

STANDARD FORM OF CONTRACT
Contract for Consultant's Services
Lump-Sum

Project Name : **Assam Agribusiness & Rural Transformation Project (APART)**

Project ID : **P155617**

Loan No. : **IBRD No. 8780 - IN;**

Contract No. : **ARIAS/APART/NRCP/102/2016**

Assignment Title : **Technical Advisory Services to Support the Pork Value Chain interventions by ICAR - National Research Centre on Pig (NRC-P) under the World Bank financed Assam Project on Agribusiness and Rural Transformation (APART)**

Contract Agreement between : **Assam Rural Infrastructure and Agricultural Services (ARIAS) Society of the Government of Assam OR "ARIAS Society"**
and
ICAR- National Research Centre on Pig (NRC-P), Guwahati

Dated : **12th July, 2018**



निदेशक/Director
राष्ट्रीय शूकर अनुसंधान केन्द्र/NRC on Pig
भा०कृ०अ०प० / I.C.A.R
रानी, गुवाहाटी-७८११३१ (असम)
Rani, Guwahati-781131 (Assam)



STATE PROJECT DIRECTOR
ARIAS SOCIETY.

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I. Form of Contract

LUMP-SUM

This CONTRACT (hereinafter called the "Contract") is made the 12th day of the month of July, 2018, between, on the one hand, **Assam Rural Infrastructure and Agricultural Services (ARIAS) Society of the Government of Assam** (hereinafter called the "Client") and, on the other hand, **ICAR- National Research Centre on Pig or "NRC-P"** (hereinafter called the "Consultant").

WHEREAS

- (a) the Client has requested the Consultant to provide certain consulting services as defined in this Contract (hereinafter called the "Services");
- (b) the Consultant, having represented to the Client that it has the required professional skills, expertise and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract;
- (c) the Client has **received** a loan from the *International Bank for Reconstruction and Development (IBRD)* toward the cost of the Services and intends to apply a portion of the proceeds of this loan to eligible payments under this Contract, it being understood that (i) payments by the Bank will be made only at the request of the Client and upon approval by the Bank; (ii) such payments will be subject, in all respects, to the terms and conditions of the loan agreement, including prohibitions of withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by the decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations; and (iii) no party other than the Client shall derive any rights from the loan agreement or have any claim to the loan proceeds;

NOW THEREFORE the parties hereto hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
 - (a) The General Conditions of Contract (including Attachment 1 "Fraud and Corruption");
 - (b) The Special Conditions of Contract;
 - (c) **Appendices:**

Appendix A:	Terms of Reference
Appendix B:	Key Experts
Appendix C:	Breakdown of Contract Price
Appendix D:	Form of Advance Payments Guarantee (Deleted)
Appendix E:	Technical Proposal from ICAR-NRC Pig

In the event of any inconsistency between the documents, the following order of precedence shall prevail: the Special Conditions of Contract; the General Conditions of Contract, including Attachment 1; Appendix A; Appendix B; Appendix C; Appendix D. Any reference to this Contract shall include, where the context permits, a reference to its Appendices.

2. The mutual rights and obligations of the Client and the Consultant shall be as set forth in the Contract, in particular:
 - (a) the Consultant shall carry out the Services in accordance with the provisions of the Contract; and
 - (b) the Client shall make payments to the Consultant in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of the **ICAR-National Research Centre on Pig or "NRC-P"**,
(Authorized Representative):

Signature:



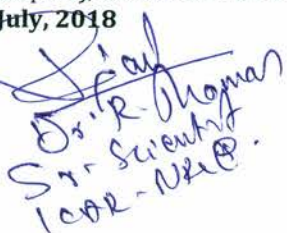
Name: Dr. Swaraj Rajkhowa

Title: Director

ICAR- National Research Centre on Pig (NRC-P),
Indian Council of Agricultural Research
Rani (Near Airport), Guwahati- 781 131

Date: 12th July, 2018

Witness:



Dr. R. Thomas
Sr. Scientist
ICAR-NRC-P

For and on behalf of the **Assam Rural Infrastructure and Agricultural Services (ARIAS) Society**,
(Authorized Representative):

Signature:



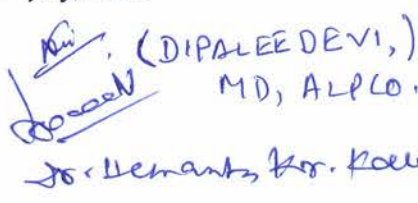
Name: Vinod Seshan, IAS

Title: State Project Director, ARIAS Society

Agri Campus, GS Road, Khanapara,
Guwahati-781022

Date: 12th July, 2018

Witness:



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II. General Conditions of Contract

A. GENERAL PROVISIONS

1. Definitions	<p>1.1 Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:</p> <ul style="list-style-type: none">(a) "Applicable Law" means the laws and any other instruments having the force of law in the Client's country, or in such other country as may be specified in the Special Conditions of Contract (SCC), as they may be issued and in force from time to time.(b) "Applicable Regulations" means Procurement Regulations for IPF Borrowers of date specified in Special Conditions of Contract (SCC).(c) "Bank" means the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).(d) "Borrower" means the Government, Government agency or other entity that signs the financing agreement with the Bank.(e) "Client" means the implementing agency that signs the Contract for the Services with the Selected Consultant.(f) "Consultant" means a legally-established professional consulting firm or entity selected by the Client to provide the Services under the signed Contract.(g) "Contract" means the legally binding written agreement signed between the Client and the Consultant and which includes all the attached documents listed in its paragraph 1 of the Form of Contract (the General Conditions (GCC), the Special Conditions (SCC), and the Appendices).(h) "Day" means a working day unless indicated otherwise.(i) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GCC 11.(j) "Experts" means, collectively, Key Experts, Non-Key Experts, or any other personnel of the Consultant, Sub-consultant or JV member(s) assigned by the Consultant to perform the Services or any part thereof under the Contract.(k) "Foreign Currency" means any currency other than the currency of the Client's country.(l) "GCC" means these General Conditions of Contract.(m) "Government" means the government of the Client's country.(n) "Joint Venture (JV)" means an association with or without a legal personality distinct from that of its members, of more than one entity where one member has the authority to conduct all businesses for and on behalf of any and all the members of the JV, and where the members of the JV are jointly and severally liable to the Client for the performance of the Contract.(o) "Key Expert(s)" means an individual professional whose skills, qualifications, knowledge and experience are critical to the performance of the Services under the Contract and whose Curricula Vitae (CV) was taken into account in the technical evaluation of the Consultant's proposal.(p) "Local Currency" means the currency of the Client's country.(q) "Non-Key Expert(s)" means an individual professional provided by the Consultant or its Sub-consultant to perform the Services or any part thereof under the Contract.(r) "Party" means the Client or the Consultant, as the case may be, and "Parties" means both of them.(s) "Procurement Regulations" means the World Bank's Procurement Regulations for IPF Borrowers,
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	<p>(t) "SCC" means the Special Conditions of Contract by which the GCC may be amended or supplemented but not over-written.</p> <p>(u) "Services" means the work to be performed by the Consultant pursuant to this Contract, as described in Appendix A hereto.</p> <p>(v) "Sub-consultants" means an entity to whom/which the Consultant subcontracts any part of the Services while remaining solely liable for the execution of the Contract.</p> <p>(w) "Third Party" means any person or entity other than the Government, the Client, the Consultant or a Sub-consultant.</p>
2. Relationship between the Parties	2.1. Nothing contained herein shall be construed as establishing a relationship of master and servant or of principal and agent as between the Client and the Consultant. The Consultant, subject to this Contract, has complete charge of the Experts and Sub-consultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.
3. Law Governing Contract	3.1. This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.
4. Language	4.1. This Contract has been executed in the language specified in the SCC, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.
5. Headings	5.1. The headings shall not limit, alter or affect the meaning of this Contract.
6. Communications	<p>6.1. Any communication required or permitted to be given or made pursuant to this Contract shall be in writing in the language specified in Clause GCC 4. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SCC.</p> <p>6.2. A Party may change its address for notice hereunder by giving the other Party any communication of such change to the address specified in the SCC.</p>
7. Location	7.1. The Services shall be performed at such locations as are specified in Appendix A hereto and, where the location of a particular task is not so specified, at such locations, whether in the Government's country or elsewhere, as the Client may approve.
8. Authority of Member in Charge	8.1. In case the Consultant is a Joint Venture, the members hereby authorize the member specified in the SCC to act on their behalf in exercising all the Consultant's rights and obligations towards the Client under this Contract, including without limitation the receiving of instructions and payments from the Client.
9. Authorized Representatives	9.1. Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the Client or the Consultant may be taken or executed by the officials specified in the SCC.
10. Fraud and Corruption	10.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Attachment 1 to the GCC.
a. Commissions and Fees	10.2 The Client requires the Consultant to disclose any commissions, gratuities or fees that may have been paid or are to be paid to agents or any other party with respect to the selection process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee. Failure to disclose such commissions, gratuities or fees may result in termination of the Contract and/or sanctions by the Bank.



B. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT	
11. Effectiveness of Contract	11.1. This Contract shall come into force and effect on the date (the "Effective Date") of the Client's notice to the Consultant instructing the Consultant to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SCC have been met.
12. Termination of Contract for Failure to Become Effective	12.1. If this Contract has not become effective within such time period after the date of Contract signature as specified in the SCC, either Party may, by not less than twenty two (22) days written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.
13. Commencement of Services	13.1. The Consultant shall confirm availability of Key Experts and begin carrying out the Services not later than the number of days after the Effective Date specified in the SCC.
14. Expiration of Contract	14.1. Unless terminated earlier pursuant to Clause GCC 19 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SCC.
15. Entire Agreement	15.1. This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.
16. Modifications or Variations	16.1. Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party. 16.2. In cases of substantial modifications or variations, the prior written consent of the Bank is required.
17. Force Majeure	
a. Definition	17.1. For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible under the circumstances, and subject to those requirements, includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action confiscation or any other action by Government agencies. 17.2. Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Experts, Sub-consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected to both take into account at the time of the conclusion of this Contract, and avoid or overcome in the carrying out of its obligations hereunder. 17.3. Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.
b. No Breach of Contract	17.4. The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.
c. Measures to be Taken	17.5. A Party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of Force

	<p>Majeure.</p> <p>17.6. A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any case not later than fourteen (14) calendar days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible.</p> <p>17.7. Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.</p> <p>17.8. During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultant, upon instructions by the Client, shall either:</p> <ul style="list-style-type: none"> (a) demobilize, in which case the Consultant shall be reimbursed for additional costs they reasonably and necessarily incurred, and, if required by the Client, in reactivating the Services; or (b) continue with the Services to the extent reasonably possible, in which case the Consultant shall continue to be paid under the terms of this Contract and be reimbursed for additional costs reasonably and necessarily incurred. <p>17.9. In the case of disagreement between the Parties as to the existence or extent of Force Majeure, the matter shall be settled according to Clauses GCC 44 & 45.</p>
18. Suspension	<p>18.1. The Client may, by written notice of suspension to the Consultant, suspend part or all payments to the Consultant hereunder if the Consultant fails to perform any of its obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultant to remedy such failure within a period not exceeding thirty (30) calendar days after receipt by the Consultant of such notice of suspension.</p>
19. Termination	<p>19.1. This Contract may be terminated by either Party as per provisions set up below:</p>
a. By the Client	<p>19.1.1. The Client may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (f) of this Clause. In such an occurrence the Client shall give at least thirty (30) calendar days' written notice of termination to the Consultant in case of the events referred to in (a) through (d); at least sixty (60) calendar days' written notice in case of the event referred to in (e); and at least five (5) calendar days' written notice in case of the event referred to in (f):</p> <ul style="list-style-type: none"> (a) If the Consultant fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to Clause GCC 18; (b) If the Consultant becomes (or, if the Consultant consists of more than one entity, if any of its members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary; (c) If the Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GCC 45.1; (d) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days; (e) If the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract;

