Loan Agreement

(Sustainable Management of Agricultural Research and Technology Dissemination Project)

between

REPUBLIC OF INDONESIA

and

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Dated September 12, 2012
LOAN AGREEMENT

Agreement dated September 12, 2012, between REPUBLIC OF INDONESIA ("Borrower") and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT ("Bank"). The Borrower and the Bank hereby agree as follows:

ARTICLE I — GENERAL CONDITIONS; DEFINITIONS

1.01. The General Conditions (as defined in the Appendix to this Agreement) constitute an integral part of this Agreement.

1.02. Unless the context requires otherwise, the capitalized terms used in this Agreement have the meanings ascribed to them in the General Conditions or in the Appendix to this Agreement.

ARTICLE II — LOAN

2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in this Agreement, the amount of eighty million Dollars ($80,000,000), as such amount may be converted from time to time through a Currency Conversion in accordance with the provisions of Section 2.07 of this Agreement ("Loan"), to assist in financing the project described in Schedule 1 to this Agreement ("Project").

2.02. The Borrower may withdraw the proceeds of the Loan in accordance with Section IV of Schedule 2 to this Agreement.

2.03. The Front-end Fee payable by the Borrower shall be equal to one quarter of one percent (0.25%) of the Loan amount. The Borrower shall pay the Front-end Fee not later than sixty (60) days after the Effective Date.

2.04. The interest payable by the Borrower for each Interest Period shall be at a rate equal to the Reference Rate for the Loan Currency plus the Variable Spread; provided, that upon a Conversion of all or any portion of the principal amount of the Loan, the interest payable by the Borrower during the Conversion Period on such amount shall be determined in accordance with the relevant provisions of Article IV of the General Conditions. Notwithstanding the foregoing, if any amount of the Withdrawn Loan Balance remains unpaid when due and such non-payment continues for a period of thirty days, then the interest payable by the Borrower shall instead be calculated as provided in Section 3.02 (e) of the General Conditions.

2.05. The Payment Dates are March 1 and September 1 in each year.
2.06. The principal amount of the Loan shall be repaid in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

2.07. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management: (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, withdrawn or un-withdrawn, to an Approved Currency; (ii) a change of the interest rate basis applicable to: (A) all or any portion of the principal amount of the Loan withdrawn and outstanding from a Variable Rate to a Fixed Rate, or vice versa; or (B) all or any portion of the principal amount of the Loan withdrawn and outstanding from a Variable Rate based on a Reference Rate and the Variable Spread to a Variable Rate based on a Fixed Reference Rate and the Variable Spread, or vice versa; or (C) all of the principal amount of the Loan withdrawn and outstanding from a Variable Rate based on a Variable Spread to a Variable Rate based on a Fixed Spread; and (iii) the setting of limits on the Variable Rate or the Reference Rate applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on the Variable Rate or the Reference Rate.

(b) Any conversion requested pursuant to paragraph (a) of this Section that is accepted by the Bank shall be considered a “Conversion”, as defined in the General Conditions, and shall be effected in accordance with the provisions of Article IV of the General Conditions and of the Conversion Guidelines.

ARTICLE III — PROJECT

3.01. The Borrower declares its commitment to the objective of the Project. To this end, the Borrower shall carry out the Project through the Ministry of Agriculture in accordance with the provisions of Article V of the General Conditions.

3.02. Without limitation upon the provisions of Section 3.01 of this Agreement, and except as the Borrower and the Bank shall otherwise agree, the Borrower shall ensure that the Project is carried out in accordance with the provisions of Schedule 2 to this Agreement.

ARTICLE IV — TERMINATION

The Effectiveness Deadline is the date ninety (90) days after the date of this Agreement.
ARTICLE V — REPRESENTATIVE; ADDRESSES

5.01. The Borrower’s Representative is its minister responsible for finance.

5.02. The Borrower’s Address is:

Directorate General of Debt Management  
Ministry of Finance  
Gedung Frans Seda  
Jalan Dr. Wahidin No. 1 Jakarta 10710  
Indonesia  
Cable:  
Telex:  
Facsimile:  
FINMINISTRY 45799  
DJMLN-IA  
62-21-381-2859

Jakarta  
44319 DEPKEU-IA

5.03. The Bank’s Address is:

International Bank for Reconstruction and Development  
1818 H Street, N.W.  
Washington, D.C. 20433  
United States of America  
Cable address:  
Telex:  
Facsimile:  
INTBAFRAD 248423(MCI) or  
Washington, D.C. 64145(MCI)  
1-202-477-6391
AGREED at Jakarta, Indonesia, as of the day and year first above written.

REPUBLIC OF INDONESIA

By

[Signature]

Authorized Representative

Name: Robert Pakpahan
Title: Expert Staff of the MOF on State Revenue With Full Mandate as DG of Debt Management

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By

[Signature]

Authorized Representative

Name: Yogana Prasta
Title: Acting Country Director, Indonesia
SCHEDULE 1

Project Description

The objective of the Project is to improve the institutional capacity and performance of the Indonesian Agency for Agricultural Research and Development to develop and disseminate relevant and demand-driven innovative technologies, meeting the needs of producers and the agri-food system.

