e-ASIA Joint Research Program (the e-ASIA JRP) Research Cooperation in the field of "Agriculture" on the topics of "Functional Food and Native Chicken" 9th Joint Call for Proposals to be submitted by 23rd April 2020

The e-ASIA Joint Research Program (hereinafter referred to as the "e-ASIA JRP") aims to develop a vibrant and collaborative research community in Science and Technology, to promote innovation in the East Asian region, and to contribute to the region's economic development. As part of the program, the following Member Organizations of the e-ASIA JRP have agreed to implement a joint call for proposals of multilateral cooperative research activities.

Participating Member Organizations (listed in alphabetical order):

- 1) Indonesia: Ministry of Research and Technology/ National Research and Innovation Agency (RISTEK/BRIN)
- 2) Lao PDR: Ministry of Science and Technology (MOST)
- 3) Philippines: Department of Science and Technology (DOST-PCAARRD)
- 4) Thailand: Agricultural Resource Development Agency (ARDA)

I. Aim of Joint Call and Research Area

(1) Functional Food

The aim of this joint call is to pursue innovative technologies and sustainable solutions for common challenges across the region to meet the requirements of food production, not only as a primary human need to eliminate hunger and obtaining nutritional value for the body, but also to prevent disease and improve human health.

The area of "Functional Food" represents a critical research area with respect to sustainable long-term use of food resources for provides benefits beyond basic nutrition that may reduce disease risk and/or promote good health. Based on that functional food can be:

- Natural food
- Foods that have added positive ingredients / components or deleterious substances have been removed
- Foods where the properties of one or more components / ingredients

have been modified

The scientific community continues to improve its understanding of the benefit of functional foods and their role in maintaining and optimizing health. This is caused by a situation where consumers begin to realize the relationship between food and health and the importance of maintaining health, which motivates them to live healthier by consuming certain foods that have health functions. For functional foods to provide potential public health benefits, consumers must be able to rely on scientific criteria used to document these health claims and claims. The conclusion is that the increasing demand for functional food is in line with the increasing attention and awareness among consumers to consume healthy products that can improve their quality of life.

Research on functional food starts from growing the plant, producing a food product, analysing the bioactive components, predicting the bioavailability and biological activity of the bioactives, sensory evaluation, justifying health claim, and consumer acceptance, until regulation on policy for development, evaluation and claim regulation.

Although functional foods may provide benefit beyond standard of nutrition value, they must comply to food regulations. The primary objective of regulatory authorities is to protect the public by ensuring food safety, preventing misleading or false product claims, and authorize claim benefit of the products. The guidance helps develop data to demonstrate that a food ingredient is safe for the specific use at a specific use level and for use as a functional food.

We would like to invite comprehensive research proposals including, but not limited to explore more functional food topics, especially in the scope of :

- Food products for pregnant and lactating women: Functional food helps calcium absorption and increased breast milk production: Biscuits / cookies / pasta / bread / flat noodles / instant puddings
- 2. Food products for toddlers: Functional food based on local ingredients to help reduce stunting rates
- 3. Food products for teenagers: Functional foods that prevent anemia and enhance body resistance based on local ingredients
- 4. Food products for the elderly: functional foods based on local plant

extracts to prevent degenerative diseases in the elderly

- 5. Supporting functional food products: Production of beta-carotene rich mocaf flour from cassava seedlings
- (2) Innovative approaches towards the improvement of the genetic performance of native chicken

The aim of the joint call is to pursue innovative technologies and molecular breeding strategies to improve genetic performance of local poultry breeds in East Asia region.

The utilization of native poultry breeds is gaining interest all over the world not just for small-holder enterprises. It is already a well-known fact that the products, both meat and eggs, coming from native chicken have superior qualities compared to their commercial counterparts. The unique attributes of native chicken, including more flavorful meat, intense yolk color, adaptability to harsh environmental conditions, and disease resistance are also gaining appreciation from consumers.

However, the sector is currently facing a huge gap between production and demand which will be difficult to address with traditional breeding and selection techniques. There is a need to improve egg production performance such as age at first lay, egg number and laying rate in order to meet the demand of the local native chicken industry. These traits have also been the focus of commercial poultry breeding for the past five decades. Until now, the genetic improvement in the performance of commercial broiler has been very tremendous because breeding companies use not only traditional selection and breeding strategies but complemented them with genomic and pedigree information. The availability of high-throughput genotyping platforms could enable to implement molecular breeding strategies in tandem with the conventional breeding selection towards attaining higher genetic gain in egg production and other economically important traits of native chicken.