	<p>(f) If the Consultant fails to confirm availability of Key Experts as required in Clause GCC 13.</p> <p>19.1.2. Furthermore, if the Client determines that the Consultant has engaged in Fraud and Corruption in competing for or in executing the Contract, then the Client may, after giving fourteen (14) calendar days written notice to the Consultant, terminate the Consultant's employment under the Contract.</p>
b. By the Consultant	<p>19.1.3. The Consultant may terminate this Contract, by not less than thirty (30) calendar days' written notice to the Client, in case of the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause.</p> <p>(a) If the Client fails to pay any money due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause GCC 45.1 within forty-five (45) calendar days after receiving written notice from the Consultant that such payment is overdue.</p> <p>(b) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days.</p> <p>(c) If the Client fails to comply with any final decision reached as a result of arbitration pursuant to Clause GCC 45.1.</p> <p>(d) If the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultant may have subsequently approved in writing) following the receipt by the Client of the Consultant's notice specifying such breach.</p>
c. Cessation of Rights and Obligations	<p>19.1.4. Upon termination of this Contract pursuant to Clauses GCC 12 or GCC 19 hereof, or upon expiration of this Contract pursuant to Clause GCC 14, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause GCC 22, (iii) the Consultant's obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GCC 25 and to cooperate and assist in any inspection or investigation, and (iv) any right which a Party may have under the Applicable Law.</p>
d. Cessation of Services	<p>19.1.5. Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GCC 19a or GCC 19b, the Consultant shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultant and equipment and materials furnished by the Client, the Consultant shall proceed as provided, respectively, by Clauses GCC 27 or GCC 28.</p>
e. Payment upon Termination	<p>19.1.6. Upon termination of this Contract, the Client shall make the following payments to the Consultant:</p> <p>(a) payment for Services satisfactorily performed prior to the effective date of termination; and</p> <p>(b) in the case of termination pursuant to paragraphs (d) and (e) of Clause GCC 19.1.1, reimbursement of any reasonable cost incidental to the prompt and orderly termination of this Contract, including the cost of the return travel of the Experts.</p>
C. OBLIGATIONS OF THE CONSULTANT	
20. General	
a. Standard of	<p>20.1 The Consultant shall perform the Services and carry out the Services with all due diligence, efficiency and economy, in accordance with generally</p>

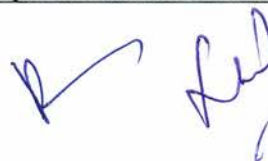
	<p>(f) If the Consultant fails to confirm availability of Key Experts as required in Clause GCC 13.</p> <p>19.1.2. Furthermore, if the Client determines that the Consultant has engaged in Fraud and Corruption in competing for or in executing the Contract, then the Client may, after giving fourteen (14) calendar days written notice to the Consultant, terminate the Consultant's employment under the Contract.</p>
b. By the Consultant	<p>19.1.3. The Consultant may terminate this Contract, by not less than thirty (30) calendar days' written notice to the Client, in case of the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause.</p> <p>(a) If the Client fails to pay any money due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause GCC 45.1 within forty-five (45) calendar days after receiving written notice from the Consultant that such payment is overdue.</p> <p>(b) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days.</p> <p>(c) If the Client fails to comply with any final decision reached as a result of arbitration pursuant to Clause GCC 45.1.</p> <p>(d) If the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultant may have subsequently approved in writing) following the receipt by the Client of the Consultant's notice specifying such breach.</p>
c. Cessation of Rights and Obligations	<p>19.1.4. Upon termination of this Contract pursuant to Clauses GCC 12 or GCC 19 hereof, or upon expiration of this Contract pursuant to Clause GCC 14, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause GCC 22, (iii) the Consultant's obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GCC 25 and to cooperate and assist in any inspection or investigation, and (iv) any right which a Party may have under the Applicable Law.</p>
d. Cessation of Services	<p>19.1.5. Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GCC 19a or GCC 19b, the Consultant shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultant and equipment and materials furnished by the Client, the Consultant shall proceed as provided, respectively, by Clauses GCC 27 or GCC 28.</p>
e. Payment upon Termination	<p>19.1.6. Upon termination of this Contract, the Client shall make the following payments to the Consultant:</p> <p>(a) payment for Services satisfactorily performed prior to the effective date of termination; and</p> <p>(b) in the case of termination pursuant to paragraphs (d) and (e) of Clause GCC 19.1.1, reimbursement of any reasonable cost incidental to the prompt and orderly termination of this Contract, including the cost of the return travel of the Experts.</p>
C. OBLIGATIONS OF THE CONSULTANT	
20. General	
a. Standard of	<p>20.1 The Consultant shall perform the Services and carry out the Services with all due diligence, efficiency and economy, in accordance with generally</p>

	activities assigned to them under this Contract.
d. Strict Duty to Disclose Conflicting Activities	21.1.5 The Consultant has an obligation and shall ensure that its Experts and Sub-consultants shall have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its Contract.
22. Confidentiality	22.1 Except with the prior written consent of the Client, the Consultant and the Experts shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and the Experts make public the recommendations formulated in the course of, or as a result of, the Services.
23. Liability of the Consultant	23.1 Subject to additional provisions, if any, set forth in the SCC, the Consultant's liability under this Contract shall be provided by the Applicable Law.
24. Insurance to be taken out by the Consultant	24.1 The Consultant (i) shall take out and maintain, and shall cause any Sub-consultants to take out and maintain, at its (or the Sub-consultants', as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverage specified in the SCC, and (ii) at the Client's request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid. The Consultant shall ensure that such insurance is in place prior to commencing the Services as stated in Clause GCC 13.
25. Accounting, Inspection and Auditing	25.1 The Consultant shall keep, and shall make all reasonable efforts to cause its Sub-consultants to keep, accurate and systematic accounts and records in respect of the Services and in such form and detail as will clearly identify relevant time changes and costs. 25.2 Pursuant to paragraph 2.2 e. of Appendix to the General Conditions the Consultant shall permit and shall cause its subcontractors and sub-consultants to permit, the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Consultant's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 10.1 which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).
26. Reporting Obligations	26.1 The Consultant shall submit to the Client the reports and documents specified in Appendix A , in the form, in the numbers and within the time periods set forth in the said Appendix.
27. Proprietary Rights of the Client in Reports and Records	27.1 Unless otherwise indicated in the SCC, all reports and relevant data and information such as maps, diagrams, plans, databases, other documents and software, supporting records or material compiled or prepared by the Consultant for the Client in the course of the Services shall be confidential and become and remain the absolute property of the Client. The Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Client, together with a detailed inventory thereof. The Consultant may retain a copy of such documents, data and/or software for teaching and scientific purposes, but shall not use the same for purposes unrelated to this Contract without prior written approval of the Client. 27.2 If license agreements are necessary or appropriate between the Consultant and third parties for purposes of development of the plans, drawings, specifications, designs, databases, other documents and software, the Consultant shall obtain the Client's prior written approval to such agreements, and the Client shall be entitled at its discretion to require recovering the expenses related to the

	development of the program(s) concerned. Other restrictions about the future use of these documents and software, if any, shall be specified in the SCC .
28. Equipment, Vehicles and Materials	<p>28.1 Equipment, vehicles and materials made available to the Consultant by the Client, or purchased by the Consultant wholly or partly with funds provided by the Client, shall be the property of the Client and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultant shall make available to the Client an inventory of such equipment, vehicles and materials and shall dispose of such equipment, vehicles and materials in accordance with the Client's instructions. While in possession of such equipment, vehicles and materials, the Consultant, unless otherwise instructed by the Client in writing, shall insure them at the expense of the Client in an amount equal to their full replacement value.</p> <p>28.2 Any equipment or materials brought by the Consultant or its Experts into the Client's country for the use either for the project or personal use shall remain the property of the Consultant or the Experts concerned, as applicable.</p>
D. CONSULTANT'S EXPERTS AND SUB-CONSULTANTS	
29. Description of Key Experts	29.1 The title, agreed job description, minimum qualification and estimated period of engagement to carry out the Services of each of the Consultant's Key Experts are described in Appendix B .
30. Replacement of Key Experts	<p>30.1 Except as the Client may otherwise agree in writing, no changes shall be made in the Key Experts.</p> <p>30.2 Notwithstanding the above, the substitution of Key Experts during Contract execution may be considered only based on the Consultant's written request and due to circumstances outside the reasonable control of the Consultant, including but not limited to death or medical incapacity. In such case, the Consultant shall forthwith provide as a replacement, a person of equivalent or better qualifications and experience, and at the same rate of remuneration.</p>
31. Removal of Experts or Sub-consultants	<p>31.1 If the Client finds that any of the Experts or Sub-consultant has committed serious misconduct or has been charged with having committed a criminal action, or if the Client determines that a Consultant's Expert or Sub-consultant has engaged in Fraud and Corruption while performing the Services, the Consultant shall, at the Client's written request, provide a replacement.</p> <p>31.2 In the event that any of Key Experts, Non-Key Experts or Sub-consultants is found by the Client to be incompetent or incapable in discharging assigned duties, the Client, specifying the grounds therefore, may request the Consultant to provide a replacement.</p> <p>31.3 Any replacement of the removed Experts or Sub-consultants shall possess better qualifications and experience and shall be acceptable to the Client.</p> <p>31.4 The Consultant shall bear all costs arising out of or incidental to any removal and/or replacement of such Experts.</p>
E. OBLIGATIONS OF THE CLIENT	
32. Assistance and Exemptions	<p>32.1 Unless otherwise specified in the SCC, the Client shall use its best efforts to:</p> <p>(a) Assist the Consultant with obtaining work permits and such other documents as shall be necessary to enable the Consultant to perform the Services.</p> <p>(b) Assist the Consultant with promptly obtaining, for the Experts and, if appropriate, their eligible dependents, all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in the Client's country while carrying out the Services under the Contract.</p> <p>(c) Facilitate prompt clearance through customs of any property required for</p>

	<p>the Services and of the personal effects of the Experts and their eligible dependents.</p> <p>(c) Issue to officials, agents and representatives of the Government all such instructions and information as may be necessary or appropriate for the prompt and effective implementation of the Services.</p> <p>(d) Assist the Consultant and the Experts and any Sub-consultants employed by the Consultant for the Services with obtaining exemption from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity in the Client's country according to the applicable law in the Client's country.</p> <p>(e) Assist the Consultant, any Sub-consultants and the Experts of either of them with obtaining the privilege, pursuant to the applicable law in the Client's country, of bringing into the Client's country reasonable amounts of foreign currency for the purposes of the Services or for the personal use of the Experts and of withdrawing any such amounts as may be earned therein by the Experts in the execution of the Services.</p> <p>(f) Provide to the Consultant any such other assistance as may be specified in the SCC.</p>
33. Access to Project Site	33.1 The Client warrants that the Consultant shall have, free of charge, unimpeded access to the project site in respect of which access is required for the performance of the Services. The Client will be responsible for any damage to the project site or any property thereon resulting from such access and will indemnify the Consultant and each of the experts in respect of liability for any such damage, unless such damage is caused by the willful default or negligence of the Consultant or any Sub-consultants or the Experts of either of them.
34. Change in the Applicable Law Related to Taxes and Duties	34.1 If, after the date of this Contract, there is any change in the applicable law in the Client's country with respect to taxes and duties which increases or decreases the cost incurred by the Consultant in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultant under this Contract shall be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the Contract price amount specified in Clause GCC 38.1
35. Services, Facilities and Property of the Client	35.1 The Client shall make available to the Consultant and the Experts, for the purposes of the Services and free of any charge, the services, facilities and property described in the Terms of Reference (Appendix A) at the times and in the manner specified in said Appendix A .
36. Counterpart Personnel	<p>36.1 The Client shall make available to the Consultant free of charge such professional and support counterpart personnel, to be nominated by the Client with the Consultant's advice, if specified in Appendix A.</p> <p>36.2 Professional and support counterpart personnel, excluding Client's liaison personnel, shall work under the exclusive direction of the Consultant. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Consultant that is consistent with the position occupied by such member, the Consultant may request the replacement of such member, and the Client shall not unreasonably refuse to act upon such request.</p>
37. Payment Obligation	37.1 In consideration of the Services performed by the Consultant under this Contract, the Client shall make such payments to the Consultant for the deliverables specified in Appendix A and in such manner as is provided by GCC F below.
F. PAYMENTS TO THE CONSULTANT	
38. Contract Price	<p>38.1 The Contract price is fixed and is set forth in the SCC. The Contract price breakdown is provided in Appendix C.</p> <p>38.2 Any change to the Contract price specified in Clause GCC 38.1 can be made only if the Parties have agreed to the revised scope of Services pursuant to Clause GCC 16 and have amended in writing the Terms of Reference in</p>