The Project consists of the following parts:

A. Development and Management of Human Resources

1. Scientific training
   (a) Provision of overseas degree training to researchers and other staff in fields relevant to the work of the Assessment Institutes for Agriculture Technology, the Central Research Institutes, and the National Research Institutes through the award of Training Scholarships.
   (b) Provision of short-term advanced training to researchers and other staff, including sandwich and post-doctoral training, and carrying out of scientific exchanges and visits by Indonesian Agency for Agricultural Research and Development scientists, through the provision of Training Awards.
   (c) Promotion of participation by researchers and management staff in international conferences, seminars, and workshops.

2. Technical and management training
   (a) Provision of technical and research management training to researchers and research technicians.
   (b) Provision of professional skills training to staff.

3. Human resource management
   (a) Development and implementation of a detachering / mobility program for knowledge and skills transfer among Indonesian Agency for Agricultural Research and Development institutions and mentoring of junior staff.
(b) Assessment of, and improvements to, staff conditions of service and evaluation, promotion, and incentive system.

(c) Assessment of, and improvements to, staff recruitment system.

E Improvement in Research Infrastructure and Facilities

1. Laboratory improvement

(a) Modernization of equipment, implementation of information, safety, and waste management systems and accreditation programs, capacity building of personnel, and improvements in laboratory development and seed production quality control.

(b) Preparation of grand design study, and improvements in laboratory management, standardization, and seed production.

2. Field station improvement

(a) Improvement of field stations, including improvements to experimental farms, plant growth and handling facilities, and irrigation systems, modernization of equipment, and construction or renovation of glasshouses.

(b) Improvement of seed production stations, including offices, security systems, plant handling facilities, workshops, and irrigation systems, modernization of equipment, and construction or renovation of glasshouses.


C. Research Management and Policy Support

1. Research priority-setting, planning, and programming

(a) Data collection and analysis in relation to need and demand for services and technologies developed by the Indonesian Agency for Agricultural Research and Development.

(b) Assessment of, and improvements to, performance assessment system, including development and implementation of an institutional assessment framework.
(c) Assessment of, and improvements to, research priority-setting, planning, and programming systems.

2. Research collaboration and networking
   (a) Establishment and / or scaling up of research collaboration funds and enhancement of national and international research collaboration partnerships through the provision of Research Funds.
   (b) Establishment and / or scaling up of innovation funds and promotion of local agricultural innovation through the utilization of research results through the provision of Research Funds.

3. Research products commercialization
   (a) Identification of knowledge / technology commercialization opportunities.
   (b) Development of a comprehensive business plan for research product commercialization.
   (c) Promotion and commercial dissemination of technologies to the private sector.

4. Improvement of technology dissemination systems
   (a) Organization of local- and regional-level events to demonstrate research activities and disseminate results.
   (b) Strengthening of technology dissemination systems.

D. Project Management and Monitoring and Evaluation

1. Project management, implementation, and monitoring and evaluation.

2. Provision of technical advisory support for implementation of Parts A, B, C, and D.1 of the Project.
SCHEDULE 2

Project Execution

Section I. Implementation Arrangements

A. Institutional Arrangements

1. The Borrower shall be responsible for Project management, implementation, and monitoring and evaluation in accordance with the following institutional arrangements.

   Project Steering Committee

2. The Borrower shall be responsible for the provision of policy and strategic orientation to the Project through the Project Steering Committee.

3. To this end, the Borrower shall establish, not later than three (3) months after the Effective Date, and thereafter maintain, throughout Project implementation, the Project Steering Committee, with a composition, institutional framework, functions, and resources satisfactory to the Borrower and the Bank for such purpose.

   Ministry of Agriculture

   Indonesian Agency for Agricultural Research and Development

4. The Borrower shall be responsible for Project management, implementation, including administrative and financial management, disbursement, and procurement, and monitoring and evaluation through the Ministry of Agriculture, particularly the Indonesian Agency for Agricultural Research and Development, and specifically the Project Management Unit.

5. To this end, the Borrower shall maintain, throughout Project implementation, the Project Management Unit, with an institutional framework, functions, and resources, including competent personnel in adequate numbers, satisfactory to the Borrower and the Bank for such purpose.

B. Anti-Corruption

The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines and the Transparency and Accountability Framework.
C. Project Operations Manual

1. The Borrower shall:

   (a) update, from time to time on a schedule agreed between and in a manner satisfactory to the Borrower and the Bank, the Project Operations Manual, adopt such updated Manual, and thereafter ensure that the Project is carried out in accordance with the provisions thereof; and

   (b) not, except as the Bank may otherwise agree in writing, assign, amend, abrogate, or waive, or permit to be assigned, amended, abrogated, or waived, the aforementioned, or any provision thereof.

2. In the event of a conflict between the provisions of the Project Operations Manual and those of this Agreement, the latter shall govern.

D. Annual Work Plans and Budgets

The Borrower shall:

   (a) furnish to the Bank for approval as soon as available, but in any case not later than November 30 of each year, the annual work plan and budget for the Project for each subsequent year of implementation, of such scope and detail as the Bank shall have reasonably requested, except for the annual work plan and budget for the Project for the first year of implementation, which shall be furnished not later than one (1) month after the Effective Date; and

   (b) thereafter ensure that the Project is carried out in accordance with such plans and budgets as approved by the Bank.