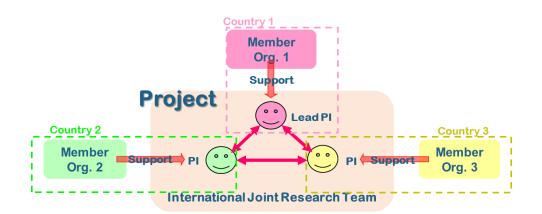
Research and development efforts have been done considerably for various breeds of native chicken for several decades now. With the increasing market demand for quality native chicken meat, significant number of stakeholders are already clamoring for reliable and consistent sources of breeder stocks.

We would like to invite research proposals on

- 1. Molecular-assisted selection and breeding
- 2. Genome-wide association study on native chicken

II. Support/ Funding Modality

In principle, each Member Organization will support its own country's researchers in a selected research project in this joint call with the type of support defined as "Funding Modality" in the following table below. The duration of a selected research project will be three years (36 months), in total, from the start date. Details of conditions of support will vary by Member Organization. Applicants shall refer to the Appendix for each Member Organization's rules and regulations.



(i) Functional Food

Participating Member Organizations	Funding Modality
(1) RISTEK/ BRIN (Indonesia)	New
(2) MOST (Lao PDR)	In-kind
(3) ARDA (Thailand)	New

(ii) Native Chicken

Participating Member Organizations	Funding Modality
(1) RISTEK/ BRIN (Indonesia)	New
(2) MOST (Lao PDR)	In-kind
(3) DOST-PCAARRD (Philippines)	New
(4) ARDA (Thailand)	New

New: Each Member Organization will support a selected project by new funding

<u>Re-budgeting</u>: Funds already allocated to an existing project by each Member Organization will be reallocated to the e-ASIA JRP

<u>In-kind</u>: Each Member Organization of his/her country does not provide budget for a selected project. A researcher participating in a selected project will use funds that are already available, but no additional fund will be provided by each Member Organization from his/her country. In principle, at least one country must participate via "new" or "re-budgeting" funding modality. In other words, proposals cannot be accepted if all the applicants intend to participate through an "in-kind" basis.

III. Application

In addition to the following common requirements, there are specific rules clarified by each Member Organization. For specific rules by each Member Organization, please refer to the Appendix or consult the person noted in Section VI.

III-1. Applicant/ Project Consortium

A project consortium must be consisted of <u>at least three eligible research teams</u> from at least three different participating countries listed above.

Each research team shall be led by a Principal Investigator (PI), and a consortium shall be led by a Lead Principal Investigator (Lead PI) specified among the PIs.

The Lead PI will be responsible for running and managing the project. The Lead PI will be the contact point with the e-ASIA JRP Secretariat on behalf of the

whole consortium and is responsible for the administrative management of the complete project, should it be awarded supporting. In addition, the Lead PI is responsible for leading the project activities at his/her own institution. The Lead PI must be affiliated with an institution situated in one of the participating countries in this call.

All PIs must fulfil their respective domestic eligibility rules for research application. Researchers from industry are encouraged to participate in the collaboration in accordance with domestic eligibility rules. PIs should contact the person noted in Section VI for information on their respective domestic eligibility rules.

III-2. Proposal Submission

<u>Proposals must be submitted from the Lead PI by e-mail to the e-ASIA JRP</u> <u>Secretariat</u> at the e-mail address specified below. Applications shall be written in English.

Deadline for Submission: 17:00 (Thai Standard Time, UTC+7) 23rd April 2020

Please submit the proposal to:



Yoshihide Kobayashi (Mr.) e-ASIA JRP Secretariat E-mail: <u>easia_secretariat@jst.go.jp</u>

Note1: The e-ASIA JRP Secretariat will send a confirmation email to the Lead PI to confirm receipt of his/her proposal. In case the Lead PI does not receive a confirmation e-mail from the e-ASIA JRP Secretariat within one week, they should contact the e-ASIA JRP Secretariat at the address above. The e-ASIA JRP Secretariat does not assume any responsibility for delay or error in e-mail delivery.

Note2: Application forms sent by any method other than e-mail, such as post, fax or telex will be rejected.