	Appendix A.
39. Taxes and Duties	<p>39.1 The Consultant, Sub-consultants and Experts are responsible for meeting any and all tax liabilities arising out of the Contract unless it is stated otherwise in the SCC.</p> <p>39.2 As an exception to the above and as stated in the SCC, all local identifiable indirect taxes (itemized and finalized at Contract negotiations) are reimbursed to the Consultant or are paid by the Client on behalf of the Consultant.</p>
40. Currency of Payment	40.1 Any payment under this Contract shall be made in the currency (ies) of the Contract.
41. Mode of Billing and Payment	<p>41.1 The total payments under this Contract shall not exceed the Contract price set forth in Clause GCC 38.1.</p> <p>41.2 The payments under this Contract shall be made in lump-sum installments against deliverables specified in Appendix A. The payments will be made according to the payment schedule stated in the SCC.</p> <p>41.2.1 <u>Advance payment:</u> Unless otherwise indicated in the SCC, an advance payment shall be made against an advance payment bank guarantee acceptable to the Client in an amount (or amounts) and in a currency (or currencies) specified in the SCC. Such guarantee (i) is to remain effective until the advance payment has been fully set off, and (ii) is to be in the form set forth in Appendix D, or in such other form as the Client shall have approved in writing. The advance payments will be set off by the Client in equal portions against the lump-sum installments specified in the SCC until said advance payments have been fully set off.</p> <p>41.2.2 <u>The Lump-Sum Installment Payments.</u> The Client shall pay the Consultant within sixty (60) days after the receipt by the Client of the deliverable(s) and the cover invoice for the related lump-sum installment payment. The payment can be withheld if the Client does not approve the submitted deliverable(s) as satisfactory in which case the Client shall provide comments to the Consultant within the same sixty (60) days period. The Consultant shall thereupon promptly make any necessary corrections, and thereafter the foregoing process shall be repeated.</p> <p>41.2.3 <u>The Final Payment</u> .The final payment under this Clause shall be made only after the final report have been submitted by the Consultant and approved as satisfactory by the Client. The Services shall then be deemed completed and finally accepted by the Client. The last lump-sum installment shall be deemed approved for payment by the Client within ninety (90) calendar days after receipt of the final report by the Client unless the Client, within such ninety (90) calendar day period, gives written notice to the Consultant specifying in detail deficiencies in the Services, the final report. The Consultant shall thereupon promptly make any necessary corrections, and thereafter the foregoing process shall be repeated. 41.2.4 All payments under this Contract shall be made to the accounts of the Consultant specified in the SCC.</p> <p>41.2.4 With the exception of the final payment under 41.2.3 above, payments do not constitute acceptance of the whole Services nor relieve the Consultant of any obligations hereunder.</p>
42. Interest on Delayed Payments	42.1 If the Client had delayed payments beyond fifteen (15) days after the due date stated in Clause GCC 41.2.2 , interest shall be paid to the Consultant on any amount due by, not paid on, such due date for each day of delay at the annual rate stated in the SCC.
G. FAIRNESS AND GOOD FAITH	
43. Good Faith	43.1 The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the



	realization of the objectives of this Contract.
H. SETTLEMENT OF DISPUTES	
44. Amicable Settlement	<p>44.1 The Parties shall seek to resolve any dispute amicably by mutual consultation.</p> <p>44.2 If either Party objects to any action or inaction of the other Party, the objecting Party may file a written Notice of Dispute to the other Party providing in detail the basis of the dispute. The Party receiving the Notice of Dispute will consider it and respond in writing within fourteen (14) days after receipt. If that Party fails to respond within fourteen (14) days, or the dispute cannot be amicably settled within fourteen (14) days following the response of that Party, Clause GCC 45.1 shall apply.</p>
45. Dispute Resolution	<p>45.1 Any dispute between the Parties arising under or related to this Contract that cannot be settled amicably may be referred to by either Party to the adjudication/arbitration in accordance with the provisions specified in the SCC.</p>



II. General Conditions
Attachment 1
Fraud and Corruption
(Text in this Appendix shall not be modified)

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

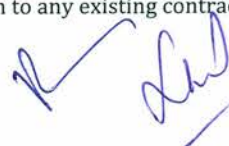
2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor,

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.



consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;

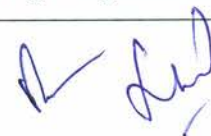
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect all accounts, records and other documents relating to the procurement process, selection and/or contract execution,, and to have them audited by auditors appointed by the Bank.



² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

III. Special Conditions of Contract

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
1.1(a)	The Contract shall be construed in accordance with the law of India
1.1 (b)	The date of the "Applicable Regulations" is: July, 2016
4.1	The language is: English
6.1 and 6.2	<p>The addresses are:</p> <p>Client :</p> <p>i) ARIAS Society, Project Coordination Unit, Agriculture Complex, Khanapara, G.S. Road, Guwahati-781022 (Assam,);</p> <p>ii) Directorate of Animal Husbandry & Veterinary, Chenikuthi, Guwahati-781003 (Assam);</p> <p>iii) Assam Livestock & Poultry Corporation (ALPCo), Panjabari, Guwahati (Assam)</p> <p>Attention :</p> <p>(i) State Project Director, ARIAS Society</p> <p>(ii) Director, Animal Husbandry & Veterinary</p> <p>(iii) Managing Director, Assam Livestock & Poultry Corporation</p> <p>E-mail : spd@arias.in, assamvety@gmail.com, alpcoltdghy@gmail.com</p> <p>Consultant :</p> <p>National Research Centre on Pig or "NRC-P" ICAR- National Research Centre on Pig (NRC-P), Indian Council of Agricultural Research Rani (Near Airport), Guwahati- 781 131 Phone: 0361-2847195, 2847221 FAX: 0361-2847195 Email: nrconpig@rediffmail.com</p> <p>Attention : Director, ICAR NRC-P Phone: 0361-2847195, 2847221, E-mail: nrconpig@rediffmail.com</p>
8.1	Not Applicable
9.1	<p>The Authorized Representatives are:</p> <p>For the Client:</p> <p>(i) State Project Director, ARIAS Society</p> <p>(ii) Director, Animal Husbandry & Veterinary</p> <p>(iii) Managing Director, Assam Livestock & Poultry Corporation</p> <p>For the Consultant: Director, ICAR-NRC on Pig</p>
11.1	The effectiveness conditions are the following: Date of signing of the Agreement for the assignment and confirmation that the proposed key staff are available.
12.1	Termination of Contract for Failure to Become Effective: The time period shall be 07 days
13.1	Commencement of Services: The number of days shall be 10 days from the date of effectiveness. Confirmation of Key Experts' availability to start the Assignment shall be submitted to the Client in writing as a written statement signed by each Key Expert.
14.1	Expiration of Contract: The time period shall be 60 months after the Effective Date
21 b.	The Client reserves the right to determine on a case-by-case basis whether the Consultant should be allowed from providing goods, works or non-consulting services due to a conflict of a nature described in Clause GCC 21.1.3- Yes
23.1	No additional provisions.
24.1	The insurance coverage requirements is waived as ICAR-NRC on Pig being ICAR institute, their



	staff are covered under Statutory Insurance Policy.
27.1	Not Applicable
38.1	<p>The Contract price is: INR 1,57,50,000/= (Rupees One crore fifty seven lakh fifty thousand only)- (equivalent to US\$ 242,308 @ 1USD=₹65 excluding taxes) (exclusive of local indirect taxes i.e. GST)(GST: Goods and Services Tax)</p> <p>Any indirect local taxes i.e. GST chargeable in respect of this Contract for the Services provided by the Consultant shall be paid by the Client for the Consultant, as per applicable laws of India.</p>
39.1 and 39.2	The Client will reimburse the Consultant for only service tax if claimed separately. Information on the consultant's tax obligation in the country may be found on Ministry of Finance, Government of India website. The Consultant shall take advice from their tax consultant and shall suitably provide for their indirect tax liability/ Service tax in their quote for this assignment. At source deductions, however, shall be made as applicable as per laws of India.
41.2	<p>The payment schedule: (furnished in next page)</p> <p>Note:</p> <p>a) Payment of installments shall be linked to the detailed deliverables specified in the Terms of Reference at Appendix A.</p> <p>b) Total sum of all installments shall not exceed the Contract price set up in SCC38.1</p> <p>c) NRC Pig will submit invoices for the activities/ group of activities completed along with interim reports and payments shall be made accordingly.</p> <p>d) Cost of activities include remunerations/honorariums, cost of hired manpower (consultants, SRF/JRF/Skilled staffs etc.), travel charges, boarding and lodging charges for the experts during visits, training etc.</p>

Activities vs. the payment schedule													
Sl	Activity	Unit	Y1		Y2		Y3		Y4		Y5		Total
			Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	
A1	INCEPTION REPORT	No.	1							1			2
		% payment	20.00%										20.00%
		Amount	31,50,000										31,50,000
A FEEDING MANAGEMENT													
1	Analysis of the locally available feed resource & preparation a database for ration balancing)	Samples	20	20	20								60
		% payment	1.00%	1.00%	2.00%								4.00%
		Amount	1,57,500	1,57,500	3,15,000								6,30,000
B LIQUID SEMEN AVAILABILITY & AI SERVICES													
2	Technical support in establishing liquid boar semen processing centre												
2a	Support in developing existing pig breeding farms of AHVD for boar selection	Farm	1	1	1	1	As per req	As per req	As per req				4
		% payment	1.00%	1.00%	1.00%	1.00%	0.50%	0.50%	0.50%				5.50%
		Amount	1,57,500	1,57,500	1,57,500	1,57,500	78,750	78,750	78,750				8,66,250
2b	Support in upgradation of liquid semen laboratories for development of liquid boar semen processing & distribution centre	Labs		1	1	1	1	1	1	As per req	As per req	As per req	6
		% payment		1.00%	1.25%	1.25%	1.50%	1.50%	1.50%	1.50%	1.00%	0.40%	10.90%
		Amount		1,57,500	1,96,875	1,96,875	2,36,250	2,36,250	2,36,250	2,36,250	1,57,500	63,000	17,16,750
3	Technical support in establishing AI satellite services at farmers' door step (training of pig bondhus)												
3a	Training of a local Service Provider (Pig Bondhu) @ 2 numbers / cluster at ICAR NRC Pig for AI	Training	1	2	1	1							5
		% payment	1.00%	1.00%	1.00%	1.00%							4.00%
		Amount	1,57,500	1,57,500	1,57,500	1,57,500							6,30,000
3b	Liquid boar semen	Doses	As per demand and availability (@200 doses per month)										
		% payment	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	2.00%	1.80%	1.80%	16.10%
		Amount	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	3,15,000	2,83,500	2,83,500	25,35,750
3c	AI Training manual for Pig Bondhu	Manual	1										1
		% payment	1.00%										1.00%
		Amount	1,57,500										1,57,500
C CAPACITY BUILDING OF BUTCHERS THROUGH ToT													
4	Designing and providing butcher training kits to AHVD District staff	Kits	10	15	10	15	10	15	10	15			100
		% payment	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%			16.00%
		Amount	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000			25,20,000
5	Master training programme (ToT) for conducting hands on training for butcher												
5a	Training programme (ToT) for conducting hands on training of butchers	Trainings	1		1		1		1				4
		% payment	1.00%		1.00%		1.00%		1.00%				4.00%
		Amount	1,57,500		1,57,500		1,57,500		1,57,500				6,30,000
5b	Training manual for master trainers	Manual	1										1
		% payment	1.00%										1.00%
		Amount	1,57,500										1,57,500
D TRAINING OF PORK VENDORS, TRADERS AND TRANSPORTERS													
6a	Training manual for pork vendors/ traders/ transporters	Manual	1				1						2
		% payment	1.00%				0.01						2.00%
		Amount	1,57,500				1,57,500						3,15,000
6b	Conducting Training of pork vendors/ transporters/ traders	Training		1		1		1		1			4
		% payment		1.00%		1.00%		1.00%		1.00%			4.00%
		Amount		1,57,500		1,57,500		1,57,500		1,57,500			6,30,000
HANDS ON TRAINING OF AHVD MASTER TRAINERS IN SCIENTIFIC PIG REARING													
7a	Training manual for AHVD Master Trainers in scientific pig rearing	Manual	1				1						2
		% payment	1.75%				1.75%						3.50%
		Amount	2,75,625				2,75,625						5,51,250
7b	Conducting trainings for Dist Department staff in scientific pig rearing, including disease management	Training	1	1	1	1	1	1	1		1		8
		% payment	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%		1.00%		8.00%
		Amount	1,57,500	1,57,500	1,57,500	1,57,500	1,57,500	1,57,500	1,57,500		1,57,500		12,60,000
	% half yearly payment		33.25%	9.50%	10.75%	8.75%	10.25%	7.50%	7.50%	6.50%	3.80%	2.20%	100.00%
	Amount of half yearly payment		52,36,875	14,96,250	16,93,125	13,78,125	16,14,375	11,81,250	11,81,250	10,23,750	5,98,500	3,46,500	1,57,50,000
	% yearly payment			42.75%		19.50%		17.75%		14.00%		6.00%	100.00%
	Amount of yearly payment			67,33,125		30,71,250		27,95,625		22,05,000		9,45,000	1,57,50,000