E. Training Scholarships, Training Awards, and Research Funds

1. Management

To facilitate the management of Parts A.1 (a) and (b) and C.2 of the Project, the Borrower shall appoint, not later than six (6) months after the Effective Date, in accordance with the provisions of Section III of this Schedule, and thereafter maintain throughout Project implementation, (a) consultant(s) under terms of reference satisfactory to the Borrower and the Bank, which shall include the obligation of such consultant(s) to:

   (a) assist in the carrying out of competitive selection of candidates, screening and selection of academic or research institutions, matching of
candidates to institutions and programs, provision of pre-departure language training or cultural orientation to candidates, and program management, including payment of fees to institutions and stipends to candidates and provision of coaching and logistics support to candidates, as applicable;

(b) ensure that said Parts of the Project are carried out in accordance with the provisions of this Part E;

(c) ensure that said Parts of the Project are carried out in accordance with the provisions of the Anti-Corruption Guidelines applicable to recipients of loan proceeds other than the Borrower, and the Transparency and Accountability Framework, and without any right or authority, except as the Borrower and the Bank shall otherwise agree, to assign, amend, abrogate, or waive, or permit to be assigned, amended, abrogated, or waived, the Transparency and Accountability Framework or any provision thereof;

(d) ensure that said Parts of the Project are implemented in accordance with the provisions of the Project Operations Manual and the Environmental Code of Practice to the extent applicable, and without any right or authority, except as the Borrower and the Bank shall otherwise agree, to assign, amend, abrogate, or waive, or permit to be assigned, amended, abrogated, or waived. the aforementioned, or any provision thereof; and

(e) ensure that each Training or Research Activity is carried out in accordance with the provisions of the respective Training Scholarship, Training Award, or Research Funds Agreement, as the case may be.

2. Review

The Borrower shall review and approve applications for Training Scholarships, Training Awards, or Research Funds, and thereafter monitor and evaluate Training or Research Activities, through the Indonesian Agency for Agricultural Research and Development, acting with the assistance of the consultant(s) referred to in the preceding paragraph, in accordance with the provisions of this Part E and the Project Operations Manual.

3. Eligibility

No proposed Beneficiary shall be eligible for a Training Scholarship, a Training Award, or Research Funds unless, on the basis of a review conducted in accordance with this Part E and the Project Operations Manual, the Borrower has
deemed satisfied the eligibility criteria specified below and in further detail in the
Project Operations Manual, which shall include those set out below.

(a) In the case of a Training Activity:

(i) the proposed Beneficiary: (A) is a staff member of the
Indonesian Agency for Agricultural Research and Development
or an institution thereunder; (B) has been nominated by his / her
employing agency or unit for an eligible program and field of
study set out in the Project Operations Manual; (C) meets the
academic record, age, professional performance, and seniority
requirements set out in the Project Operations Manual; (D) has
performed satisfactorily on the required academic and language
tests; and (E) has successfully completed pre-departure language
training or cultural orientation, as required; and

(ii) the proposed academic or research institution to host the
Beneficiary meets the quality assurance standards set out in the

(b) In the case of a Research Activity:

(i) the proposed Beneficiary is an institution under the Indonesian
Agency for Agricultural Research and Development;

(ii) any contribution, whether in cash or in kind, toward the cost of
the Research Activity from the proposed institutional partner
with which the Beneficiary will be working is set out in the
application and meets any related requirements in the Project
Operations Manual;

(iii) the objective of the Research Activity is consistent with at least
one (1) of those set out in the institutional assessment framework
to be developed under Part C.1 of the Project; and

(iv) a monitoring and evaluation system is part of the Research
Activity and the proposed indicators are consistent with those for
specific research outputs set forth in the institutional assessment
framework to be developed under Part C.1 of the Project.

4. Terms

(a) A Training or Research Activity shall be carried out pursuant to a
Training Scholarship, Training Award, or Research Funds Agreement, as
the case may be, to be concluded between the Borrower, acting through the Indonesian Agency for Agricultural Research and Development, and the Beneficiary, under terms satisfactory to the Borrower and the Bank, described in further detail in the Project Operations Manual, which shall include the following:

(i) a description of the Training or Research Activity, its budget, and the applicable performance indicators;

(ii) provision of the Training Scholarship, the Training Award, or the Research Funds on a non-reimbursable basis, subject to the fulfillment of the specified conditions;

(iii) the obligation of the Beneficiary to carry out and successfully complete the Training or Research Activity: (A) with due diligence and efficiency; and (B) in accordance with the provisions of the Anti-Corruption Guidelines applicable to recipients of loan proceeds other than the Borrower, the Transparency and Accountability Framework, the Project Operations Manual, and the Environmental Code of Practice, as applicable;

(iv) the obligation of the Beneficiary to furnish to the Borrower records reflecting the carrying out of the Training or Research Activity upon completion of each academic term, if applicable, and the Training or Research Activity;

