Loan Agreement

(Guangdong Agricultural Pollution Control Project)

between

PEOPLE'S REPUBLIC OF CHINA

and

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

Dated February 28, 2014
LOAN AGREEMENT

Agreement dated February 24, 2014, between PEOPLE’S REPUBLIC OF CHINA ("Borrower") and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT ("Bank").

WHEREAS:

(A) the Borrower has requested the Bank to provide assistance towards the financing of the project described in Schedule 1 to this Agreement ("Project"); and

(B) by an agreement of even date herewith between the Borrower and the Bank, acting as an Implementing Agency of the Global Environment Facility (GEF) ("GEF Grant Agreement"), the Bank has agreed to provide such assistance in an amount of five million one hundred thousand Dollars ($5,100,000) ("Grant") to assist in financing Parts 1 (c), 3 and 4 of the Project.

NOW 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.

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 one hundred million Dollars ($100,000,000), as such amount may be converted from time to time through a Currency Conversion in accordance with the provisions of Section 2.07 of this Agreement ("Loan"), to assist in financing the project described in Schedule 1 to this Agreement ("Project").

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

2.03. The Front-end Fee payable by the Borrower shall be equal to one quarter of one percent (0.25%) of the Loan amount.

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 Notwithstanding the foregoing, if any amount of the Withdrawn Loan Balance remains unpaid when due and such non-payment continues for a period of thirty days, then the interest payable by the Borrower shall instead be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

2.05. The Payment Dates are June 15 and December 15 in each year.

2.06. The principal amount of the Loan shall be repaid in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

2.07. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management: (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, withdrawn or unwithdrawn, to an Approved Currency; (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 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.

(c) Promptly following the Execution Date for an Interest Rate Cap or Interest Rate Collar for which the Borrower has requested that the premium be paid out of the proceeds of the Loan, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and pay to itself the amounts required to pay any premium payable in accordance with Section 4.05 (c) of the General Conditions up to the amount allocated from time to time for the purpose in the table in Section IV of Schedule 2 to this Agreement.

ARTICLE III—PROJECT

3.01. The Borrower declares its commitment to the objective of the Project. To this end, the Borrower shall cause the Project to be carried out by the Project Implementing Entity in accordance with the provisions of Article V of the General Conditions and the Project Agreement.
3.02. Without limitation upon the provisions of Section 3.01 of this Agreement, and except as the Borrower and the Bank shall otherwise agree, the Borrower shall ensure that the Project is carried out in accordance with the provisions of Schedule 2 to this Agreement.

ARTICLE IV — TERMINATION

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

ARTICLE V — REPRESENTATIVE; ADDRESSES

5.01. The Borrower’s representative is its Minister of Finance.

5.02. The Borrower’s Address is:

Ministry of Finance
Sanlihe
Beijing 100820
People’s Republic of China

Facsimile:
(86-10) 6855-1125

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: INTBAFRAD
Telex: 248423(MCI) or 64145(MCI)
Facsimile: 1-202-477-6391
AGREED at Beijing, People’s Republic of China, as of the day and year first above written.

PEOPLE’S REPUBLIC OF CHINA

By

Authorized Representative

Name: Yang Yingying

Title: Deputy Director-General

International Department
Ministry of Finance

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By

Authorized Representative

Name: Klaus Rohland

Title: Country Director, China
SCHEDULE 1

Project Description

The objective of this Project is to reduce water pollutant releases from crop and livestock production in selected areas of Guangdong Province.

The Project consists of the following parts:

Part 1 Environmentally Friendly Crop Production

(a) Soil Nutrient Management

(i) Development and dissemination of sound soil nutrient management plans through soil nutrient sampling and analysis.

(ii) Promotion, through the provision of Subsidies, of use of various technical measures to improve application and utilization efficiencies of fertilizers based on soil nutrient management plans including: (A) application of formula fertilizers; (B) application of slow-release fertilizers; (C) development of fertigation facilities in vegetable and orchard farms; and (D) adoption of three control techniques on rice paddies.

(b) Integrated Pest Management (IPM)

(i) Upgrading of pest monitoring and early warning systems; and

(ii) Promotion of integrated pest management practices for key cropping systems through the provision of Subsidies for professional pest management services, and for the acquisition of pesticides and related equipment.