41.2.1	There shall be no advance payment under the contract.
41.2.4	<p>The accounts are: <u>for Foreign currency:</u> Not applicable</p> <p><u>for local currency:</u> ACCOUNT NAME : ICAR-NATIONAL RESEARCH CENTRE ON PIG CURRENCY : INDIAN RUPEES BANK NAME : STATE BANK OF INDIA BANK ADDRESS : KHANAPARA ACCOUNT NUMBER: 10029420452 SWIFT/BIC : BANK CODE : SBIN0009945</p>
42.1	The interest rate is: 8% per Annum
45.1	<p>Disputes shall be settled by arbitration in accordance with the following provisions:</p> <p>1. <u>Selection of Arbitrators.</u> Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator or an arbitration panel composed of three (3) arbitrators, in accordance with the following provisions:</p> <p>(a) Where the Parties agree that the dispute concerns a technical matter, they may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within thirty (30) days after receipt by the other Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to the Federation Internationale des Ingenieurs-Conseil (FIDIC) of Lausanne, Switzerland for a list of not fewer than five (5) nominees and, on receipt of such list, the Parties shall alternately strike names therefrom, and the last remaining nominee on the list shall be the sole arbitrator for the matter in dispute. If the last remaining nominee has not been determined in this manner within sixty (60) days of the date of the list, The Indian Council of Arbitration shall appoint, upon the request of either Party and from such list or otherwise, a sole arbitrator for the matter in dispute.</p> <p>(b) Where the Parties do not agree that the dispute concerns a technical matter, the Client and the Consultant shall each appoint one (1) arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the arbitrators named by the Parties do not succeed in appointing a third arbitrator within thirty (30) days after the latter of the two (2) arbitrators named by the Parties has been appointed, the third arbitrator shall, at the request of either Party, be appointed by the Secretary, The Indian Council of Arbitration.</p> <p>(c) If, in a dispute subject to paragraph (b) above, one Party fails to appoint its arbitrator within thirty (30) days after the other Party has appointed its arbitrator, the Party which has named an arbitrator may apply to the Secretary, The Indian Council of Arbitration to appoint a sole arbitrator for the matter in dispute, and the arbitrator appointed pursuant to such application shall be the sole arbitrator for that dispute.</p>
	<p>2. <u>Rules of Procedure.</u> Except as otherwise stated herein, arbitration proceedings shall be conducted in accordance with the rules of procedure for arbitration of the United Nations Commission on International Trade Law (UNCITRAL) as in force on the date of this Contract.</p> <p>3. <u>Substitute Arbitrators.</u> If for any reason an arbitrator is unable to perform his/her function, a substitute shall be appointed in the same manner as the original arbitrator.</p> <p>4. <u>Nationality and Qualifications of Arbitrators.</u> The sole arbitrator or the third arbitrator appointed pursuant to paragraphs 1(a) through 1(c) above shall be an internationally recognized legal or technical expert with extensive experience in relation to the matter in dispute and shall not be a national of the Consultant's home country or of the Government's country. For the purposes of this Clause, "home country" means any of:</p> <p>(a) the country of incorporation of the Consultant; or (b) the country in which the Consultant's principal place of business is located; or (c) the country of nationality of a majority of the Consultant's shareholders; or (d) the country of nationality of the Sub-consultants concerned, where the dispute involves a subcontract.</p>

5. Miscellaneous. In any arbitration proceeding hereunder:
- (a) proceedings shall, unless otherwise agreed by the Parties, be held in **Guwahati**;
 - (b) the **English** language shall be the official language for all purposes; and
 - (c) the decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.



IV. Appendices

APPENDIX A – TERMS OF REFERENCE

For Technical Advisory Services to Support the Pork Value Chain interventions by ICAR- National Research Centre on Pig (NRC-P) under the World Bank financed Assam Project on Agribusiness and Rural Transformation (APART)

(A) BACKGROUND & OBJECTIVES OF THE PROJECT

1. The Government of Assam (GoA), through the Government of India has received a loan of US\$200 million from the World Bank (W.B.) for implementation of the **Assam Agribusiness and Rural Transformation Project (APART)**. Assam Rural Infrastructure and Agricultural Services Society is the apex coordinating and monitoring agency for the project. ARIAS Society in association of Animal Husbandry and Veterinary Directorate (AHVD) now intends to apply a portion of the loan towards hiring Indian Council of Agricultural Research, National Research Centre on Pig (ICAR-NRCP) to support the pork value chain development program under APART. The project interventions are planned to be taken up in 16 undivided (*as of 1st April, 2016*) districts viz.: Nagaon, Sonitpur, Barpeta, Karbi Anglong, Kamrup, Dhubri, Golaghat, Kokrajhar, Lakhimpur, Darrang, Cachar, Sivasagar, Jorhat, Goalpara, Morigaon and Nalbari.
2. **PROJECT DEVELOPMENT OBJECTIVE (PDO):** The Project Development Objective (PDO) is to *“add value and improve resilience of selected agriculture value chains, focusing on smallholder farmers and agro-entrepreneurs in targeted districts of Assam”*.
3. There are four components to the APART. **The first component is Enabling Agri Enterprise Development**, with sub components being (i) enhancing state capacity to attract private investments, (ii) Setting up an Agribusiness Enterprise Development and Promotion Facility (EDPF) (iii) Agribusiness Investment Fund (AIF) support (iv) establishing sector stewardship councils. **The second component is Facilitating Agro Cluster Development** with subcomponents being- (i) support establishment of cluster level Industry Associations (IAs), (ii) supply chain support. **The third component is Fostering Market Led Production and Resilience Enhancement** with sub components being (i) promoting climate resilient technologies and their adoption (ii) facilitating market linkages through market intelligence and product aggregation (iii) facilitating access to and responsible use of financial services. **The fourth component is project Management, Monitoring and Learning.**
4. APART will achieve the PDO by: (i) promoting investments in agri-enterprises, reducing the business and transaction costs, facilitating access to finance for agribusiness entrepreneurs, and, where appropriate, push for process, regulatory and/or policy change; (ii) supporting the development of a modern agri supply chain; improved information communication technologies based farm information and intelligence services, and alternative marketing channels; and (iii) improving producers' access to knowledge, technologies & infrastructure so that they are better able to respond to market opportunities & climate variability.
5. The objective of this sub-component C-1 is to support sustainable increase in production and productivity of the priority value chains, and promote the adoption of climate resilient solutions. This would be achieved by geographically targeted approach for the integrated development of these value chains and will make key investments in the production clusters of prioritized value chains.
6. The interventions in pork value chain program to be implemented by Animal Husbandry & Veterinary Department (AHVD) and Assam Livestock And Poultry Corporation (ALPCo) supported by ICAR-National Research Center (NRC) on Pig, and International Livestock Research Institute (ILRI) and private sector partners, will focus on: (i) increasing production and productivity by organizing smallholder producers into producer groups to access services, inputs and markets, including matching grants (CIG Grants) for improved housing and feed management, with in kind contribution by the beneficiary groups as per the norms given in the project implementation plan (PIP) (ii) developing and equipping a service delivery network (including pig bandhus) for breeding including a multiplier scheme for boars and artificial insemination services, feeding and animal health; (iii) common service centres to support access to inputs, post-harvest management facilities, small scale slaughter houses (iv) capacity building through skills training, demonstrations and exposure visits; (v) enhancing market access through enterprise development and promoting aggregation and processing, with a focus on food safety and human health risks; (vi) building state capacity to implement the Food Safety Standard Act for India (FSSAI); and (vii) training and certification of small scale market actors (eg. butchers) and increasing consumer awareness on food safety. This subcomponent will further integrate improved breeding through artificial insemination, vaccination of cattle, improving feeding practices with specific agents that aid digestion to reduce methane (CH₄). The project will improve feeding practices by introduction of concentrates, mineral mixes adding certain oils or oil seeds to the diet and improving pasture quality. To improve digestion specific agents and dietary additives would be added to reduce CH₄ emissions.

(B) ASSIGNMENT OBJECTIVES

7. The objectives of the assignment would be support AHVD and ALPCo in the following:
- Feeding management
 - Liquid semen availability and AI Services
 - Capacity building of Masters Trainers (Project staff, Departmental staff and beneficiary representatives).

(C) SCOPE OF THE ASSIGNMENT & TASKS TO BE CARRIED OUT BY THE CONSULTANT

8. Feeding Management

- Analysis of the locally available feed resource & preparation a database for ration balancing: Judicious use of feed stuff is a key element in enhancing pig production. The objective of the feeding initiative is to increase productivity, FCR, ADG and reduce wastage and spoilage caused by imbalanced feeding. Analysis of nutritive value of the local unconventional feed resource & ration balancing would be taken up by ICAR-NRC Pig in the first year of the Project. One of the major issues found during the Value chain analysis was that, the prevailing feeding practices are not based on the scientific principles. Majority of the farmers feed their animals on the basis of locally available feed resources, irrespective of their nutritional value required for optimum growth and quality production. This imbalanced feeding practice leads to reduction in quality production and productivity. To address the issue, the existing nutritional gap will be assessed and effort will be made to support local feed manufactures to produce customized supplementary feed based on the gap assessment. In addition, food feed crop cultivation at the back yard and ration balancing will be promoted
- The estimation of the nutritive value of the locally available feed resources on the basis of agro climatic zones will be carried out by ICAR-NRC Pig and would build on existing feed libraries & recommendation for computation of balance ration with the existing indigenous resources. ICAR-NRC Pig will also recommend the nutrient gap for additional supplementation as and when required. The local AHVD officials and the pig bondhu will implement the programme as per the guidelines provided by the ICAR-NRC Pig. The nutrient content of the non conventional feed stuff and ration balancing formulas will be fitted by the AHVD into a software to be developed under this project and the same will be used through tablets to be provided to pig bondhus. They would provide services to the farmers at the door step using the outsourced software.
- Based on the balanced formula recommendation by the AHVD to the FPOs, it will the responsibility of FPOs to purchase concentrate feed in bulk. Output targets for each of the activity under this deliverable are given in the table below:

Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
Analysis of the locally available feed resource & preparation a database for ration balancing	Samples (to be collected & sent by Pig Bondhus)	40	20	-	-	-	60

9. Liquid Semen Availability & AI Services

- Technical support in establishing of liquid boar semen processing centre:** The existing pig breeding farms of the AHVD could be incorporated with semen collection and processing facilities for production of liquid boar semen with the support of ICAR-NRCP so that the availability of the semen can be maintained locally. To this end, it is planned that four pig breeding farms would be equipped with such facilities. The Common Service Centres (CSCs) will be provided with the facility for preservation of liquid semen and the Pig Bandhu as well as the AHVD personnel will deliver services for insemination as per the requirement. ICAR-NRCP will extend technical support to AHVD for the upgradation of 6 nos. of laboratories in the existing ICDP for up-gradation for liquid boar semen processing and preservation in different zones for local requirement.