Make sure to submit all necessary application documents requested by Member Organizations of your country, in addition to the application to the e-ASIA JRP Secretariat (submitted by Lead PI only). Each Member Organization may request applicants of its country to submit supplementary documentation for the research proposals with different deadline date.

Proposals must meet the common requirements (outlined in this call guideline) **AND** individual requirements requested by each Member Organization.

A research team that does not meet the individual requirements of their Member Organization will be deemed ineligible. For individual requirements of each Member Organization, please refer to the Appendix or consult the person noted in Section VI.

The proposal shall include:

- a) Project description including how the collaboration will be carried out, with clear statements of what roles each country's researchers will play respectively in the project;
- b) Description of the expected outcomes of the proposed project, scientifically as well as in terms of relevance for industry and society;
- c) Description of the ongoing activities and specific advantages of each group respectively, which form the basis for the proposed joint project;
- d) Description of the expected value added from the proposed joint project, including how the competence, technology and other resources in each group complement each other;
- e) Description of how the project is expected to help strengthen multilateral research collaboration over the longer term;
- f) Description of the expected value added from the multidisciplinary approach in the proposed joint project; and
- g) Description of how the proposed joint project interacts with or impacts other comparable activities worldwide.

III-3. Application Forms

Researchers should prepare the following application (proposal) forms in English ("E").

For further requirements by each Member Organization, researchers shall refer to the Appendix or shall consult each Member Organization of his/her country.

- Form 1E Application outline (title, acronym, general description and proposed period of cooperative research project)
- Form 2E Summary of the project
- Form 3E Research leaders' information (their CVs*)
- Form 4E Research team (list of individuals committed to the cooperative research project in each country)
- Form 5E Description of the cooperative research project
- Form 6E Research networking plan
- Form 7E Plan to nurture early career researchers
- Form 8E Budget plan for the project
- Form 9E Research infrastructures and funds from other sources

* The description of Curriculum Vitae (CV) from each PI shall include basic information on education, past and present positions, membership of relevant organizations/associations and a publication list in the past 5 years.

In addition to the documents above, all projects must comply with ethical review and requirements of each Member Organization, especially for research activities related to human and animal subjects. <u>PIs shall refer to the Appendix</u> for each Member Organization's ethical requirement.

IV. Evaluation

IV-1. Evaluation Process

A proposal will be evaluated at each relevant Member Organization of the project consortium, according to the evaluation criteria clarified in the following subsection.

Based on the results of the evaluation conducted at each Member Organization, a final decision will be made at the joint panel meeting among the participating Member Organizations, followed by approval at the e-ASIA JRP Board Meeting.

IV-2. Evaluation Criteria

Proposals will be evaluated according to the following common e-ASIA JRP evaluation criteria, incorporated with evaluation criteria clarified by each Member Organization. For the evaluation criteria clarified by each Member Organization, please refer to the respective Appendix or consult each Member Organization of

his/her country.

1) Regional Relevance of the Research

The research activity should contribute to:

- The advancement of scientific discovery;
- The development of science and technology in the region; and
- The resolution of significant relevant issues across the region.

2) Mutual Benefits of the Joint Research

Activities of mutual benefit to the collaborators and their institutions are desirable. Mutually beneficial in the sense that the projects utilize unique opportunities the e-ASIA JRP will provide that could not be achieved either through bilateral or individual research but only through multilateral cooperation.

3) Effectiveness of Exchange

The project should:

- Contain activities to nurture early career researchers through research activities;
- Contain activities to engage female researchers where strengthening capacity is needed; and
- Enhance research capacity in the region.

IV-3. Notification of the Final Decision

The Lead PI will be notified the final decision by the e-ASIA JRP Secretariat as soon as the final decision is taken and approved by all Member Organizations in the e-ASIA JRP. (Approximate implementation of the notification: End of November 2020)

V. Project Implementation

Project reporting will be in accordance with the respective Member Organization's rules. Please contact respective Member Organizations for more details.

In addition to the Member Organization's requirements, the consortia are expected to deliver Progress Reports and Final Reports to the e-ASIA JRP Secretariat, in English, including a description of their collaboration and a publishable summary of the project status. The Progress and Final Reports will be reviewed by the Board and Scientific Advisory Council. It is also encouraged that the project proactively disseminates its achievements to the public.

V-1. Progress Report

In the middle of research period (i.e., after one and a half year), the lead PI shall promptly develop and submit an integrated progress report to the e-ASIA JRP Secretariat on the status of the joint research.