(c) Conservation Agriculture Pilots

Provision of CA Pilot Sub-grants to farmers for the carrying out of CA Pilots to demonstrate the use of no-till or limited tillage technologies and practices for typical cropping systems.

(d) Implementation Support to Beneficiaries

(i) Provision of field technical support to Beneficiaries, in particular smallholders, in crop production practices promoted by the Project;

(ii) Provision of Sub-grants to eligible Village Committees to finance part of their incremental operating costs for organizing Beneficiaries in their villages to carry out Project activities; and

(iii) Provision of Certification Incentive Payments to Beneficiaries to encourage them to go through the process necessary for their farms to be certified by the DOA as
safe agricultural product sites or for their products to be certified by the Ministry of Agriculture as green agricultural products or organic products.

Part 2 Livestock Waste Management

(a) Provision of LWM Sub-grants to Beneficiaries to partially finance the construction of livestock waste management facilities to promote the proper collection and treatment of pig manure.

(b) Provision of output based LWM Sub-grants to Beneficiaries to partially finance the Incremental Investment Costs incurred in the construction of pilot high-rise pig production facilities.

Part 3 Monitoring and Evaluation, Capacity Building and Knowledge Management

(a) Monitoring and evaluation of Project activities, including of monitoring of environmental and social safeguards, and measuring impacts of various Project activities.

(b) Building the capacity of the Project Implementing Entity and Project stakeholders through Acquisition of monitoring equipment and vehicles, carrying out of studies, and provision of study trips and training.

(c) Summarizing and disseminating lessons and experiences derived from Project implementation.

Part 4 Project Management

Strengthening the institutional capacity of the PMO and the PMUs for the implementation of the Project, including the provision of Incremental Operating Costs.
SCHEDULE 2

Project Execution

Section I. Implementation Arrangements

A. Financing Arrangements

1. For the purposes of the Project, the Borrower shall make available the proceeds of the Loan to the Project Implementing Entity, under terms and conditions satisfactory to the Bank, including the following principal terms:

   (a) The principal amount shall be made available in Dollars or any other Currency as the Loan may be converted from time to time through a Currency Conversion (such principal amount determined on the date, or respective dates, of withdrawal from the Loan Account) of the value of the currency or currencies so withdrawn.

   (b) The principal amount so made available (including an amount equal to the fee paid pursuant to Section 2.03 of this Agreement) shall be recovered over a period of 25 years, inclusive of a grace period of 5 years.

   (c) Interest shall be charged on such principal amount withdrawn and outstanding from time to time at a rate equal to the rate of interest applicable from time to time to the Loan pursuant to Section 2.04 of this Agreement.

2. The Borrower shall cause the Project Implementing Entity to: (a) manage, operate, monitor, transfer and reconcile the proceeds of the Loan made available to it pursuant to paragraph 1 above in accordance with arrangements and procedures satisfactory to the Bank; (b) take all required actions, including provision of timely consents and approvals as may be necessary, to facilitate the utilization of said Loan proceeds and the implementation of the Project and to enable the Project Implementing Entity to comply with its undertakings under the Project Agreement; and (c) maintain all relevant records and documents related to the Loan and the Project and provide promptly such documents and records, including all other information, as may be requested by the Borrower or the Bank from time to time.

B. Implementation Arrangements and Work Plans

1. The Borrower shall cause the Project Implementing Entity to carry out the Project in accordance with the Project Implementation Manual, and the Annual Work Plans as annually reviewed and approved by the Bank, as provided for in Section I, Part B of the Schedule to the Project Agreement, in a manner satisfactory to the Bank and shall not amend, suspend, or waive the said manual or plan or any part thereof without the prior written agreement of the Bank.

2. In the event of any inconsistency between the Project Implementation Plan or the Annual Work Plan and this Agreement, the provisions of this Agreement shall prevail.
C. Anti-Corruption

The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines.

D. Safeguards

1. Without limitation upon its other obligations under this Agreement, the Borrower shall cause the Project Implementing Entity to carry out the Project, or ensure that the Project is carried out, in accordance with the provisions of Part D of Section I of the Schedule to the Project Agreement.