The existing staffs of the AHVD labs will be trained at NRC pig for the purpose and breeding farms of the Deptt. will be strengthened for rearing of boar and semen collection. Laboratories at (i) Demow Intensive Cattle Development Program (ICDP), (ii) Baghchung, Jorhat, (iii) Biswanath Chariali, (iv) Kokrajhar, (v) Khanapara, (vi) Manja ICDP laboratory are proposed for development of liquid boar semen processing & distribution centre under the project. Pig breeding farms of the State Department as well as some private breeders will maintain required breeding boars in the nearby locations of the laboratories for semen production, which will be undertaken by AHVD. Output targets for each of the activities under this task are given in the table below:

Activities	Unit	Y1	Y2	Y3	Y4	Y5	Total
Support in developing existing pig breeding farms of AHVD for boar selection	Farm	2	2				4
Support in upgradation of liquid semen laboratories for development of liquid boar semen processing & distribution centre	Labs	1	2	2	1		6

- b) **Technical support in establishing AI satellite services at farmer' door step:** ICAR-NRC Pig has already initiated AI of Pig with liquid semen in a cost effective manner with a simple technology which can be adopted even by a farmer after training. As the state has acute shortage of quality breeding boars, the AI can be a very timely and viable option for increasing market led productivity of the farmers. Initially, AI workers will be selected @ two /cluster and trained in ICAR-NRC Pig for AI service delivery and provided with the inputs for conducting AI in his/her respective area. The semen will be sourced from ICAR NRC Pig initially on payment basis. Some satellite semen collection centers will be established in the project districts to minimize the cost of transportation and facilitating easy availability.
- c) The cold chain facility required for the storage of the semen will be provided in the CSCs. The local AI service providers or "pig bondhus" will cater the need of their area from the concerned CSCs which in turn get the semen from the satellite semen collection centers. The pig bondhus will be a viable proposition provided the area of his service is having minimum 224 breedable sows for AI service and atleast 500 fatteners produced in a year. The pig bondhu can earn an amount of Rs.8000/- per month from the AI service as well as other basic Animal Husbandry services at farmers door step. Output targets for each of the activity under this deliverable are given in the table below:

Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training of a local Service Provider (Pig Bondhu) @ 2 numbers / cluster at NRC for AI	Training	3	2	-	-	-	5
Liquid boar semen	Doses	As per demand & availability (~200 doses per month)					
AI Training manual for Pig Bondhus	Manual	1	-	-	-	-	1

10. Capacity Building of Value Chain Actors

- a) **Designing & providing butcher training kits to AHVD District staff:** ICAR-NRC Pig will design (as per required standards and specifications) and supply training kit to AHVD District staff who would be the master trainers for training butchers. ICAR-NRCP will prepare the detailed list of items to be included in the training kit. ICAR-NRC Pig will procure the specific components of the kit from different sources and prepare the kits to be provided to the AHVD staffs during the respective training programme. AHVD staffs may use the training kits in conducting butcher training programmes in their areas (described in C.2 below). Output targets for the activity under this deliverable are given in the table below:

Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training kit for butchers	kit	25	25	25	25	-	100

- b) **Master training programme (ToT) for conducting hands on training for butchers:** ICAR-NRCP will train the master trainers from the AHVD District staff (2 staff from each district) in scientific slaughtering of pigs. As the situation demands, a training manual will be prepared in this regard and copies will be provided to trainees before the start of the training. The trainings will be conducted at ICAR-NRCP and each training will have duration of three days. A database of all the master trainers will be maintained by ICAR-NRCP for the purpose of follow up and refresher trainings. Selection of master trainers will be done by AHVD. Responsibility of nomination/deputation of master trainers for the training and their transport to the training venue i.e. ICAR-NRCP will be that of AHVD. Output targets for the activities under this task are given in the table below:

Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training programme (ToT) for conducting hands on training of butchers*	Training	1	1	1	1	-	4
Training manual for Master trainers	Manual	1	-	-	-	-	1

*Batch size of each training= 25 participants

11. **Training of pork vendors, traders, transporters:** Post production value chain participants like local vendors, traders and transporters play an important role in the pork value chain. ICAR-NRCP will conduct trainings for pork vendors, transporters and traders, along with development of training manual for these value chain actors. The manual and training content for pork vendors will cover aspects like management of the vending point or vending shed as per scientific standards, automation of processes, maintaining hygienic conditions, deciding the Economic Order Quantities (EOQ), display and storage arrangement, disposal of left over and accounts management. The manual and training content for pork transporters will include aspects like safe and hygienic transport, transport routes, quality and shelf life maintenance during transport, techniques for long distance transportation, ambient temperature, preventing spoilage & contamination during transport, loading, unloading techniques including preventing human touch during these processes. The manual and training content for pork traders will include apart from guidelines on proper transportation, elements like storage, sourcing strategies (right quantity, quality, rate, place, source), safe and hygienic handling, quality preservation during storage and transit, freezing/refrigerating conditions and devices to be used etc. The duration of each training would be three days. Output targets for each of the activities under this task are given in the table below:

Activities	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training manual for pork vendors/ traders/ transporters	Manual	1	-	-	-	-	1
Conducting Training* of pork vendors/ transporters/ traders	Training	1	1	1	1	-	4

*Batch size of each training= 25 participants

12. **Hands on Training of AHVD master trainers in scientific pig rearing:** ICAR-NRC Pig will train the District level staff (including block level officers) of AHVD as master trainers on practical aspects of scientific pig husbandry, approximately at the rate of three staff/ district every year who will in turn train the pig farmers in their districts on cluster basis. The duration of each training at ICAR-NRCP will be of 3-4 days. ICAR-NRCP will also develop a *practical training manual* for the purpose. The resource persons from ILRI may also be a part of these trainings and would be allotted sessions in line with the man day limits as specified in the agreement signed with ILRI. Output targets for this activity are given in the table below:

*Batch size of each training = 25 participants

Activities	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training manual for AHVD Master Trainers in scientific pig rearing	Manual	1	-	-	-	-	1
Conducting Training of Dist Department staff in scientific pig rearing including disease management*	Training	2	2	2	1	1	8

(D) REPORTING REQUIREMENTS

13. **NRC-P shall submit the following reports for the Deliverables:**

- a) NRC-P will submit the reports/ documents to the ARIAS Society during the assignment period, in both soft (MS word/excel and PDF versions) as well as hard copies along with summary report to assess the progress against the targets. All the reports and documents shall be in English language. A brief description of the deliverables is shown below:
 - i) **Inception report** will include detailed work plan, milestones, methodology and resources to be mobilized to accomplish the assignment. The Inception Report is to be submitted within **30 days** of signing the contract agreement. The Inception Report *inter alia* should include detailed mobilization arrangements, complete description of all activities required for the key deliverables, complete Work Plan to ensure timely start-up and on-time completion of the implementation of this Agreement; **A payment of 20% of the contract amount will be made on acceptance of Inception Report.**
 - ii) **Progress report:** At the end of every 03 months/06 months (as applicable), a report highlighting the technical support activities carried out during the period is to be submitted within **21 office working days** from the completion of the period. The Payment Request from NRC-P is to be based on the Payment Schedule given below, which would be updated based on mutual agreements. **However, ICAR-NRC Pig may also raise invoice as per the individual activities/ group of activities completed and submit along with interim reports and the payments will be made accordingly (Quarterly/Half yearly Reports/Interim Report, as applicable).**
 - iii) **Mid-Term report**, to be submitted within **30 office working days** from the completion of **24 months** (two years) from agreement signing and should focus on (a) implementation processes and recommend mid-term corrections, if any, required to achieve the prescribed targets, adjustments in the project design, (b) implementation arrangements to overcome identified bottlenecks and (c) socio-economic analysis, in addition to overall review of the progress of project implementation under different activities and sub-activities, as per the approved action plan covering all deliverables (technical and physical) with suggestions for improvements..
 - iv) **Final/ End of Project report** will have to be submitted by NRC-P, **45 days** before the closure of the consultancy assignment. The report shall include a comprehensive overall assessment of the implementation, impact of the activities on pork/piggery value chain.
- b) **Documents required for making payment:** NRC-P will submit **Progress Reports (Quarterly/Half yearly Reports/Interim Report, as applicable) along with invoice supported by** (i) progress report as per the prescribed format agreed with the client and (ii) a certification from the Director of Animal Husbandry & Veterinary and/or the Managing Director ALPCo (as applicable), stating that technical advisory services have been provided as per the targeted deliverables of the contract. All financial reports shall be expressed in Indian Rupees.

(E) DELIVERABLES/ACTIVITIES AND PAYMENT SCHEDULE:

Sl	Activity	Unit	Y1		Y2		Y3		Y4		Y5		Total	
			Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	Sem1	Sem2		
A1	INCEPTION REPORT	No.	1							1			2	
		% payment	20.00%											20.00%
		Amount	31,50,000											31,50,000
A	FEEDING MANAGEMENT													
1	Analysis of the locally available feed resource & preparation a database for ration balancing)	Samples	20	20	20								60	
		% payment	1.00%	1.00%	2.00%								4.00%	
		Amount	1,57,500	1,57,500	3,15,000								6,30,000	
B	LIQUID SEMEN AVAILABILITY & AI SERVICES													
2	<i>Technical support in establishing liquid boar semen processing centre</i>													
2a	Support in developing existing pig breeding farms of AHVD for boar selection	Farm	1	1	1	1	As per req	As per req	As per req				4	
		% payment	1.00%	1.00%	1.00%	1.00%	0.50%	0.50%	0.50%				5.50%	
		Amount	1,57,500	1,57,500	1,57,500	1,57,500	78,750	78,750	78,750				8,66,250	
2b	Support in upgradation of liquid semen laboratories for development of liquid boar semen processing & distribution centre	Labs		1	1	1	1	1	1	As per req	As per req	As per req	6	
		% payment		1.00%	1.25%	1.25%	1.50%	1.50%	1.50%	1.50%	1.00%	0.40%	10.90%	
		Amount		1,57,500	1,96,875	1,96,875	2,36,250	2,36,250	2,36,250	2,36,250	1,57,500	63,000	17,16,750	
3	<i>Technical support in establishing AI satellite services at farmers' door step (training of pig bondhus)</i>													
3a	Training of a local Service Provider (Pig Bondhu) @ 2 numbers / cluster at ICAR NRC Pig for AI	Training	1	2	1	1							5	
		% payment	1.00%	1.00%	1.00%	1.00%							4.00%	
		Amount	1,57,500	1,57,500	1,57,500	1,57,500							6,30,000	
3b	Liquid boar semen	Doses	As per demand and availability (@200 doses per month)											
		% payment	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	2.00%	1.80%	1.80%	16.10%	
		Amount	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	3,15,000	2,83,500	2,83,500	25,35,750	
3c	AI Training manual for Pig Bondhu	Manual	1										1	
		% payment	1.00%										1.00%	
		Amount	1,57,500										1,57,500	
C	CAPACITY BUILDING OF BUTCHERS THROUGH ToT													
4	Designing and providing butcher training kits to AHVD District staff	Kits	10	15	10	15	10	15	10	15			100	
		% payment	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		16.00%	
		Amount	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000		25,20,000	
5	<i>Master training programme (ToT) for conducting hands on training for butcher</i>													
5a	Training programme (ToT) for conducting hands on training of butchers	Trainings	1		1		1		1				4	
		% payment	1.00%		1.00%		1.00%		1.00%				4.00%	
		Amount	1,57,500		1,57,500		1,57,500		1,57,500				6,30,000	
5b	Training manual for master trainers	Manual	1										1	
		% payment	1.00%										1.00%	
		Amount	1,57,500										1,57,500	
D	TRAINING OF PORK VENDORS, TRADERS AND TRANSPORTERS													
6a	Training manual for pork vendors/ traders/ transporters	Manual	1				1						2	
		% payment	1.00%				0.01						2.00%	
		Amount	1,57,500				1,57,500						3,15,000	
6b	Conducting Training of pork vendors/ transporters/ traders	Training		1		1		1		1			4	
		% payment		1.00%		1.00%		1.00%		1.00%		1.00%	4.00%	
		Amount		1,57,500		1,57,500		1,57,500		1,57,500		1,57,500	6,30,000	
HANDS ON TRAINING OF AHVD MASTER TRAINERS IN SCIENTIFIC PIG REARING														
7a	Training manual for AHVD Master Trainers in scientific pig rearing	Manual	1				1						2	
		% payment	1.75%				1.75%						3.50%	
		Amount	2,75,625				2,75,625						5,51,250	
7b	Conducting trainings for Dist Department staff in scientific pig rearing, including disease management	Training	1	1	1	1	1	1	1		1		8	
		% payment	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%		1.00%	8.00%	
		Amount	1,57,500	1,57,500	1,57,500	1,57,500	1,57,500	1,57,500	1,57,500	1,57,500		1,57,500	12,60,000	
% half yearly payment			33.25%	9.50%	10.75%	8.75%	10.25%	7.50%	7.50%	6.50%	3.80%	2.20%	100.00%	
Amount of half yearly payment			52,36,875	14,96,250	16,93,125	13,78,125	16,14,375	11,81,250	11,81,250	10,23,750	5,98,500	3,46,500	1,57,50,000	
% yearly payment			42.75%	19.50%	17.75%	14.00%	6.00%	100.00%						
Amount of yearly payment			67,33,125	30,71,250	27,95,625	22,05,000	9,45,000							

