs through provision of civil works, office equipment, vehicles, consultants' services and training and incremental operating costs.

(c) Strengthening the block level line department staff skills and operational capacity within each Project district for providing broad-based technical advice to farmers using farming system approach through provision of training, communications facilities, technical literature and equipment.

(d) Establishment of farmers' organizations at the village level within each Project district to assist in technology transfer to members, and in improving access to credit inputs and marketing services, and provision of consultants' and NGOs' services and training.

(e) Expansion and upgrading of existing agricultural management and extension training facilities within each Project State through provision of civil works, computers and other equipment, consultants' services, training of trainers and incremental operating costs.

\* \* \*

The Project is expected to be completed by June 30, 2003.

## SCHEDULE 3

### Procurement and Consultants' Services

#### Section I. Procurement of Goods and Works

##### Part A: General

Goods and works shall be procured in accordance with the provisions of Section I of the "Guidelines for Procurement under IBRD Loans and IDA Credits" published by the Bank in January 1995 and revised in January and August 1996 and September 1997 (the Guidelines) and the following provisions of Section I of this Schedule.

##### Part B: International Competitive Bidding

1. Except as otherwise provided in Part C of this Section, goods shall be procured under contracts awarded in accordance with the provisions of Section II of the Guidelines and paragraph 5 of Appendix 1 thereto.

2. The following provisions shall apply to goods to be procured under contracts awarded in accordance with the provisions of paragraph 1 of this Part B.

##### (a) Grouping of contracts

To the extent practicable, contracts for the purchase of goods shall be grouped in bid packages estimated to cost \$200,000 equivalent or more each.

(b) Preference for domestically manufactured goods

The provisions of paragraphs 2.54 and 2.55 of the Guidelines and Appendix 2 thereto shall apply to goods manufactured in the territory of the Borrower.

Part C: Other Procurement Procedures

1. National Competitive Bidding

(a) Equipment and materials estimated to cost less than \$200,000 equivalent per contract, up to an aggregate amount not to exceed \$10,000,000 equivalent, may be procured under contracts awarded in accordance with the provisions of paragraphs 3.3 and 3.4 of the Guidelines.

(b) Works estimated to cost \$20,000 equivalent or more per contract, up to an aggregate amount not to exceed \$7,000,000, may be procured under contracts awarded in accordance with the provisions of paragraphs 3.3 and 3.4 of the Guidelines.

2. National Shopping

(a) Equipment and materials estimated to cost less than \$20,000 equivalent per contract, up to an aggregate amount not to exceed \$10,000,000 equivalent, may be procured under contracts awarded on the basis of national shopping procedures in accordance with the provisions of paragraphs 3.5 and 3.6 of the Guidelines.

(b) Vehicles estimated to cost the equivalent of up to \$100,000 per contract, up to an aggregate amount not to exceed \$6,900,000 may be procured under contracts awarded on the basis of national shopping procedures in accordance with the provisions of paragraphs 3.5 and 3.6 of the Guidelines.

3. Direct Contracting

(a) Books, subscriptions, periodicals, extension and publicity materials, software, proprietary equipment and spares, estimated to cost up to an aggregate amount not to exceed \$9,900,000, may, with the Association's and the Bank's prior agreement, be procured in accordance with the provisions of paragraph 3.7 of the Guidelines.

(b) Maps, aerial photography, satellite imagery, and data, estimated to cost \$1,000,000 equivalent or less in the aggregate, may, with the Association's and the Bank's prior agreement, be procured in accordance with the provisions of paragraph 3.7 of the Guidelines.

4. Procurement of Small Works

Works estimated to cost less than \$20,000 equivalent per contract, up to an aggregate amount not to exceed \$6,800,000 equivalent, may be procured either: (i) under lump-sum, fixed-price contracts awarded on the basis of quotations obtained from three (3) qualified domestic contractors in response to a written invitation. The invitation shall include a detailed description of the works, including basic specifications, the required completion date, a basic form of agreement acceptable to the Association and the Bank, and relevant drawings, where applicable. The award shall be made to the contractor who offers the lowest price quotation for the required work, and who has the experience and resources to complete the contract successfully; (ii) through direct contracting with NGOs or community organizations, in accordance with the provisions of paragraph 3.7 of the Guidelines, and with the Association's and the Bank's prior agreement; or (iii) with prior approval of the Association and the Bank, through force account in accordance with the provisions of paragraph 3.8 of the Guidelines and procedures satisfactory to the Association and the Bank.