2. Without limitation upon its other reporting obligations under Section II of this Schedule, the Borrower shall take, and cause the Project Implementing Entity to take, all measures necessary to regularly collect and compile, and submit to the Bank, as part of the Project Reports, information on the status of compliance with the Safeguards Instruments, providing details of:

   (a) measures taken in furtherance of said Instruments;

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

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

Section II. Project Monitoring Reporting and Evaluation

A. Project Reports.

The Borrower shall: (a) monitor and evaluate, and cause the Project Implementing Entity to monitor and evaluate, the progress of the Project and to prepare Project Reports in accordance with the provisions of Section 5.08 (b) of the General Conditions and on the basis of the indicators agreed with the Bank and set forth in the Project Implementation Manual. Each such Project Report shall cover the period of one (1) calendar semester, and shall be furnished to the Bank not later than March 15 and September 15 each year; and (b) without limitation upon the provisions of the preceding sub-paragraph, cause the Project Implementing Entity to, by no later than December 31, 2016 carry out a mid-term review of the Project, under terms of reference acceptable to the Bank.


1. The Borrower shall maintain, or shall cause the Project Implementing Entity to maintain, 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 cause the Project Implementing Entity to prepare and furnish to the Bank as part of the Project Report not later than March 15 and September 15 each year, interim un-audited financial
reports for the Project covering the preceding calendar semester, in form and substance satisfactory to the Bank.

3. The Borrower shall cause the Project Implementing Entity to 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 methods, other than International Competitive Bidding, may be used for procurement of goods, works and non-consulting services for those contracts specified in the Procurement Plan: (a) Shopping; (b) Direct Contracting; (c) Community Participation procedures which have been found acceptable to the Bank, as set out in the PIM; and (d) National Competitive Bidding, subject to the additional provisions set forth in the box below:

The procedures applicable to the procurement of goods, works, and non-consulting services under contracts awarded on the basis of National Competitive Bidding ("NCB") shall be the open tendering procedures set forth in the Borrower's Law on Tendering and Bidding promulgated by its Order No. 21 dated August 30, 1999; provided, however, that such procedures shall be subject to the provisions of Section I, Paragraphs 3.3 and 3.4 of Section III, and Appendix 1 of the
Procurement Guidelines, and the additional provisions in the following. In the event of a conflict between the Borrower’s procedures and these NCB Procedure Modifications, the latter shall govern.

(i) Eligibility to participate in a procurement process and to be awarded a Bank-financed contract shall be as defined under Section I of the Procurement Guidelines; accordingly, no bidder or potential bidder shall be declared ineligible for such contract for reasons other than those provided in Section I of the Procurement Guidelines. No restriction based on nationality of bidders and/or origin of goods shall apply, and foreign bidders shall be allowed to participate in NCB without application of restrictive conditions.

(ii) All invitations to prequalify or bid shall be advertised in a national newspaper of wide circulation in the Borrower’s country, or on a widely used website/ electronic portal with free national and international access acceptable to the Bank except for goods or non-consulting services contracts that are estimated to cost less than $300,000 equivalent each, or works contracts that are estimated to cost less than $2,000,000 each, which may be advertised in a provincial daily newspaper. Such advertisement shall be made in sufficient time for prospective bidders to obtain prequalification or bidding documents and prepare and submit their responses. In any event, a minimum of thirty (30) days shall be given to bidders between the date of such advertisement (or the date of availability of bidding documents, whichever is later) and the deadline for the submission of bids, and the advertisement and bidding documents shall specify the deadline for the submission of bids. In the case of such advertisement on a website/ electronic portal, the notice shall remain readily accessible nationally and internationally until at least the deadline for the submission of bids. Potential bidders shall be allowed to inspect and purchase bidding documents at any time prior to the deadline for the submission of bids.

(iii) Standard Bidding Documents acceptable to the Bank shall be used.

(iv) Qualification requirements of bidders and the method of evaluating the qualification of each bidder shall be specified in detail in the bidding documents.

(v) Prequalification procedures and documents acceptable to the Bank shall be used for large, complex and/or specialized works. Verification of the information upon which a bidder was prequalified, including current commitments, shall be carried out at the time of contract award, along with the bidder’s capability with respect to personnel and equipment. All bidders that meet the qualification criteria set out in the pre-qualification documents shall be allowed to bid, and there shall be no limit on the number of pre-qualified bidders. Where pre-qualification is not used, the qualification of the bidder who is recommended for award of contract shall be assessed by post-qualification, applying the qualification criteria stated in the bidding documents.