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(F) QUALIFICATIONS AND EXPERIENCE OF ICAR-NRC-P TEAM MEMBERS

#	Name of experts	Qualification and Experience
	Key Expert	
K-1	Dr. S. Rajkhowa (Project Director)	<ul style="list-style-type: none"> • Ph.D. in Animal Husbandry/Veterinary Science or related fields • At least 12 years professional experience in livestock industry/research
K-2	Dr. R. Thomas (Project Coordinator/ Team Leader)	<ul style="list-style-type: none"> • Ph.D in Livestock Products Technology or closely related filed • At least 10 years professional experience in Livestock Products Technology & related fields
K-3	Dr. K. Barman	<ul style="list-style-type: none"> • Ph.D in Animal Nutrition or closely related filed • At least 10 years professional experience in animal nutrition/feed industry or research
K-4	Dr. M. K. Tamuli (Contractual)	<ul style="list-style-type: none"> • Ph. D in Animal Reproduction or closely related filed • At least 20 years professional experience in animal reproduction and related fields research
	Non-Key Experts	
N-1	Dr. S. Banik	<ul style="list-style-type: none"> • Ph.D. in Animal Husbandry/Veterinary Science or related fields • At least 9 years professional experience in livestock industry/research
N-2	Dr. Mohan NH	<ul style="list-style-type: none"> • Ph.D. in Animal Husbandry/Veterinary Science or related fields • At least 12 years professional experience in livestock industry/research
N-3	Dr. P.J. Das	<ul style="list-style-type: none"> • Ph.D. in Animal Husbandry/Veterinary Science or related fields • At least 5 years professional experience in livestock industry/research
N-4	Dr. Seema R Pegu	<ul style="list-style-type: none"> • Ph.D. in Animal Husbandry/Veterinary Science or related fields • At least 9 years professional experience in livestock industry/research
N-5	Dr. Sunil Kumar	<ul style="list-style-type: none"> • Ph.D. in Animal Husbandry/Veterinary Science or related fields • At least 2 years professional experience in livestock industry/research
N-6	RA/SRF-2 nos.	<ul style="list-style-type: none"> • RA: PhD (in any discipline of Life Science.) or MSc in any discipline of Life Science/MVSc with minimum two years R&D experience. • SRF: MSc in any discipline of Life Science/MVSc or equivalent degree
N-7	JRF/skilled supporting staff-2 nos.	<ul style="list-style-type: none"> • JRF: Bachelor's Degree in any discipline of Life Science/ BVSc • Skilled supporting staff: Skilled to assist in field visits and organizing trainings with minimum 10+2 pass.

(G) DURATION OF ASSIGNMENT

14. The Consultant's services shall commence with effect from the date of effectiveness of the contract agreement. The consultancy would be for a period of total **60** months of which, **48** months will be for actual implementation and **12** months for implementing Exit Strategy, subject to the timely achievement of targeted activities by the Consultant, and unless terminated pursuant to the contract provisions.

(H) SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT

15. Provide access to all relevant documents like Annual Work Plan (AWP), correspondences, information associated with the assignment and available with the ARIAS Society and the AHVD/ALPCo, ATMA's etc.
16. Liaising and co-ordination with AHVD/ALPCo, ATMA's etc. and other stakeholders will be ensured.

(I) REVIEW MECHANISM

17. The progress and performance of NRC Pig on the assignment will be reviewed by State Project Director (SPD), ARIAS Society either by himself or through a constituted a committee for the purpose, with experts from ARIAS Society, AHVD, ALPCo, etc. and also invited external experts (if felt necessary). The Team Leader from NRC Pig would have to remain present during the Review Meetings.
18. The Project Implementation Unit (PIU) AHVD and ALPCo will undertake day-to-day monitoring of the assignment.

APPENDIX C – BREAKDOWN OF CONTRACT PRICE

(1) Summary of Costs

Item	Amount in Indian Rupees
Cost of the Financial Proposal Including:	
(A) Remuneration	76,80,000
(B) Reimbursables	80,70,000
Total Cost of the Financial Proposal (excluding GST):	1,57,50,000

Note: Payments will be made in the currency expressed above

(2) Breakdown of Remuneration and Breakdown of Reimbursable Expenses

Note: Information to be provided in this Form will be used to demonstrate the basis for the calculation of the Contract's ceiling amount; to calculate applicable taxes; and, if needed, to establish payments to the Consultant for possible additional services requested by the Client. **This Form will not be used as a basis for payments:**

#	Name of experts	Rate per day	No. of days*	Quantity	Total Amount
	Remuneration	(Rs.)		Nos.	(Rs.)
	Key Expert				
K-1	Dr. S. Rajkhowa, Principal Scientist and Director (Acting)	1500	75	1	112500
K-2	Dr. R. Thomas, Senior Scientist (Livestock Products & Technology)	1500	75	1	112500
K-3	Dr. K. Barman, Principal Scientist (Animal Nutrition)	1500	75	1	112500
K-4	Dr. M. K. Tamuli, Principal Scientist (Contractual)	2000	240	1	480000
	Non-Key Experts				
N-1	Dr. S. Banik, Principal Scientist (Animal Genetics & Breeding)	1500	75	1	112500
N-2	Dr. Mohan NH, Principal Scientist (Animal Physiology) & ICAR-National Fellow	1500	75	1	112500
N-3	Dr. P.J. Das, Sr. Scientist, AGB	1500	75	1	112500
N-4	Dr. Seema R Pegu, Scientist, Veterinary Pathology	1500	75	1	112500
N-5	Dr. Sunil Kumar, Scientist (Animal Reproduction)	1500	75	1	112500
	Subtotal				1380000
	Support Manpower (Contractual)				
N-6	RA /SRF	1200	1800	2	4320000
N-7	JRF/Skilled Supporting staff	550	1800	2	1980000
	Total Remuneration				7680000
	Reimbursables				
	Particulars	Unit	Quantity	Rate (Rs.)	Amount
	Liquid boar semen	Doses	12000	225	2700000
	Designing and providing 100 butcher training kits to AHVD District staff	Nos.	100	25000	2500000
	Travelling Cost, Per Diem including food & accommodation during field visits etc.	LS			1470500
	Training Operational Cost including food and lodging to participants at NRC-P Center etc.	-	LS	-	599500
	Institutional charges (@5% of cost excluding that of liquid semen, travel cost and miscellaneous cost)	-	LS	-	580000
	Miscellaneous	-	LS	-	220000
				Sub-Total	8070000
				Grand Total	157,50,000

Name of Consultant: [ICAR-NRC-Pig]

Signature of Authorized Representative:

Date: 12/7/2018

Name: Dr. Swaraj Rajkhowa

Title: Director

निदेशक/Director

राष्ट्रीय शूकर अनुसंधान केन्द्र/NRC on Pig

भा.कृ.अ.पं. / I.C.A.R

रानी, गुवाहाटी-781131 (असम)

Rani, Guwahati-781131 (Assam)



**Appendix E: Technical Proposal from ICAR-NRC Pig
(attached)**



ICAR-NATIONAL RESEARCH CENTRE ON PIG
INDIAN COUNCIL OF AGRICULTURAL RESEARCH
Ministry of Agriculture & Farmers Welfare, Govt. of India
RANI, GUWAHATI-781 131 ASSAM, INDIA
(An ISO 9001:2008 Certified Institute)



Dr. Swaraj Rajkhowa, Ph.D.
Director (Acting)

F.No. 745/NRCP/2016-17/APART

Date: 21-04-2018

To

Siddharth Singh, IAS
State Project Director
ARIAS Society

Sub: Submission of revised Agreement and project proposal to APRAT-reg.
Ref: F.No. ARIAS/APART/236/2017/9 dated 7th August, 2017

Sir,

Greetings from ICAR-National Research Centre on Pig.

In reference to the subject cited above, I am submitting herewith the revised project proposal along with agreement copy for providing 'Technical Advisory Services for Piggery Value Chain Improvement in Assam, under the World Bank financed Assam Agribusiness and Rural Transformation Project'.

As you are well aware, detailed deliberations were already done on different points mentioned in the agreement. You may kindly treat this draft as the final version from ICAR-National Research Centre on Pig.

In this regard, Sir, you are requested to kindly examine the proposal and suggest the required modifications, if any. If it is agreeable, you may kindly take necessary steps to sign the agreement in the near future.

Thanking you,

Yours sincerely,


(Swaraj Rajkhowa)
Director (Acting)



Technical Advisory Services for Piggery Value Chain Improvement in
Assam, under the World Bank financed Assam Agribusiness and Rural
Transformation Project (APART)

Submitted to
The Assam Rural Infrastructure and Agricultural Services (ARIAS) Society
(an autonomous body under Govt. of Assam)
Agriculture Campus, Khanapara, Guwahati-781022
Assam, India



Submitted by
राष्ट्रीय शूकर अनुसंधान केन्द्र
(भारतीय कृषि अनुसंधान परिषद), राणी, गुवाहाटी, असम -781 131
ICAR-NATIONAL RESEARCH CENTRE ON PIG
(Indian Council of Agricultural Research)
Rani, Guwahati, Assam-781131
An ISO 9001:2008 Certified Institute



[Handwritten signatures]

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2. OBJECTIVES AND APPROACHES

2.1 Objective of ICAR-NRCP's contribution

ICAR-NRC Pig as a knowledge partner intends to provide evidence, technologies, capacity building, tool/ training kits and guidance in order to:

- 2.1.1 Feeding management
- 2.1.2 Liquid semen availability and AI Services
- 2.1.3 Capacity building of Masters Trainers (Project staff, Departmental staff and beneficiary representatives).

2.2 Approach

Piggery in Assam is mainly practiced as a homestead/ backyard activity generally by low income households where the herd size is small. The informal pig sub-sectors is key for supporting food and nutritional security as well as improving income and employment in Assam, and ensuring benefits for women involved in this sectors. ICAR- NRC Pig intends to work with the Animal Husbandry & Veterinary Department (AHVD), Government of Assam on the pork value chains especially on ration balancing, liquid semen availability and training & capacity building. Given the low productivity, poor marketing support and low capacities of the value chain actors, ICAR-NRC Pig believes that interventions with regards to ration balancing, availability of liquid bore semen and training and capacity building of the value chain actors is critical for enhancing the competitiveness of pork value chain in Assam. Moreover, with sudden and unforeseen changes in climate, it has become imperative to develop and train the pig farmers on climate smart housing. ICAR NRC Pig would work with project staff and Departmental staff in gradual devolution mode so as Department takes on the responsibilities of continuing the activities before the exit of ICAR-NRC Pig in the Program. To this end, last year of ICAR NRC-pig's work would be dedicated to implementation of an exit strategy with the Department.