Part D: Review by the Bank of Procurement Decisions

1. Procurement Planning

Prior to the issuance of any invitations to prequalify for bidding or to bid for contracts, the proposed procurement plan for the Project shall be furnished to the Association and the Bank for their review and approval, in accordance with the provisions of paragraph 1 of Appendix 1 to the Guidelines. Procurement of all goods and works shall be undertaken in accordance with such procurement plan as shall have been approved by the Association and the Bank, and with the provisions of said paragraph 1.

## 2. Prior Review

(a) With respect to any contract for goods or works, estimated to cost the equivalent of \$200,000 or more, the procedures set forth in paragraphs 2 and 3 of Appendix 1 to the Guidelines shall apply.

(b) With respect to the first two contracts for goods and the first two contracts for works, estimated to cost less than \$200,000, but more than \$20,000, the following procedures shall apply:

- (i) prior to the selection of any supplier or contractor, ICAR shall provide to the Association and the Bank a report on the comparison and evaluation of quotations received;
- (ii) prior to the execution of any such contract, ICAR shall provide to the Association and the Bank a copy of the specifications and the draft contract; and
- (iii) the procedures set forth in paragraphs 2(f), 2(g) and 3 of Appendix 1 to the Guidelines shall apply.

## 3. Post Review

With respect to each contract not governed by paragraph 2 of this Part, the procedures set forth in paragraph 4 of Appendix 1 to the Guidelines shall apply.

## Section II. Employment of Consultants

### Part A: General

Consultants' services shall be procured in accordance with the provisions of the Introduction and Section IV of the "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" published by the Bank in January 1997 and revised in September 1997 (the Consultant Guidelines) and the following provisions of Section II of this Schedule.

### Part B: Quality- and Cost-based Selection

1. Except as otherwise provided in Part C of this Section, consultants' services shall be procured under contracts awarded in accordance with the provisions of Section II of the Consultant Guidelines, paragraph 3 of Appendix 1 thereto, Appendix 2 thereto, and the provisions of paragraphs 2.13 through 2.18 thereof applicable to quality- and cost-based selection of consultants.

2. The following provisions shall apply to consultants' services to be procured under contracts awarded in accordance with the provisions of the preceding paragraph. The short list of consultants for services for technical assistance or training under the Project estimated to cost less than \$100,000 equivalent per contract, may comprise entirely national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.

### Part C: Other Procedures for the Selection of Consultants

#### 1. Selection Based on Consultants' Qualifications

Services for technical assistance or training estimated to cost less than \$100,000 equivalent per contract may be procured under contracts awarded in accordance with the provisions of paragraphs 3.1 and 3.7 of the Consultant Guidelines.

#### 2. Single Source Selection

(a) Services for research under Part B 1 of the Project may, with the Association's and the Bank's prior agreement, be procured in accordance with the provisions of paragraphs 3.8 through 3.11 of the Consultant Guidelines, subject to the requirement that any contract for goods, forming part of such research contract, and estimated to cost more than \$20,000 equivalent, shall be procured in accordance with the provisions of paragraphs 3.5 and 3.6 of the Procurement Guidelines.

(b) Consultants' or NGOs' services for technical assistance or training which are estimated to cost less than \$100,000 equivalent per contract, may, with the Association's and the Bank's prior agreement, be procured in accordance with the provisions of paragraphs 3.8 through 3.11 of the Consultant Guidelines.

3. Individual Consultants

Services for tasks that meet the requirements set forth in paragraph 5.1 of the Consultant Guidelines shall be procured under contracts awarded to individual consultants in accordance with the provisions of paragraphs 5.1 through 5.3 of the Consultant Guidelines.

Part D: Review by the Association and the Bank of the Selection of Consultants

1. Selection Planning

Prior to the issuance to consultants of any requests for proposals, the proposed plan for the selection of consultants under the Project shall be furnished to the Association and the Bank for their review and approval, in accordance with the provisions of paragraph 1 of Appendix 1 to the Consultant Guidelines. Selection of all consultants' services shall be undertaken in accordance with such selection plan as shall have been approved by the Association and the Bank, and with the provisions of said paragraph 1.