(v) the obligation of the Beneficiary to: (A) use the proceeds of the Training Scholarship, the Training Award, or the Research Funds exclusively in the carrying out of the Training or Research Activity, as the case may be; and (B) procure the goods and services to be financed from the proceeds of the Training Scholarship, the Training Award, or the Research Funds in accordance with procedures ensuring efficiency and economy and use such expenditures exclusively in the carrying out of the Training or Research Activity, as the case may be;

(vi) the obligation of the Beneficiary to return to his employing agency or unit upon completion of the Training or Research Activity and continue in such employment for a minimum period of time thereafter in accordance with the provisions of the Project Operations Manual, subject to the application of the specified sanctions in the event of non-fulfillment of this condition; and
(vii) the right of the Indonesian Agency for Agricultural Research and Development, on behalf of the Borrower, and of the Borrower in its own right, to: (A) obtain all information as it, or the Bank, shall reasonably request regarding the administration, operation, and financial condition of the Training or Research Activity; and (B) suspend or terminate the right of the Beneficiary to use the proceeds of the Training Scholarship, the Training Award, or the Research Funds, or obtain a refund of all or any part of the amount of the Training Scholarship, the Training Award, or the Research Funds then withdrawn, upon failure by the Beneficiary to perform any of his obligations under the Training Scholarship, Training Award, or Research Funds Agreement, as the case may be.

(b) The Borrower shall exercise its rights under the Training Scholarship, Training Award, or Research Funds Agreement in such manner as to protect its interests and the interests of the Bank and to accomplish the purposes of the Training Scholarship, the Training Award, or the Research Funds, respectively, and, except as the Bank shall otherwise agree, the Borrower shall not assign, amend, abrogate, or waive, or permit to be assigned, amended, abrogated, or waived, the aforementioned, or any provision thereof.

5. Audits

The Borrower shall carry out annual technical audits of the compliance of the Training Scholarships, the Training Awards, and the Research Funds with the eligibility criteria, terms, and implementation procedures set out in paragraphs 2, 3, and 4 of this Part E and the Project Operations Manual and shall submit to the Bank, not later than one (1) month after the receipt of the report of each such audit, such report, and thereafter take all measures required to ensure the efficient completion of the respective Training or Research Activities and the achievement of the objectives thereof, based on the conclusions and recommendations of such report and the Bank's views on the matter.

F. Safeguards

1. The Borrower shall:
   
   (a) ensure that the Project is carried out in accordance with the provisions of the Environmental Code of Practice; and
(b) not, except as the Bank shall otherwise agree in writing, assign, amend, abrogate, or waive, or permit to be assigned, amended, abrogated, or waived, said Code, or any provision thereof.

2. The Borrower shall ensure that no land acquisition or Involuntary Resettlement is carried out under the Project.

3. The Borrower shall ensure that each contract for works under the Project includes the obligation of the relevant contractor to implement the Environmental Code of Practice.

4. The Borrower shall take all measures necessary on its part to regularly collect, compile, and submit to the Bank, as part of the Project Reports, information on the status of compliance with the Environmental Code of Practice, giving details of:

(a) measures taken in furtherance of said Code;

(b) conditions, if any, which interfere or threaten to interfere with the smooth implementation of said Code; and

(c) remedial measures taken or required to be taken to address such conditions.

5. In the event of a conflict between the provisions of the Environmental Code of Practice and those of this Agreement, the latter shall govern.

Section II. Project Monitoring Reporting and Evaluation

A. Project Reports

1. (a) The Borrower shall monitor and evaluate the progress of the Project and prepare Project Reports in accordance with the provisions of Section 5.08 of the General Conditions and on the basis of the indicators set forth below in sub-paragraph (b) of this paragraph. Each Project Report shall cover the period of one (1) calendar semester, and shall be furnished to the Bank not later than forty-five (45) days after the end of the period covered by such report.
(b) The performance indicators referred to above in sub-paragraph (a) consist of the following:

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator</th>
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<tbody>
<tr>
<td></td>
<td><strong>Project Objective</strong></td>
</tr>
<tr>
<td>1.</td>
<td>Percentage of farmers, disaggregated by gender, adopting Indonesian Agency for Agricultural Research and Development (IAARD) research results disseminated under the Project</td>
</tr>
<tr>
<td>2.</td>
<td>Number of technologies developed and / or refined and disseminated to users</td>
</tr>
<tr>
<td>3.</td>
<td>Number of articles relating to agricultural research and development carried out by IAARD published in internationally peer-reviewed journals</td>
</tr>
<tr>
<td>4.</td>
<td>Percentage and number of sources of external funding in IAARD’s research and dissemination budget, and percentage of IAARD’s operational budget allocated to research and dissemination</td>
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<tr>
<td></td>
<td><strong>Part A of the Project</strong></td>
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<tr>
<td>5.</td>
<td>Percentage of researchers in IAARD staff, disaggregated by gender</td>
</tr>
<tr>
<td>6.</td>
<td>Percentage of IAARD researchers with master's and doctorate degrees, disaggregated by gender</td>
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<tr>
<td></td>
<td><strong>Part B of the Project</strong></td>
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<td>7.</td>
<td>Number of laboratories supported under the Project having been accredited nationally and internationally</td>
</tr>
<tr>
<td>8.</td>
<td>Number of field stations supported under the Project having been accredited nationally and internationally</td>
</tr>
<tr>
<td>9.</td>
<td>Number of laboratories supported under the Project involved in international research networking</td>
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<tr>
<td></td>
<td><strong>Part C of the Project</strong></td>
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<tr>
<td>10.</td>
<td>Number of national and international research collaborations</td>
</tr>
<tr>
<td>11.</td>
<td>Number of inventions having been patented or licensed to industry</td>
</tr>
</tbody>
</table>
12. IAARD annual work programs take into account the results of the priority-setting, planning, and programming systems developed under the Project