(vi) Registration shall not be used to assess bidders’ qualifications. A bidder shall not be required to register as a condition for inspecting or purchasing bidding documents, submitting its bid or receiving contract award. A bidder determined to be the lowest evaluated responsive bidder, shall be given reasonable opportunity of registering (if required) before contract signing without any let or hindrance. Bidding shall not be restricted to any particular class of contractors, and non-classified contractors shall also
be eligible to bid.

(vii) No margins of preference of any sort shall be given to bidders, such as on the basis of their location, place of incorporation, or affinity with the geographical area in which the Project activities will take place.

(viii) All bidders who are awarded contracts for works and single-responsibility contracts shall be required to provide performance security in an amount sufficient to protect the Borrower or the Project Implementing Entity / Entities, as the case may be, in case of breach of contract by the contractor, and the bidding documents shall specify the required form and amount of such security and any other potential damages for such breach.

(ix) Bidders shall be allowed to submit bids by mail or in person.

(x) All bids shall be opened in public; all bidders shall be offered an opportunity to be present (either in person or through their representatives) at the time of bid opening, but bidders shall not be required to be present at the bid opening.

(xi) All bid evaluation criteria shall be disclosed in the bidding documents and quantified in monetary terms or expressed in the form of pass/fail requirements.

(xii) No bid may be rejected solely on the basis that the bid price exceeds any cost estimate or falls outside any margin or bracket of prices or average bids established by the Borrower or the Project Implementing Entity / Entities, as the case may be. Rejection of all bids or re-bidding shall not be allowed solely because the number of bids is less than three (3), and rejection of all bids or re-bidding shall not take place without the Bank’s prior written agreement.

(xiii) Each contract shall be awarded to the lowest evaluated responsive bidder, that is, the bidder who meets the appropriate standards of capability and resources and whose bid has been determined: (A) to be substantially responsive to the bidding documents; and (B) to offer the lowest evaluated cost. The winning bidder shall not be required, as a condition of award, to undertake responsibilities for work or to assume other obligations not stipulated in the bidding documents or otherwise to modify the bid as originally submitted. No negotiations shall be permitted except with the Bank’s no-objection.

(xiv) In accordance with the Procurement Guidelines, each bidding document and contract shall include provisions stating the Bank’s policy to sanction firms or individuals found to have engaged in fraud and corruption as set forth in the Procurement Guidelines.

(xv) In accordance with the Procurement Guidelines, each bidding document and contract shall include provisions stating the Bank’s policy with respect to inspection and audit of accounts, records and other documents relating to the submission of bids and contract performance.

(xvi) Government-owned enterprises in the Borrower’s country may be permitted to bid or submit a proposal of goods, works, or non-consulting services if they can establish that they: (A) are legally and financially autonomous; (B) operate under commercial law; and
(C) are not a dependent agency of the agency conducting the procurement.

(xvii) Matters such as subcontracting, joint venture relationships and assignment of contract shall be handled in accordance with the bidding documents.

(xviii) The results of bid evaluation and contract award shall be published in the national or provincial press (as provided under paragraph (ii) above) or official gazette or a free and open-access website and shall identify: (A) the name of each bidder who submitted a bid; (B) bid prices as read out at bid opening; (C) the name of the bidder, and the evaluated price, of each bid that was evaluated; (D) the names of bidders whose bids were either rejected as non-responsive or not meeting qualification criteria, or not evaluated, with the reasons therefor; and (E) the name of the winning bidder and the final total contract price, as well as the duration and summary scope of the contract. Such publication shall be within two (2) weeks of receiving the Bank’s no-objection to the award recommendation for contracts subject to the Bank’s prior review, and within two (2) weeks of the Borrower or the Project Implementing Entity’s award decision for contracts subject to the Bank’s post review. The bidding documents shall disclose the newspaper in which and/or the electronic means by which the information on contract award will be published.

(xix) The Borrower or the Project Implementing Entity / Entities, as the case may be, shall have in place an effective and independent protest mechanism for bidders to protest. The bidding documents shall provide the professional title and address of the official to whom such protests should be sent.