2. Prior Review

(a) With respect to each contract for the employment of consulting firms for technical assistance or training estimated to cost the equivalent of \$100,000 or more, the procedures set forth in paragraphs 1, 2 (other than the third subparagraph of paragraph 2(a)) and 5 of Appendix 1 to the Consultant Guidelines shall apply.

(b) With respect to each contract for the employment of consulting firms for technical assistance or training estimated to cost the equivalent of \$50,000 or more, but less than the equivalent of \$100,000, the procedures set forth in paragraphs 1, 2 (other than the second subparagraph of paragraph 2(a)) and 5 of Appendix 1 to the Consultant Guidelines shall apply.

(c) With respect to each contract for the employment of individual consultants estimated to cost the equivalent of \$50,000 or more, the qualifications, experience, terms of reference and terms of employment of the consultants shall be furnished to the Association and the Bank for their prior review and approval. The contract shall be awarded only after the said approval shall have been given.

3. Post Review

With respect to each contract not governed by paragraph 2 of this Part, the procedures set forth in paragraph 4 of Appendix 1 to the Consultant Guidelines shall apply.

SCHEDULE 4

Special Account

1. For the purposes of this Schedule:

(a) the term "eligible Categories" means Categories (1), (2), (3), (4) and (5) set forth in the table in paragraph 1 of Schedule 1 to the Development Credit 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 Credit or the Loan allocated from time to time to the eligible Categories in accordance with the provisions of Schedule 1 to the Development Credit Agreement; and

(c) the term "Authorized Allocation" means an amount equivalent to \$11,000,000 to be withdrawn from the Credit Account or the Loan Account and deposited into the Special Account pursuant to paragraph 3 (a) of this Schedule, provided, however, that unless the Association shall otherwise agree, the Authorized Allocation shall be limited to an amount equivalent to \$6,000,000 until the aggregate amount of withdrawals from the Credit Account and the Loan Account plus the total amount of all outstanding special commitments entered into by the Association or the Bank pursuant to Section 5.02 of the respective General Conditions shall be equal to or exceed the equivalent of SDR 22,000,000.

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 Association 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 Association a request or requests for deposit into the Special Account of an amount or amounts which do not exceed the aggregate amount of the Authorized Allocation. On the basis of such request or requests, the Association shall, on behalf of the Borrower, withdraw from the Credit Account or 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 Association requests for deposits into the Special Account at such intervals as the Association shall specify.

(ii) Prior to or at the time of each such request, the Borrower shall furnish to the Association 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 Association shall, on behalf of the Borrower, withdraw from the Credit Account or 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 Association from the Credit Account or 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 Association shall reasonably request, furnish to the Association 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 Association shall not be required to make further deposits into the Special Account:

(a) if, at any time, the Association shall have determined that all further withdrawals should be made by the Borrower directly from the Credit Account in accordance with the provisions of Article V of the General Conditions and paragraph (a) of Section 2.02 of the Development Credit Agreement or from the Loan Account in accordance with the provisions of Section 2.02 of the Loan Agreement and Article V of the General Conditions applicable thereto;

(b) if the Borrower shall have failed to furnish to the Association, within the period of time specified in Section 4.01 (b) (ii) of this Agreement, any of the audit reports required to be furnished to the Association pursuant to said Section, or to the Bank pursuant to Section 3.01 of the Loan Agreement, in respect of the audit of the records and accounts for the Special Account;

(c) if, at any time, the Bank shall have notified the Borrower of its intention to suspend in whole or in part the right of the Borrower to make withdrawals from the Credit Account or the Loan Account pursuant to the provisions of 6.02 of the respective General Conditions; or

(d) once the total unwithdrawn amount of the Credit and the Loan allocated to the eligible Categories, minus the amount of all outstanding special commitments entered into by the Association or the Bank pursuant to Section 5.02 of the respective General Conditions with respect to the Project, shall equal the equivalent of twice the amount of the Authorized Allocation.