13. Number of areas under the IAARD multi-channel technology dissemination program that are priorities consistent with Provincial Technology Commission recommendations

(c) The Borrower shall furnish to the Bank, as part of the Project Reports, information as follows in relation to Parts A.1 (a) and (b) of the Project for the period covered by said Reports: (i) the names of Beneficiaries selected and their employing agency or unit and host institution; (ii) the amounts of the Training Scholarships, Training Awards, or Research Funds awarded to said Beneficiaries; and (iii) the academic or research performance of Beneficiaries having commenced their academic or research program.

B. Annual Reviews

The Borrower shall review, jointly with the Bank, no later than one (1) month after the submission of every second Project Report to the Bank, such report and the one preceding, and thereafter take all measures required to ensure the efficient completion of the Project and the achievement of the objective thereof, based on the conclusions and recommendations of such reports and the Bank's views on the matter.

C. Midterm Review

The Borrower shall:

(a) carry out, jointly with the Bank, not later than thirty (30) months after the Effective Date, a midterm review to assess the status of Project implementation, as measured against the performance indicators set forth in Part A.1 (b) of this Section II. Such review shall include an assessment of the following: (i) overall progress in implementation; (ii) results of monitoring and evaluation activities; (iii) progress on procurement and disbursement; (iv) progress on implementation of safeguards measures; (v) implementation arrangements; and (vi) the need to make any adjustments to the Project and reallocate funds to improve performance.

(b) prepare and furnish to the Bank, at least one (1) month before each such review, a report, in scope and detail satisfactory to the Bank, needed to undertake the review as described in the preceding paragraph, integrating the results of the monitoring and evaluation activities performed pursuant to Part A.1 (a) of this
Section II on the progress achieved in the carrying out of the Project during the period preceding the date of such report and setting out the measures recommended to ensure the efficient carrying out of the Project and the achievement of the objective thereof during the period following such date; and

(c) review, jointly with the Bank, the report referred to in paragraph (b) of this Part C and thereafter take all measures required to ensure the efficient completion of the Project and the achievement of the objective thereof, based on the conclusions and recommendations of such report and the Bank's views on the matter.

D. Financial Management, Financial Reports and Audits

1. The Borrower shall maintain or cause to be maintained a financial management system in accordance with the provisions of Section 5.09 of the General Conditions.

2. Without limitation on the provisions of Part A of this Section, the Borrower shall prepare and furnish to the Bank not later than forty-five (45) days after the end of each calendar quarter, interim unaudited financial reports for the Project covering the quarter, in form and substance satisfactory to the Bank.

3. The Borrower shall have its Financial Statements audited in accordance with the provisions of Section 5.09 (b) of the General Conditions. Each audit of the Financial Statements shall cover the period of one (1) fiscal year of the Borrower. The audited Financial Statements for each such period shall be furnished to the Bank not later than six (6) months after the end of such period.

Section III. Procurement

A. General

1. Goods, Works, and Non-consulting Services. All goods, works, and non-consulting services required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in Section I of the Procurement Guidelines, and with the provisions of this Section.

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

B. **Particular Methods of Procurement of Goods, Works, and Non-consulting Services**

1. **International Competitive Bidding.** Except as otherwise provided in paragraph 2 below, goods, works, and non-consulting services shall be procured under contracts awarded on the basis of International Competitive Bidding.

2. **Other Methods of Procurement of Goods, Works, and Non-consulting Services.** The following table specifies the methods of procurement, other than International Competitive Bidding, which may be used for goods, works, and non-consulting services. The Procurement Plan shall specify the circumstances under which such methods may be used: (a) National Competitive Bidding, subject to the additional provisions set forth in the Annex to this Schedule; (b) Shopping; and (c) Direct Contracting.

C. **Particular Methods of Procurement of Consultants' Services**

1. **Quality- and Cost-based Selection.** Except as otherwise provided in paragraph 2 below, consultants' services shall be procured under contracts awarded on the basis of Quality and Cost-based Selection.

2. **Other Methods of Procurement of Consultants' Services.** The following table specifies the methods of procurement, other than Quality and Cost-based Selection, which may be used for consultants' services. The Procurement Plan shall specify the circumstances under which such methods may be used: (a) Quality-based Selection; (b) Selection based on Consultants' Qualifications; (c) Single-source Selection of consulting firms; (d) Procedures set forth in paragraphs 5.2 and 5.3 of the Consultant Guidelines for the Selection of Individual Consultants; and (e) Single-source procedures for the Selection of Individual Consultants.