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 methods, other than Quality- and Cost-based Selection, may be used for procurement of consultants’ services for those contracts which are specified in the Procurement Plan: (a) Quality-based Selection; (b) Selection Based on the Consultants’ Qualifications; (c) Procedures set forth in paragraphs 5.2 and 5.3 of the Consultant Guidelines for the Selection of Individual Consultants; and (d) Single-source procedures for the Selection of firm and 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 USD)</th>
<th>Percentage of Expenditures to be Financed (inclusive of Taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Goods and works under Part 2 (a) of the Project</td>
<td>56,720,000</td>
<td>50%</td>
</tr>
<tr>
<td>(2) Sub-financings under Parts 1 (a) (ii), 1 (b) (ii) and 2 (b) of the Project</td>
<td>31,800,000</td>
<td>100% of amounts disbursed</td>
</tr>
<tr>
<td>(3) Works, goods, non-consulting services, consultants’ services, Incremental Operating Costs, Training and Workshops under Parts 1 (a) (i), 1 (b) (i), 3 and 4 of the Project:</td>
<td>11,230,000</td>
<td>100%</td>
</tr>
<tr>
<td>(4) Front-end Fee</td>
<td>250,000</td>
<td>Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 2.07 (b) of the General Conditions</td>
</tr>
<tr>
<td>(5) Interest Rate Cap or Interest Rate Collar premium</td>
<td>0</td>
<td>Amount due pursuant to Section 2.07(c) of this Agreement</td>
</tr>
<tr>
<td>TOTAL AMOUNT</td>
<td>100,000,000</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 for payments made prior to the date of this Agreement, except that withdrawals up to an aggregate amount not to exceed $10,000,000 equivalent may be made for payments made prior to this date but on or after October 29, 2013 for Eligible Expenditures:
2. The Closing Date is December 31, 2019.
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>June 15, 2019</td>
<td>1.48</td>
</tr>
<tr>
<td>December 15, 2019</td>
<td>1.52</td>
</tr>
<tr>
<td>June 15, 2020</td>
<td>1.56</td>
</tr>
<tr>
<td>December 15, 2020</td>
<td>1.59</td>
</tr>
<tr>
<td>June 15, 2021</td>
<td>1.63</td>
</tr>
<tr>
<td>December 15, 2021</td>
<td>1.67</td>
</tr>
<tr>
<td>June 15, 2022</td>
<td>1.72</td>
</tr>
<tr>
<td>December 15, 2022</td>
<td>1.76</td>
</tr>
<tr>
<td>June 15, 2023</td>
<td>1.8</td>
</tr>
<tr>
<td>December 15, 2023</td>
<td>1.85</td>
</tr>
<tr>
<td>June 15, 2024</td>
<td>1.89</td>
</tr>
<tr>
<td>December 15, 2024</td>
<td>1.94</td>
</tr>
<tr>
<td>June 15, 2025</td>
<td>1.99</td>
</tr>
<tr>
<td>December 15, 2025</td>
<td>2.04</td>
</tr>
<tr>
<td>June 15, 2026</td>
<td>2.09</td>
</tr>
<tr>
<td>December 15, 2026</td>
<td>2.14</td>
</tr>
<tr>
<td>June 15, 2027</td>
<td>2.2</td>
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<tr>
<td>December 15, 2027</td>
<td>2.25</td>
</tr>
<tr>
<td>June 15, 2028</td>
<td>2.31</td>
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<td>December 15, 2028</td>
<td>2.37</td>
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<td>June 15, 2029</td>
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<td>December 15, 2029</td>
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<td>June 15, 2030</td>
<td>2.55</td>
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<td>December 15, 2030</td>
<td>2.61</td>
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<td>June 15, 2031</td>
<td>2.68</td>
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<tr>
<td>December 15, 2031</td>
<td>2.74</td>
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<td>June 15, 2032</td>
<td>2.81</td>
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<td>December 15, 2032</td>
<td>2.88</td>
</tr>
<tr>
<td>June 15, 2033</td>
<td>2.95</td>
</tr>
<tr>
<td>Period</td>
<td>Rate</td>
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<tr>
<td>---------------------</td>
<td>-------</td>
</tr>
<tr>
<td>December 15, 2033</td>
<td>3.03</td>
</tr>
<tr>
<td>June 15, 2034</td>
<td>3.1</td>
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<td>December 15, 2034</td>
<td>3.18</td>
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<td>June 15, 2035</td>
<td>3.26</td>
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<td>December 15, 2035</td>
<td>3.34</td>
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<tr>
<td>June 15, 2036</td>
<td>3.43</td>
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<tr>
<td>December 15, 2036</td>
<td>3.51</td>
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<td>June 15, 2037</td>
<td>3.6</td>
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<td>December 15, 2038</td>
<td>4.14</td>
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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 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