Thereafter, withdrawal from the Credit Account and the Loan Account of the remaining unwithdrawn amount of the Credit and the Loan allocated to the eligible Categories shall follow such procedures as the Association shall specify by notice to the Borrower. Such further withdrawals shall be made only after and to the extent that the Association 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 Association 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 Association, the Borrower shall, promptly upon notice from the Association: (A) provide such additional evidence as the Association may request; or (B) deposit into the Special Account (or, if the Association shall so request, refund to the Association or the Bank) an amount equal to the amount of such payment or the portion thereof not so eligible or justified. Unless the Association shall otherwise agree, no further deposit by the Association 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 Association 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 Association, refund to the Association or the Bank such outstanding amount.

(c) The Borrower may, upon notice to the Association, refund to the Association or the Bank all or any portion of the funds on deposit in the Special Account.

(d) Refunds to the Association or the Bank made pursuant to paragraphs 6 (a), (b) and (c) of this Schedule shall be credited to the Credit Account or the Loan Account, as the case may be, for subsequent withdrawal or for cancellation in accordance with the relevant provisions of the Development Credit Agreement or the Loan Agreement, including the General Conditions applicable thereto.

#### SCHEDULE 5

##### Participation Agreement (Implementation Arrangements for Part C 2 of the Project)

1. Each Participation Agreement shall include provisions whereby:

(a) Each Project State shall declare its commitment to the objectives of the Project as set forth in Schedule 2 to the Development Credit Agreement, and, to this end, shall carry out Part C 2 of the Project with due diligence and efficiency and shall provide, promptly as needed, the facilities, services and other resources required for Part C 2 of the Project.

(b) Each Project State shall undertake that, unless the Borrower, the Association and 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 Credit and the Loan shall be governed by the provisions of Schedule 3 to the Development Credit Agreement.

(c) Each Project State shall undertake to carry out the obligations set forth in Sections 9.04, 9.05, 9.06, 9.07 and 9.08 of the General Conditions Applicable to the Development Credit Agreements, and in Sections 9.04, 9.05, 9.06, 9.07, 9.08 and 9.09 of the General Conditions Applicable to the Loan and Guarantee Agreements for Single Currency Loans in respect of such State's Participation Agreement.

(d) Each Project State shall undertake to, at the request of the Borrower, exchange views with the Borrower, the Association and the Bank, with regard to the progress of Part C 2 of the Project, the performance of its obligations under the respective Participation Agreement, and other matters related to the purposes of the Credit and the Loan.

(e) Each Project State shall undertake to promptly inform the Borrower, the Association and the Bank of any condition which interferes or threatens to interfere with the progress of Part C 2 of the Project, the accomplishment of the purposes of the Credit or the Loan, or the performance by such Project State of its obligations under the respective Participation Agreement.

(f) Each Project State shall undertake to:

(i) maintain records and accounts adequate to reflect in accordance with sound accounting practices the operations, resources and expenditures in respect of Part C 2 of the Project of the departments or agencies of such State responsible for carrying out Part C 2 of the Project; and



(ii) have its records and accounts referred to in paragraph (i) above for each fiscal year audited in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Borrower; and furnish to the Borrower, as soon as available, but in any case not later than six months after the end of each such fiscal year, the report of such audit by said auditors of such scope and in such detail as the Borrower shall reasonably request, including such other information concerning said records, accounts and the audit thereof as the Borrower shall from time to time reasonably request.

(g) Each Project State shall undertake to prepare and furnish to the Borrower bi-annual and annual progress reports, within 30 days of the reporting period, setting out the progress achieved in carrying out Part C 2 of the Project during the previous six months or year, as the case may be.

(h) Each Project State shall take all necessary measures to ensure that, not later than December 31, 1999, extension services in at least one block in a district in each Project State are carried out by NGOs and farmers' organizations, together with existing public extension agencies.

(i) Each Project State shall undertake to establish, not later than September 30, 1998, at least one district level Agricultural Technology Management Agency (ATMA) for coordination and management of technology dissemination to farmers under part C 2 (b) of the Project, and shall thereafter establish the remaining ATMAs in accordance with a timetable agreed with the Borrower, the Association, and the Bank.

(j) Each Project State shall ensure that an annual work plan for technology dissemination activities in the Project districts under Part C 2 (b) of the Project, including support for SAUs zonal research stations and district level KVKs, line departments, NGOs and farmers' organizations, will be based on a strategic extension plan acceptable to the Association and the Bank.