D. **Review by the Bank of Procurement Decisions**

The Procurement Plan shall set forth those contracts which shall be subject to the Bank's Prior Review. All other contracts shall be subject to Post Review by the Bank.
Section IV. Withdrawal of Loan Proceeds

A. General

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

2. The following table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Loan ("Category"), the allocation of the amounts of the Loan to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of the Loan Allocated (expressed in Dollars)</th>
<th>Percentage of Expenditures to be financed (inclusive of Taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Training Scholarships and Training Awards for the Project (Parts A.1 (a) and (b) of the Project, respectively), and non-consulting services and Training for Part A of the Project, except for Parts A.3 (b) and (c) of the Project</td>
<td>39,525,000</td>
<td>100</td>
</tr>
<tr>
<td>(2) Goods, works, non-consulting services, and Training for Part B of the Project</td>
<td>34,025,000</td>
<td>100</td>
</tr>
<tr>
<td>(3) Research Funds for the Project (Part C.2 of the Project)</td>
<td>5,600,000</td>
<td>100</td>
</tr>
<tr>
<td>(4) Consultants' services for Part D.2 of the Project</td>
<td>850,000</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL AMOUNT</td>
<td>80,000,000</td>
<td></td>
</tr>
</tbody>
</table>
B. Withdrawal Conditions; Withdrawal Period

1. Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made:

   (a) from the Loan Account until the Bank has received payment in full of the Front-end Fee; or

   (b) for payments made prior to the date of this Agreement.

2. The Closing Date is September 30, 2017.
ANNEX TO SCHEDULE 2

National Competitive Bidding: Additional Provisions

The procedures applicable to the procurement of goods, works, and non-consulting services under contracts awarded on the basis of National Competitive Bidding shall be those of the Pelelangan Umum (Public Tendering) and Pemilihan Langsung / Pelelangan Sederhana (Simplified Tendering) methods as set forth in the Borrower’s Presidential Regulation No. 54/2010, with the modifications set out below in order to ensure economy, efficiency, transparency, and broad consistency with the provisions of Section I of the Procurement Guidelines, pursuant to paragraph 3.3 of said Guidelines. The Pemilihan Langsung / Pelelangan Sederhana (Simplified Tendering) method shall apply to such procurement up to the financial thresholds specified in said Regulation. In the event of a conflict between the Borrower’s procedures and these modifications, the latter shall govern.

1. Procuring entities shall use the appropriate standard bidding documents acceptable to the Borrower and the Bank. The provisions of Section 1.16 (Fraud and Corruption) of the Procurement Guidelines shall apply, and each bidding document and contract financed out of the proceeds of the Loan shall include provisions on matters pertaining to fraud and corruption as defined in paragraph 1.16 (a) of said Guidelines and the contract provisions set out in paragraph 1.16 (e) of said Guidelines.

2. Foreign bidders shall not be precluded from bidding. If a registration process is required, a foreign firm determined to be the lowest evaluated bidder shall be given reasonable time for registration. Foreign bidders shall not be required to form a joint venture or sub-contract part of the supply of goods, non-consulting services, and works as a condition for submitting bids or the award of the contract. Bidding documents shall be made available, by mail or in person, to all international bidders who are willing to pay the required fee.

3. No preference of any kind shall be given to any bidders.

4. Under the Pelelangan Umum (Public Tendering) method, bidders shall be allowed at least twenty-one (21) days from the date of the invitation to bid or the date of availability of bidding documents, whichever is later, to prepare and submit bids; this period shall be ten (10) days under the Pemilihan Langsung / Pelelangan Sederhana (Simplified Tendering) method.
5. Bids invited under the *Pelelangan Umum* (Public Tendering) method shall be submitted in one (1) envelope and evaluated using post-qualification.

6. No bidder shall be rejected merely on the basis of a comparison with the owner's estimate and budget ceiling without the Bank's prior written concurrence.

7. Bid security, at the bidder's option, shall be in the form of a letter of credit or guarantee from a reputable bank or other reputable financial institution and shall follow the form provided for this purpose in the bidding documents without exception.

8. All bids shall not be rejected and new bids solicited without the Bank's prior written concurrence.

9. Government-owned enterprises in Indonesia shall be eligible to participate in bidding only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not dependent agencies of the Borrower.
SCHEDULE 3