1. "Annual Work Plans" means the rolling plans for the Project to be prepared or updated by the Project Implementing Entity on an annual basis as provided for in the Section I, Part B.2 of the Schedule to the Project Agreement.


3. "Beneficiary" means a CA Pilot Beneficiary, a Certification Beneficiary, a Fertigation Beneficiary, a Subsidy Beneficiary, or an LWM Beneficiary and "Beneficiaries" means, collectively, all such Beneficiaries.

4. "CA Pilot" means an activity carried out or to be carried out under Part 1 (c) of the Project in order to demonstrate the use of no-till or limited tillage technologies and practices for typical cropping systems.

5. "CA Pilot Beneficiary" means an individual, cooperative or other group that meets the eligibility criteria set forth in the Project Implementation Manual and who or which has received or will receive CA Pilot Sub-grant to finance a CA Pilot under Part 1 (c) of the Project.

6. "CA Pilot Sub-grant" means a payment made or proposed to be made to a CA Pilot Beneficiary (as herein defined) out of the proceeds of the Loan to partially finance the cost of goods, works and services required for carrying out a CA Pilot pursuant to a CA Pilot Sub-grant Agreement (as hereinafter defined).

7. "CA Pilot Sub-grant Agreement" means an agreement, referred to in Part E.5 of the Schedule to the Project Agreement, between the Project Implementing Entity and a CA Pilot Beneficiary, setting forth the terms and conditions governing a CA Pilot Sub-grant.

8. "Category" means a category set forth in the table in Section IV of Schedule 2 to this Agreement.

9. "Certification Beneficiary" means an individual, cooperative or other group that meets the eligibility criteria set forth in the Project Implementation Manual and who or which has received or will receive an incentive payment under Part 1 (d) of the Project once their products have been certified by DOA as safe agricultural products or by the Ministry of Agriculture as green agricultural products to cover part of the costs of such certification.

10. "Certification Incentive Payment" means a payment made or to be made to a Certification Beneficiary under Part 1 (d) (iii) of the Project as a reward for going
through process necessary for their products to be certified by DOA as safe agricultural products or by the Ministry of Agriculture as green agricultural products.


12. "Department of Agriculture" and the acronym "DOA" mean the Department of Agriculture of Guangdong Province and any successor thereto.

13. "Department of Environmental Protection" and "DEP" mean the Department of Environmental Protection of Guangdong Province and any successor thereto.

14. "Department of Finance" and the acronym "DOF" mean the Department of Finance of Guangdong Province and any successor thereto.

15. "Displaced Persons" means persons who, on account of implementation of the Project, have experienced or would experience direct economic and social impacts caused by: (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 such persons 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 such person.

16. "Environmental Management Plan" means the Project Implementing Entity’s plan, acceptable to the Bank and publicly disclosed in the Borrower’s territory on January 15, 2013 and in the Bank’s InfoShop on February 22, 2013 which analyzes the adverse environmental impacts of the Project, and sets out: (a) the measures to be taken during the implementation and operation of the Project to eliminate or offset such adverse environmental impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures.

17. "Fertigation Beneficiary" means an individual, cooperative or other group that meets the eligibility criteria set forth in the Project Implementation Manual and who or which has received or will receive a Fertigation Sub-grant under Part I (a) (ii) (C) of the Project to finance the development of fertigation facilities in vegetable and orchard farms.

18. "Fertigation Sub-grant" means an output based payment made or proposed to be made to a Fertigation Beneficiary, pursuant to a Fertigation Sub-grant Agreement (as hereinafter defined), out of the proceeds of the Loan to partially finance the cost of goods, works and services required for carrying out a Fertigation Sub-project.