Other interventions in the pork value chain would be designed around increasing production through genetic improvement of indigenous pigs through selective and crossbreeding through popularization of the artificial insemination, addressing the issues related to feed shortage and improvement of nutrient utilization for enhancing pig production, developing of pig health management systems, designing efficient systems and processes for value chain actors (like farmers, traders, vendors, processors, transporters) across the value chain, promoting environment friendly and climate smart pig farming including shelter management, promoting entrepreneurial development in forward and backward front of pig production.

Value chain actors after training would also be awarded a certificate so that it brings in them a sense of pride and ownership and they can further share their knowledge, skills (practicing pig husbandry, pig trading, processing in their own farms and set up), with other value chain actors. As seeing is believing and farmers and value chain actors learn more from their peers, it is expected to have a trickle-down effect on other value chain players who are not exposed to project interventions. Further, the farmers and value chain actors having a certificate have a better chance of getting value chain finance from banks and other financial institutions. The expected key deliverables of the trainings to be conducted to be conducted by ICAR NRC Pig shall be stakeholders exposure to formal, clean and hygienic and scientific systems and processes in piggery value chain.

3. ACTIVITIES

A. Feeding Management

A.1. Analysis of the locally available feed resource & preparation a database for ration balancing

Judicious use of feed stuff is a key element in enhancing pig production. The objective of the feeding initiative is to increase productivity, FCR, ADG and reduce wastage and spoilage caused by imbalanced feeding. Analysis of nutritive value of the local unconventional feed resource & ration balancing would be taken up by NRC Pig in the first year of the Project. One of the major issues found during the Value chain analysis was that, the prevailing feeding practices are not based on the scientific principles. Majority of the farmers feed their animals on the basis of locally available feed resources, irrespective of their nutritional value required for optimum growth and quality production. This imbalanced feeding practice leads to reduction in quality production and productivity. To address the issue, the existing nutritional gap will be assessed and effort will be made to support local feed manufactures to produce customized supplementary feed based on the gap assessment. In addition, food feed crop cultivation at the back yard and ration balancing will be promoted.

The estimation of the nutritive value of the locally available feed resources on the basis of agro climatic zones will be carried out by ICAR NRC Pig and would build on existing feed libraries & recommendation for computation of balance ration with the existing indigenous resources. ICAR NRC Pig will also recommend the nutrient gap for additional supplementation as and when required. The local AHVD officials and the pig bondhu will implement the programme as per the guidelines provided by the ICAR NRC Pig. The nutrient content of the non conventional feed stuff and ration balancing formulas will be fitted by the AHVD into a software to be developed under this project and the same will be used through tablets to be provided to pig bondhus. They would provide services to the farmers at the door step using the outsourced software.

Based on the balanced formula recommendation by the AHVD to the FPOs, it will the responsibility of FPOs to purchase concentrate feed in bulk. Output targets for each of the activity under this deliverable are given in the table below:

Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
Analysis of the locally available feed resource & preparation a database for ration balancing	Samples (to be collected & sent by Pig Bondhus)	40	20	-	-	-	60

B. Liquid Semen Availability & AI Services

B.1 Technical support in establishing of liquid boar semen processing centre

The existing breeding farms of the AHVD could be incorporated with semen collection and processing facilities for production of liquid boar semen with the support of ICAR-NRC Pig so that the availability of the semen can be maintained locally. The Common Service Centres (CSCs) will be provided with the facility for preservation of liquid semen and the Pig Bondhu as well as the AHVD personnel will deliver services for insemination as per the requirement. Institute will extent technical support to AHVD for the upgration of 6 nos. of laboratories in the existing ICDP for up-gradation for

liquid boar semen processing and preservation in different zones for local requirement. The existing staffs of the Labs will be trained at NRC pig for the purpose and breeding farms of the Deptt. will be strengthened for rearing of boar and semen collection. Laboratories at (i) Demow Intensive Cattle Development Program (ICDP), (ii) Baghchung, Jorhat, (iii) Biswanath chariali, (iv) Kokrajhar, (v) Khanapara, (vi) Manja ICDP laboratory are proposed for development of liquid boar semen processing & distribution centre under the project. Breeding farms of the State Department as well as some private breeders will maintain required breeding boars in the nearby locations of the laboratories for semen production, which will be undertaken by AHVD. Output targets for each of the activities under this deliverable are given in the table below:

Activities	Unit	Y1	Y2	Y3	Y4	Y5	Total
Support in developing existing pig breeding farms of AHVD for boar selection	Farm*	2	2				4
Support in upgradation of liquid semen laboratories for development of liquid boar semen processing & distribution centre	Labs	1	2	2	1		6

B.2 Technical support in establishing AI satellite services at farmer' door step

ICAR NRC Pig has already initiated AI of Pig with liquid semen in a cost effective manner with a simple technology which can be adopted even by a farmer after training. As the state has acute shortage of quality breeding boars, the AI can be a very timely and viable option for increasing market led productivity of the farmers. Initially, AI workers will be selected @ two /cluster and trained in ICAR NRC Pig for AI service delivery and provided with the inputs for conducting AI in his/her respective area. The semen will be sourced from ICAR NRC Pig initially on payment basis. Some satellite semen collection centers will be established in the project districts to minimize the cost of transportation and facilitating easy availability. The cold chain facility required for the storage of the semen will be provided in the CSCs. The local AI service providers or "pig bondhus" will cater the need of their area from the concerned CSCs which in turn get the semen from the satellite semen collection centers. The pig bondhus will be a viable proposition provided the area of his service is having minimum 224 breedable sows for AI service and atleast 500 fatteners produced in a year. The pig bondhus can earn an amount of Rs.8000/- per month from the AI service as well as other basic Animal Husbandry services at farmers door step. Output targets for each of the activity under this deliverable are given in the table below:

Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training of a local Service Provider (Pig Bondhu) @ 2 numbers / cluster at NRC for AI	Training	3	2	-	-	-	5
Liquid boar semen	Doses	As per demand and availability (~200 doses per month)					
Training manual for Pig Bondhus	Manual	1	-	-	-	-	1

Batch size= 25

C. Capacity Building of Value Chain Actors

C.1 Designing & providing butcher training kits to AHVD District staff

ICAR-NRC Pig will design and supply training kit to AHVD District staff who would be the master trainers for training butchers. ICAR-NRCP will prepare the detailed list of items to be included in the

training kit. Institute will procure the required number of kits in one go and will be provided to the AHVD staffs during the respective training programme. AHVD staffs may use the training kits in conducting butcher training programmes in their areas (described in C.2 below). Output targets for the activity under this deliverable are given in the table below:

Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training kit for butchers	kit	25	25	25	25	-	100

C.2 Training of Trainers (ToT) for conducting hands on training of butchers

ICAR NRC Pig will train the master trainers from the AHVD District staff (2 staff from each district) in butchering of pigs. As the situation demands, a training manual will be prepared in this regard, may be a common one with separate sections for different stakeholders. The trainings will be conducted preferably at ICAR NRC pig and each training will have duration of three days. A database of all the master trainers will be maintained by ICAR NRC Pig for the purpose of follow up and refresher trainings. Selection of master trainers will be done by AHVD. Responsibility of nomination/deputation of master trainers for the training and their transport to the training venue i.e. ICAR NRC Pig will be the responsibility of AHVD. Output targets for the activity under this deliverable are given in the table below:

Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
Conducting Training of Master Trainers*	Training	1	1	1	1	-	4
Training manual for Master trainers	Manual	1	-	-	-	-	1

*Batch size of each training= 25 participants

C.3 Training of pork vendors, traders, transporters

ICAR NRC Pig will conduct trainings for pork vendors, transporters and traders, along with development of training manuals for these value chain actors. The manuals and trainings for pork vendors will cover aspects like management of the retail point or retail shed as per scientific standards, automation of processes, maintaining hygienic conditions, deciding the Economic Order Quantities (EOQ), display and storage arrangement, disposal of left over and accounts management. The manual and trainings for pork transporters will include aspects like safe and hygienic transport, transport routes, quality and shelf life maintenance during transport, techniques for long distance transportation, ambient temperature, preventing spoilage & contamination during transport, loading, unloading techniques including preventing human touch during these processes. The training manuals and trainings for pork traders will include apart from guidelines on proper transportation, elements like storage, sourcing strategies (right quantity, quality, rate, place, source), safe and hygienic handling, quality preservation during storage and transit, freezing/refrigerating conditions and devices to be used etc. The duration of each training would be three days. Output targets for each of the activities under this deliverable are given in the table below:

Activities	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training manual for pork vendors/ traders/ transporters	Manual	1	-	-	-	-	1
Conducting Training of pork vendors/ transporters/ traders*	Training	1	1	1	1	-	4

*Batch size of each training= 25 participants

C.4 Training of AHVD master trainers in scientific pig rearing

ICAR NRC Pig will train the District level staff of AHVD as master trainer farmers in scientific pig husbandry practices approximately at the rate of three staff/ district every year who will in turn train the pig farmers in their districts on cluster basis. Output targets for this activity are given in the table below:

Activities	Unit	Y1	Y2	Y3	Y4	Y5	Total
Training manual for AHVD Master Trainers in scientific pig rearing	Manual	1	-	-	-	-	1
Conducting Training of Dist Department staff in scientific pig rearing including disease management*	Training	2	2	2	2	-	8

*Batch size of each training =25 participants

4. INSTITUTIONAL BACKGROUND, EXPERTISE & EXPERIENCE

The mid-term appraisal committee constituted by ICAR in 1990 to review the work of the All India Coordinated Centres on Pig recommended the establishment of a National Research Centre on Pig preferably in the North Eastern part of the country where 28% of country's pig population is distributed. Following the recommendation, ICAR approved the establishment of NRC on pig at Rani, Guwahati, Assam towards the fag end of the IX five year plan. All existing AICRP centres were merged with the NRC and the post of Project Coordinator was upgraded to the position of Director.

The institute is focused on achieving excellence in pig production, health and product processing through innovative research in order to provide technological backstopping for enhanced pork production, employment generation and poverty reduction among socially and economically weaker sections through the medium of pig husbandry.

Leading areas of research at ICAR NRC Pig include among others genetic cataloguing of indigenous pigs, development of improved pig variety together with production, health, product processing and pig based integrated farming system technologies to facilitate the pig rearers of the country achieving household food, nutritional and economic security.

The institute is maintaining is maintaining four breeds of pigs viz. Ghungroo, Hampshire, Large White Yorkshire and Duroc and cross of Ghungroo & Hampshire. The institute is ISO certified and maintains 30 nos. trained breeding boars from which semen is regularly collected and processed for preservation and artificial insemination. The institute is facilitating genetic cataloguing of pig breeds in India and so far the breeds of pigs namely Ghungroo, Niang-Megha, Doom, Agonda Goan, Tenyivo and Nicobari Pigs were registered. Also, the institute has prepared the draft proposal of breeding policy of pigs for India. Among the popular technologies Artificial insemination has reached the farmers' door step and have boost the superior variety crossbred piglets production in villages. Since 2010, the institute has produced more than 35000 piglets through AI in the field. There are more than 1600 registered farmers who are availing the benefits of AI technology spread within a radius of 120 km. Due to increase demand of AI in pig, the enthusiastic farmers are now given one day technical training for doing AI in their farm as well as in the neighbourhood. So far, 19 males and 1 lady farmer have started doing AI for themselves with optimistic results.



5. ASSIGNMENT STAFF/ RESOURCE PLAN

#	Key Expert	Position in assignment	Role in the Assignment
K-1	Dr. S. Rajkhowa	Project Director	<ul style="list-style-type: none"> • Overall coordination of the assignment • Animal Health Expert
K-2	Dr. R. Thomas	Project Coordinator & Team Leader	<ul style="list-style-type: none"> • Acting as the common touch point for all correspondence from APART • Products & Tech Expert: Training of master trainers (ToT) for conducting of hands on training to the butchers & designing butcher training kits
K-3	Dr. K. Barman	Nutrition Expert	<ul style="list-style-type: none"> • Feed analysis of the locally available feed resource & preparation a database for ration balancing • Providing inputs on better nutrition for pigs • Inputs on scientific pig rearing
K-4	Dr. M. K. Tamuli	Animal Reproduction Expert (Contractual)	<ul style="list-style-type: none"> • Inputs on establishing liquid boar semen processing centre • Inputs on establishing satellite AI services at farmers' doorstep • Inputs on scientific pig rearing

Non-Key Experts

N-1	Dr. S. Banik	Breeding Expert	<ul style="list-style-type: none"> • Training inputs on scientific pig rearing • Inputs on formulating a pig breeding policy
N-2	Dr. Mohan NH	Housing Expert	Training inputs on scientific pig rearing
N-3	Dr. P.J.Das,	Animal Genetics and Breeding	Training inputs on scientific pig rearing
N-4	Dr. Seema R Pegu	Disease Expert	Training inputs on scientific pig rearing
N-5	Dr. Sunil Kumar	Reproduction Expert	Training inputs on scientific pig rearing

Note: Formulating the evidence based pig breeding policy would be anchored by ILRI and NRC Pig would provide the need based inputs.