Amortization Schedule

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

<table>
<thead>
<tr>
<th>Principal Payment Date</th>
<th>Installment Share (Expressed as a Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1, 2021</td>
<td>2.17</td>
</tr>
<tr>
<td>March 1, 2022</td>
<td>2.22</td>
</tr>
<tr>
<td>September 1, 2022</td>
<td>2.28</td>
</tr>
<tr>
<td>March 1, 2023</td>
<td>2.34</td>
</tr>
<tr>
<td>September 1, 2023</td>
<td>2.40</td>
</tr>
<tr>
<td>March 1, 2024</td>
<td>2.46</td>
</tr>
<tr>
<td>September 1, 2024</td>
<td>2.52</td>
</tr>
<tr>
<td>March 1, 2025</td>
<td>2.58</td>
</tr>
<tr>
<td>September 1, 2025</td>
<td>2.64</td>
</tr>
<tr>
<td>March 1, 2026</td>
<td>2.71</td>
</tr>
<tr>
<td>September 1, 2026</td>
<td>2.78</td>
</tr>
<tr>
<td>March 1, 2027</td>
<td>2.85</td>
</tr>
<tr>
<td>September 1, 2027</td>
<td>2.92</td>
</tr>
<tr>
<td>March 1, 2028</td>
<td>2.99</td>
</tr>
<tr>
<td>September 1, 2028</td>
<td>3.07</td>
</tr>
<tr>
<td>March 1, 2029</td>
<td>3.14</td>
</tr>
<tr>
<td>September 1, 2029</td>
<td>3.22</td>
</tr>
<tr>
<td>March 1, 2030</td>
<td>3.30</td>
</tr>
<tr>
<td>September 1, 2030</td>
<td>3.38</td>
</tr>
<tr>
<td>March 1, 2031</td>
<td>3.47</td>
</tr>
<tr>
<td>September 1, 2031</td>
<td>3.56</td>
</tr>
<tr>
<td>March 1, 2032</td>
<td>3.65</td>
</tr>
<tr>
<td>September 1, 2032</td>
<td>3.74</td>
</tr>
<tr>
<td>March 1, 2033</td>
<td>3.83</td>
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<tr>
<td>September 1, 2033</td>
<td>3.93</td>
</tr>
<tr>
<td>March 1, 2034</td>
<td>4.02</td>
</tr>
</tbody>
</table>
2. If the proceeds of the Loan have not been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:

(a) To the extent that any proceeds of the Loan have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the Withdrawn Loan Balance as of such date in accordance with paragraph 1 of this Schedule.

(b) Any amount withdrawn after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by the Bank by multiplying the amount of each such withdrawal by a fraction, the numerator of which is the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date ("Original Installment Share") and the denominator of which is the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such amounts repayable to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

3. (a) Amounts of the Loan withdrawn within two (2) calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.

(b) Notwithstanding the provisions of sub-paragraph (a) of this paragraph, if at any time the Bank adopts a due date billing system under which invoices are issued on or after the respective Principal Payment Date, the provisions of such sub-paragraph shall no longer apply to any withdrawals made after the adoption of such billing system.

4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the Withdrawn Loan Balance to an
Approved Currency, the amount so converted in the Approved Currency that is repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by the Bank by multiplying such amount in its currency of denomination immediately prior to the Conversion by either: (i) the exchange rate that reflects the amounts of principal in the Approved Currency payable by the Bank under the Currency Hedge Transaction relating to the Conversion; or (ii) if the Bank so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.

5. If the Withdrawn Loan Balance is denominated in more than one (1) Loan Currency, the provisions of this Schedule shall apply separately to the amount denominated in each Loan Currency, so as to produce a separate amortization schedule for each such amount.
APPENDIX

Section I. Definitions


2. “Assessment Institutes for Agricultural Technology” means the technical operational units of the Indonesian Agency for Agricultural Research and Development (as hereinafter defined) in each province, responsible for the management of agricultural technology assessment, or successors thereto.

3. “Beneficiary” means, in the case of Research Funds (as hereinafter defined), an institution under the Indonesian Agency for Agricultural Research and Development to whom or for whose benefit Research Funds are made available or proposed to be made available, and, in the case of a Training Award (as hereinafter defined) or a Training Scholarship (as hereinafter defined), a staff member of the Indonesian Agency for Agricultural Research and Development or an institution thereunder to whom or for whose benefit a Training Award or a Training Scholarship is made or proposed to be made, all in accordance with the eligibility criteria specified in Section I.E.3 of Schedule 2 to this Agreement and in further detail in the Project Operations Manual (as hereinafter defined).

4. “Central Research Institutes” means the institutes of the Indonesian Agency for Agricultural Research and Development responsible for the management of research and development in relation to agricultural commodities or other such areas, or successors thereto.


6. “Degree Training Activity” means a specific activity carried out under Part A.1 (a) of the Project, financed or proposed to be financed through a Training Scholarship in accordance with the eligibility criteria specified in Section I.E.3 of Schedule 2 to this Agreement and in further detail in the Project Operations Manual.

7. “Environmental Code of Practice” means the Borrower’s code, dated January 25, 2012, agreed with the Bank and setting out mitigation, enhancement, monitoring, and institutional measures, including capacity building through training, to eliminate any adverse environmental impacts of activities to be implemented under the Project, offset them, or reduce them to acceptable levels,
or enhance positive impacts, as the same may be modified from time to time with the prior written agreement of the Bank, and such term includes any annexes or schedules to such code.

8. “General Conditions” means the “International Bank for Reconstruction and Development General Conditions for Loans”, dated March 12, 2012, with the modifications set forth in Section II of this Appendix.

9. “IAARD” or “Indonesian Agency for Agricultural Research and Development” means the unit of the Ministry of Agriculture (as hereinafter defined) responsible for the management of agricultural research and development, and whose responsibilities under the Project are set out in Section I.A.4 of Schedule 2 to this Agreement, or a successor thereto.

10. “Involuntary Resettlement” means the following caused on account of Project implementation: (a) the involuntary taking of land, resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets; or (iii) loss of income sources or means of livelihood, whether or not the affected person must move to another location; or (b) the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihood of the affected person.

11. “Ministry of Agriculture” means the Borrower’s ministry responsible for the management of agriculture or a successor thereto.