19. "Fertigation Sub-grant Agreement" means an agreement, referred to in Part E.3 of the Schedule to the Project Agreement, between the Project Implementing Entity and a Fertigation Beneficiary; setting forth the terms and conditions governing a Fertigation Sub-grant.
20. “Fertigation Sub-project” means a specific investment activity entailing the development of fertigation facilities in vegetable and orchard farms under Part 1 (a) (ii) (C) of the Project which is financed or proposed to be financed through a Fertigation Sub-grant(as hereinafter defined) in accordance with the criteria set forth in Part E.3 of the Schedule to the Project Agreement and in further detail in the PIM.


22. “Guangdong Province” means the province of Guangdong in the People’s Republic of China.

23. “IC Card” means the card, linked to the IC Card System, to be used by each Beneficiary in procuring goods and services under the Project.

24. “IC Card System” means the computerized system established by the Project Implementing Entity for storing and validating basic information on Beneficiaries under Part 1 of the Project, and their eligible Project support in order to facilitate the procurement by such Beneficiaries of goods and services at a subsidized price from certified Suppliers and Service Providers.

25. “Incremental Investment Costs” means the difference between the cost of construction of single-floor flash farms and cost of construction of the high-rise pig production facilities described under Part 2 (b) of the Project.

26. “Incremental Operating Costs” means the reasonable costs incurred by the Project Implementing Entity, including the PMO and the PMUs, for purposes of Project management and implementation based on the annual work plans and budgets approved in advance by the Bank and the Project Implementing Entity as provided for in Section 1, Part B.2 (b) of the Schedule to the Project Agreement, on account of office supplies and consumables, utilities, bank charges, communications, mass media and printing services, interpretation and translation services, vehicle rental, operation, maintenance, and insurance, building and equipment maintenance, local transportation, domestic travel, lodging, and subsistence allowances, and salaries of contractual and temporary staff, but excluding salaries and any salary supplements of members of the Borrower’s or the Project Implementing Entity’s civil service.

27. “LWM Beneficiary” means an individual, cooperative or other group that meets the eligibility criteria set forth in the Project Implementation Manual and who or which has received or will receive LWM Sub-grant.

28. “LWM Sub-grant” means a payment made or proposed to be made to a LWM Beneficiary, pursuant to a LWM Sub-grant Agreement (as hereinafter defined), out of the proceeds of the Loan to partially finance the cost of goods, works and services required for carrying out a LWM Sub-project.

29. “LWM Sub-grant Agreement” means an agreement, referred to in Part C of the Annex to the Schedule to the Project Agreement, between the Project Implementing Entity and a
LWM Sub-project Beneficiary, setting forth the terms and conditions governing a LWM Sub-grant.

30. "LWM Sub-project" means a specific investment activity financed or proposed to be financed through a LWM Sub-grant (as hereinafter defined) in accordance with the criteria set forth in the Annex to the Schedule to the Project Agreement and in further detail in the Project Implementation Manual and entailing either: (a) the construction and/or operation of a livestock waste management facility to promote the proper collection and treatment of pig manure under Part 2 (a) of the Project; or (b) the construction of a pilot high-rise pig production facility under Part 2 (b) of the Project.

31. "Pest Management Plan" means the Project Implementing Entity's plan acceptable to the Bank and publically disclosed in the Borrower's territory on January 15, 2013 and in the Bank's InfoShop on February 22, 2013 setting out, among other things, the measures to promote and support safe, effective, and environmentally sound pest management under the Project.


33. "Procurement Plan" means the Borrower's procurement plan for the Project, dated October 25, 2013 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.

34. "Project Counties and Municipalities" means the following jurisdictions in Guangdong Province: Huiyang District, Huicheng District and Boluo County of Huizhou Municipality, and Enping City, Kaiping City and Taishan City of Jiangmen Municipality.

35. "Project Implementation Manual" and "PIM" means the Project Implementing Entity's manual dated October 2013 providing, inter alia for: (a) the institutional arrangements for the implementation of the Project, acceptable to the Bank, including the procedures and criteria for the appraisal, environmental screening and selection of Livestock Waste Management Sub-projects, and for the provision of Sub-financings under the Project; (b) the terms and conditions of Sub-financings, acceptable to the Bank, including maximum and minimum amounts in accordance with eligible technologies, procurement arrangements, and remedies for non-compliance with any of the conditions thereof; and (c) arrangements, satisfactory to the Bank, for the flow of funds of the proceeds of the Loan including financial management, disbursement and procurement arrangements.