6. OUTCOME INDICATORS

SI	Activities	Outcome
1	Analysis of locally available feed resource & preparation a database for ration balancing	Balanced feed being given to pigs
2	Technical support in establishing liquid boar semen processing centre (farms & labs)	Maintenance and availability of liquid boar semen locally
3	Technical Support in establishing AI satellite services at farmers' doorstep (training to pig bondhus)	Well functioning liquid boar semen processing & distribution centre in place and increased availability of quality liquid boar semen to pig farmers
4	Designing and providing butcher training kits to AHVD District staff	Increased success rate of AIs, more number of pigs born
5	Training of master trainers for conducting hands on training for butchers	Enhanced knowledge and skill levels of butchers on scientific handling of pork
6	Training for pork vendors, transporters and traders	Awareness created on scientific pork retailing by vendors
7	Training of AHVD master trainers in scientific pig rearing	Awareness created on scientific pork handling by traders

7. RESPONSIBILITIES SHARING AMONG THE STAKEHOLDERS

Sl.	Deptt. / Institutions	Responsibilities
1	Animal Husbandry & Veterinary Deptt:	1. Health care & management support service to production clusters.
		2. Oversee the Breeding front of the state.
		3. Moderate the policy and regulatory reforms for improved piggery value chain
		4. Implementation of Food safety regulations in coordination with Local authority.
2	Assam Livestock and Poultry Corporation Ltd.	1. Production of breeding stock in collaboration with PPP
		2. Micro & Small Enterprise development in pig subsector.
		3. Organize the Post harvest management –Processing, marketing, value addition etc
		4. Implementation of low cost slaughterhouse for primary processing and clean pork production.
		5. Forward and backward linkages of the production clusters.
3	National Research Centre on Pig, ICAR Rani	Knowledge partner and expert services in
		1. Breeding front
		2. Nutrition.
		3. Post harvest technology, HACCP etc
		4. Capacity building of value chain actors for better production, value addition and marketing
4	International Livestock Research Institute	1. Knowledge gap assessment of all the stakeholders.
		2. Customized designing of the training materials
5	NGO (SP)	Aggregation of Farmers, formation of FIG, Formation of FPO
6	FPO/ FPC	Operation of CSC

8. SUMMARY OF TIMELINES

SI	Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total
1	Feed analysis of the locally available feed resource & preparation a database for ration balancing	Samples	40	20	-	-	-	60
2	Technical support in establishing liquid boar semen processing centre							
2a	Support in developing existing pig breeding farms of AHVD for boar selection	Farm	2	2	-	-	-	4
2b	Support in upgradation of liquid semen laboratories for development of liquid boar semen processing & distribution centre	Labs	1	2	2	1		6
3	Technical support in establishing AI satellite services at farmers' door step (training of pig bondhus)							
3a	Training of a local Service Provider (Pig Bondhu) @ 2 numbers / cluster at ICAR NRC Pig for AI	Training	3	2	-	-	-	5
3b	Liquid boar semen	Doses	As per demand and availability (~200 doses per month)					
3c	Training manual for Pig Bondhu	Manual	1	-	-	-	-	1
4	Designing and providing butcher training kits to AHVD District staff	Kits	25	25	25	25	-	100
5	Master training programme (ToT) for conducting hands on training for butchers							
5a	Training programme (ToT) for conducting hands on training of butchers	Trainings	1	1	1	1	-	4
5b	Training manual for master trainers	Manual	1	-	-	-	-	1
6	Training of pork vendors, traders and transporters							
6a	Training manual for pork vendors/ traders/ trasporters	Manual	1	-	-	-	-	1
6b	Conducting Training of pork vendors/ transporters/ traders	Training	1	1	1	1	-	4
7	Training of AHVD master trainers in scientific pig rearing							
7a	Training manual for AHVD Master Trainers in scientific pig rearing	Manual	1	-	-	-	-	1
7b	Conducting trainings for Dist Department staff in scientific pig rearing including disease managment	Training	2	2	2	2	-	8

BUDGET

Sl	Activity	Unit	Y1		Y2		Y3		Y4		Y5		Total
			Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	Sem1	Sem2	
A	Inception Report	No.	1						1				2
		% payment	20.00%										20.00%
		Amount	31,50,000										31,50,000
1	Feed analysis of the locally available feed resource & preparation a database for ration balancing	Samples	20	20	20								60
		% payment	1.00%	1.00%	2.00%								4.00%
		Amount	1,57,500	1,57,500	3,15,000								6,30,000
2	Technical support in establishing liquid boar semen processing centre												
2a	Support in developing existing pig breeding farms of AHVD for boar selection	Farm	1	1	1	1	As per req	As per req	As per req				4
		% payment	1.00%	1.00%	1.00%	1.00%	0.50%	0.50%	0.50%				5.50%
		Amount	1,57,500	1,57,500	1,57,500	1,57,500	78,750	78,750	78,750				8,66,250
2b	Support in upgradation of liquid semen laboratories for development of liquid boar semen processing & distribution centre	Labs		1	1	1	1	1	1	As per req	As per req	As per req	6
		% payment		1.00%	1.25%	1.25%	1.50%	1.50%	1.50%	1.50%	1.00%	0.40%	10.90%
		Amount		1,57,500	1,96,875	1,96,875	2,36,250	2,36,250	2,36,250	2,36,250	1,57,500	63,000	17,16,750
3	Technical support in establishing AI satellite services at farmers' door step (training of pig bondhus)												
3a	Training of a local Service Provider (Pig Bondhu) @ 2 numbers / cluster at ICAR NRC Pig for AI	Training	1	2	1	1							5
		% payment	1.00%	1.00%	1.00%	1.00%							4.00%
		Amount	1,57,500	1,57,500	1,57,500	1,57,500							6,30,000
3b	Liquid boar semen	Doses	As per demand and availability (~200 doses per month)										
		% payment	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	2.00%	1.80%	1.80%	16.10%
		Amount	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	2,36,250	3,15,000	2,83,500	2,83,500	25,35,750
3c	Training manual for Pig Bondhu	Manual	1										1
		% payment	1.00%										1.00%
		Amount	1,57,500										1,57,500
4	Designing and providing butcher training kits to AHVD District staff	Kits	10	15	10	15	10	15	10	15			100
		% payment	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%		16.00%
		Amount	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000	3,15,000		25,20,000
5	Master training programme (ToT) for conducting hands on training for butchers												
5a	Training programme (ToT) for conducting hands on training of butchers	Trainings	1		1		1		1				4
		% payment	1.00%		1.00%		1.00%		1.00%				4.00%

SI	Activity	Unit	Y1	Y2	Y3	Y4	Y5	Total					
			Sem1	Sem2	Sem1	Sem2	Sem1	Sem2					
		Amount	1,57,500		1,57,500		1,57,500	6,30,000					
5b	Training manual for master trainers	Manual	1					1					
		% payment	1.00%					1.00%					
		Amount	1,57,500					1,57,500					
6	Training of pork vendors, traders and transporters												
6a	Training manual for pork vendors/ traders/ transporters	Manual	1		1			2					
		% payment	1.00%		0.01			2.00%					
		Amount	1,57,500		1,57,500			3,15,000					
6b	Conducting Training of pork vendors/ transporters/ traders	Training		1		1		4					
		% payment		1.00%		1.00%		4.00%					
		Amount		1,57,500		1,57,500		6,30,000					
7	Training of AHVD master trainers in scientific pig rearing												
7a	Training manual for AHVD Master Trainers in scientific pig rearing	Manual	1		1			2					
		% payment	1.75%		1.75%			3.50%					
		Amount	2,75,625		2,75,625			5,51,250					
7b	Conducting trainings for Dist Department staff in scientific pig rearing including disease management	Training	1	1	1	1	1	8					
		% payment	1.00%	1.00%	1.00%	1.00%	1.00%	8.00%					
		Amount	1,57,500	1,57,500	1,57,500	1,57,500	1,57,500	12,60,000					
	% half yearly payment		33.25%	9.50%	10.75%	8.75%	10.25%	7.50%	6.50%	3.80%	2.20%	100.00%	
	Amount of half yearly payment		52,36,875	14,96,250	16,93,125	13,78,125	16,14,375	11,81,250	11,81,250	10,23,750	5,98,500	3,46,500	157,50,000
	% yearly payment		42.75%		19.50%		17.75%		14.00%		6.00%		100.00%
	Amount of yearly payment		67,33,125		30,71,250		27,95,625		22,05,000		9,45,000		157,50,000
													15750000

a) Cost of activities include remunerations/honorariums, cost of hired manpower (consultants, SRF/JRF/Skilled staffs etc.), travel charges, boarding and lodging charges for the experts during visits, training etc.



Summary of Costs

Item	Amount in US\$
Cost of the Financial Proposal Including:	
(A) Remuneration	7680000
(B) Reimbursables	8070000
Total Cost of the Financial Proposal:	1,57,50,000

(2) Breakdown of Remuneration and Breakdown of Reimbursable Expenses

Note: Information provided in this Form is used to demonstrate the basis for the calculation of the Contract's ceiling amount; to calculate applicable taxes; and, if needed, to establish payments to the Consultant for possible additional services requested by the Client. **This Form may not be used as a basis for payments:**

#	Name of experts	Rate per day	No. of days*	Quantity	Total Amount
	Remuneration	(Rs.)		Nos.	
	Key Expert				
K-1	Dr. S. Rajkhowa, Principal Scientist and Director (Acting)	1500	75	1	112500
K-2	Dr. R. Thomas, Senior Scientist (Livestock Products & Technology)	1500	75	1	112500
K-3	Dr. K. Barman, Principal Scientist (Animal Nutrition)	1500	75	1	112500
K-4	Dr. M. K. Tamuli, Principal Scientist (Contractual)	2000	240	1	480000
	Non-Key Experts				
N-1	Dr. S. Banik, Principal Scientist (Animal Genetics & Breeding)	1500	75	1	112500
N-2	Dr. Mohan NH, Principal Scientist (Animal Physiology) & ICAR-National Fellow	1500	75	1	112500
N-3	Dr. P.J. Das, Sr. Scientist, AGB	1500	75	1	112500
N-4	Dr. Seema R Pegu, Scientist, Veterinary Pathology	1500	75	1	112500
N-5	Dr. Sunil Kumar, Scientist (Animal Reproduction)	1500	75	1	112500
	Subtotal				1380000
	Support Manpower (Contractual)				
N-6	RA /SRF	1200	1800	2	4320000
N-7	JRF/Skilled Supporting staff	550	1800	2	1980000
	Total Remuneration				7680000
	Reimbursables				
	Particulars	Unit	Quantity	Rate (Rs.)	Amount
	Liquid boar semen	Doses	12000	225	2700000
	Designing and providing 100 butcher training kits to AHVD District staff	Nos.	100	25000	2500000
	Travelling Cost, Per Diem including food & accommodation during field visits etc.	LS			1470500
	Training Operational Cost including food and lodging to participants at NRC-P Center etc.	-	LS	-	599500
	Institutional charges (@5% of cost excluding that of liquid semen, travel cost and miscellaneous cost)	-	LS	-	580000
	Miscellaneous	-	LS	-	220000
				Sub-Total	8070000
				Grand Total	157,50,000

- Only the training dates are shown as the actual involvement days for the Key and non-key experts of ICAR-NRC on Pig as they are drawing salary.

10. CONTACTS

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