12. “National Research Institutes” means the institutes of the Indonesian Agency for Agricultural Research and Development responsible for the management of research in relation to specific agricultural commodities or other such areas, or successors thereto.


14. “Procurement Plan” means the Borrower’s procurement plan for the Project, dated June 8, 2012 and referred to in paragraph 1.18 of the Procurement Guidelines and paragraph 1.25 of the Consultant Guidelines, as the same shall be updated from time to time in accordance with the provisions of said paragraphs.

15. “Project Management Unit” means the unit of the Indonesian Agency for Agricultural Research and Development, established and operating pursuant to said Agency’s Decree No. 273/Kpts/OT.160/I/11/2011 dated November 8, 2011, and whose responsibilities are set out in Section I.A.4 of Schedule 2 to this Agreement, or a successor thereto.
16. "Project Operations Manual" means the Borrower's manual, dated June 8, 2012, agreed with the Bank and setting out implementation, organizational, administrative, monitoring and evaluation, financial management, disbursement, procurement, and safeguards arrangements for purposes of Project implementation, as the same may be modified from time to time with the prior written agreement of the Bank, and such term includes any annexes or schedules to such manual.

17. "Project Steering Committee" means the Borrower's entity, referred to in Section I.A.3 of Schedule 2 to this Agreement and whose responsibilities are set out in Section I.A.2 of said Schedule, or a successor thereto.

18. "Provincial Technology Commission" means the commission established by each provincial government, responsible for the coordination of the participation of provincial stakeholders in prioritizing agricultural research and development and reviewing the outcomes of agricultural technology assessments, or a successor thereto.

19. "Research Activity" means a specific activity carried out under Part C.2 of the Project, financed or proposed to be financed through Research Funds in accordance with the eligibility criteria specified in Section I.E.3 of Schedule 2 to this Agreement and in further detail in the Project Operations Manual; and "Research Activities" means more than one (1) such activity.

20. "Research Funds" means one (1) or more cash awards made or proposed to be made to a Beneficiary institution out of the proceeds of the Loan to finance a Research Activity pursuant to a Research Funds Agreement and covering the cost of research fees, equipment, and supplies, and living stipends and travel of relevant Beneficiary institution staff, as applicable.

21. "Research Funds Agreement" means an agreement, referred to in Section I.E.4 of Schedule 2 to this Agreement, between the Borrower, represented by the Indonesian Agency for Agricultural Research and Development, and a Beneficiary, setting forth the terms and conditions governing Research Funds.

22. "Short-term Training Activity" means a specific activity carried out under Part A.1 (b) of the Project, financed or proposed to be financed through a Training Award in accordance with the eligibility criteria specified in Section I.E.3 of Schedule 2 to this Agreement and in further detail in the Project Operations Manual.

23. "Training" means the cost of training under the Project, based on the annual work plans and budgets referred to in Section I.D of Schedule 2 to this Agreement as approved by the Bank, and attributable to seminars, study tours, and workshops,
along with the cost of domestic and international travel and subsistence allowances for training participants, services of trainers, rental of training facilities, preparation and reproduction of training materials, and other activities directly related to training preparation and implementation.

24. "Training Activity" means a Degree Training Activity or a Short-term Training Activity; and "Training Activities" means more than one (1) such activity.

25. "Training Award" means a cash award made or proposed to be made to a Beneficiary out of the proceeds of the Loan to finance a Short-term Training Activity pursuant to a Training Award Agreement (as hereinafter defined) and covering the cost of training fees and supplies, living stipends, and travel, as applicable; and "Training Awards" means more than one (1) such award.

26. "Training Award Agreement" means an agreement, referred to in Section I.E.4 of Schedule 2 to this Agreement, between the Borrower, acting through the Indonesian Agency for Agricultural Research and Development, and a Beneficiary, setting forth the terms and conditions governing a Training Award.

27. "Training Scholarship" means a cash award made or proposed to be made to a Beneficiary out of the proceeds of the Loan to finance a Degree Training Activity pursuant to a Training Scholarship Agreement (as hereinafter defined) and covering the cost of training fees and supplies, living stipends, and travel, as applicable; and "Training Scholarships" means more than one (1) such award.

28. "Training Scholarship Agreement" means an agreement, referred to in Section I.E.4 of Schedule 2 to this Agreement, between the Borrower, acting through the Indonesian Agency for Agricultural Research and Development, and a Beneficiary, setting forth the terms and conditions governing a Training Scholarship.

29. "Transparency and Accountability Framework" means the Borrower's framework, dated February 2012, agreed with the Bank and setting out measures to reinforce Project governance, enhance the transparency of Project activities, increase public accountability, and reduce opportunities for collusion, corruption, or fraud under the Project, as the same may be modified from time to time with the prior written agreement of the Bank, and such term includes any annexes or schedules to such framework.
Section II. Modifications to the General Conditions

The modification to the General Conditions is as follows, namely, that Section 2.05 (a) is modified to read as follows:

“(a) the payment is for the reasonable cost of goods, works, non-consulting services, consultants’ services, training, training scholarships, training awards, or research funds required for the Project, to be financed out of the proceeds of the Loan and procured, all in accordance with the provisions of the Legal Agreements;”