36. "Project Implementing Entity" means Guangdong Province.

37. "Project Management Office" and "PMO" mean the office to be maintained by the Project Implementing Entity at the provincial level with overall responsibility for Project implementation, as provided for in Section I, Part A.1 (a) (iii) of the Schedule to the Project Agreement.
38. “Project Management Unit” and “PMU” mean the office to be maintained by the Project Implementing Entity in each of the Project Counties and Municipalities, responsible for, in the case of the Project counties, implementing Part 1 of the Project within its jurisdiction and, in case of the Project municipalities, assisting the PMO with day-to-day Project implementation within its jurisdiction, all as provided for in Section I, Part A.1 (b)(iii) of the Schedule to the Project Agreement.

39. “PSC” means the provincial steering committee to be maintained as provided for in Section I, Part A.1 (b) (i) of the Schedule to the Project Agreement, responsible for providing guidance to PMO in the implementation of the Project.

40. “Resettlement Action Plan” or “RAP” means a plan prepared or to be prepared pursuant to Section I, Part D.4 of the Schedule to the Project Agreement, which sets forth principles and procedures governing the acquisition of land and related assets, and the compensation, resettlement, and rehabilitation of Displaced Persons in accordance with the guidelines and procedures set forth in the Resettlement Policy Framework, as said plan may be revised from time to time with the prior written agreement of the Bank, and such term includes any annexes or schedules to such plan.

41. “Resettlement Policy Framework” means the Project Implementing Entity’s policy framework for compensation, resettlement and rehabilitation of Displaced Persons, acceptable to the Bank and publically disclosed in the Borrower’s territory on February 22, 2013, setting forth the guidelines, principles and procedures for mitigating any adverse impact that may arise from resettlement under the Project including detailed procedures on review of land issues, preparation and approval of potential land acquisition activities, institutional and financial arrangements, and monitoring plans for resettlement implementation.

42. “Safeguards Instruments” means the Environmental Management Plan, the Pest Management Plan, the Resettlement Policy Framework and any Resettlement Action Plan prepared under the Project.

43. “Service Provider” means an individual, cooperative or other entity that meets the eligibility criteria set forth in the PIM and who or which has entered into, or will enter into an agreement with a Village Committee for the provision of services to Beneficiaries to be partially financed out of the proceeds of the Loan.

44. “Sub-financing” means a CA Pilot Sub-grant, a Certification Incentive Payment, a Fertigation Sub-grant, a Subsidy, or an LWM Sub-grant, and “Sub-financings” means, collectively, all such Sub-financings.

45. “Subsidy” means amount paid or to be paid to a Subsidy Beneficiary (as herein defined) to meet part of the cost to such Subsidy Beneficiary of: (a) the purchase of fertilizers and pesticides under Part 1 (a) and (b) of the Project; (b) the procurement of professional pest management services, and acquisition of pesticides and related equipment under Part 1 (b) of the Project; and “Subsidies” means, collectively all such Subsidies.
46. "Subsidy Beneficiary" means an individual, cooperative or other group that meets the eligibility criteria set forth in the Project Implementation Manual and who or which has received or will receive a Subsidy (as herein defined).

47. "Supplier" means an individual, cooperative or other entity that meets the eligibility criteria set forth in the PIM and who or which has entered into, or will enter into an agreement with a Village Committee or a PMU for the provision of goods to Beneficiaries to be partially financed out of the proceeds of the Loan.

48. "Training and Workshops" means, for the purposes of the table in Schedule 2, Section IV, Paragraph A.2 of this Agreement, the reasonable cost of travel, lodging and per diem for trainees attending training, workshops and study tours and the cost of delivering training including rental of training space and training equipment, fees, and other logistical costs, all as agreed with the Bank and based on the annual work plans and budgets approved in advance by the Bank and the Project Implementing Entity as provided for in Section I, Part B.2 (b) of the Schedule to the Project Agreement.

49. "Village Committee" means the committee established in each of villages in the Project Counties with the mandate to, among other things, organize farmer participation in activities under Part I of the Project, under the guidance of the relevant PMU, including communicating extension worker technical advice, and monitoring Beneficiary activities.