V-2. Final Report

A final report shall be developed and submitted by the Lead PI to the e-ASIA JRP Secretariat within two months after the completion of the joint research period.

V-3. Others

All the researchers/research institutions organizing a consortium are strongly recommended to conclude a Collaborative Research Agreement (hereinafter referred to as "CRA") to assure optimal understanding and coordination among the collaborating scientists working on each project before project starts. CRA should, with due respect to the researchers' institutions and the Member Organizations' intellectual property and data handling policy, include the treatment of intellectual property rights, handling of confidential information, publication of research results, warranty and indemnification, and access to and transfer of the relevant materials. <u>Applicants shall refer to the Appendix for each Member Organization's requirement.</u>

VI. Contact information

Applicants should contact the following for information on each Member Organization's eligibility rules or support conditions:

Also please refer to the Appendix for information of each Member Organization.

Country: Member Organization	Contact Point
 (1) Indonesia: Ministry of Research and Technology/ National Research and Innovation Agency (RISTEK/BRIN) 	Ms. Anggun Amalia Fibriyanti/ Mr. Adhi Indra Hermanu Tel: +62-21-3169119 e-mail: <u>anggunamalia11@gmail.com/</u> <u>manoe@ristekdikti.go.id</u>
(2) Lao PDR: Ministry of Science and	Mr. Chittaphong ACHKHAVONG

Technology (MOST)	Tel: +85620 2239 9289
	E-mail: chittaphong66@yahoo.com
(3) Philippines: Department of	Mr. Reynaldo V. Ebora
Science and Technology –	Tel: +49 536-4990
Philippine Council for Agriculture,	E-mail: <u>r.ebora@pcaarrd.dost.gov.ph;</u>
Aquatic and Natural Resources	rvebora@gmail.com
Research and Development	
(DOST -PCAARRD)	
(4) Thailand: Agricultural Research	Ms. Somying Theeradech
Development Agency (ARDA)	Tel: 0-2579-7435 Ext. 3604
	E-mail: <u>somying@arda.or.th</u>

Applicants should contact the following for general inquiries:



Yoshihide Kobayashi (Mr.) e-ASIA JRP Secretariat / Japan Science and Technology Agency Room 218 Innovation Cluster1 Building National Science and Technology Development Agency (NSTDA) 111 Thailand Science Park, Phahonyothin Road Khlong Nueng, Khlong Luang, Pathum Thani 12120 THAILAND Tel: +66-2-564-7713 H/P: +66-61-421-0316 E-mail: easia_secretariat@jst.go.jp

e-ASIA Joint Research Program (the e-ASIA JRP) Research Cooperation in the field of "Agriculture" on the topics of "Functional Food and Native Chicken" 9th Joint Call for Proposals to be submitted by 23rd April 2020

Information about each Member Organization (alphabetical order by country)

1)	Indonesia: Ministry of Research and Technology/ Nasional Research and
	Innovation Agency (RISTEK/BRIN)
2)	Lao PDR: Ministry of Science and Technology (MOST) 15
3)	Philippines: Department of Science and Technology – Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST -PCAARRD)
4)	Thailand: Agricultural Research Development Agency (ARDA) 18

1) Indonesia: Ministry of Research and Technology/ Nasional Research and Innovation Agency (RISTEK/BRIN)

Indonesian researchers who seek new funds from RISTEK/BRIN need to apply for "International Collaboration (KLN)", RISTEK/BRIN's competitive funds. The Indonesian PI MUST be from Higher Education Institutions/University. Other research Institutions may join the project as Co PI. After the awardee list has been announced by the e-ASIA secretariat of the Joint Research Program (the e-ASIA JRP), Indonesia PI should contact RISTEK/BRIN for the proposal submission process.

RISTEK/BRIN requires the Indonesian Principal Investigator to meet conditions by Simlitabmas Guideline, with minimum requirements as follows:

- Applications only are accepted from PI in University. The Indonesian PI MUST be from Higher Education Institutions / University.
- Indonesian citizens and hold a permanent or fixed-term contract in an eligible university or research institute in Indonesia;
- Competent in oral and writing English skills;

The proposed budget submitted must be related to the Minister of Finance Regulation, for each unit/component have a maximum budget at year (standard of special cost and standard of input cost). The awardee selected proposed funding will be subject to assessment by RISTEK/BRIN reviewer. The amount of funds will be determined through the evaluation process by the reviewer assigned by RISTEK/BRIN

Personnel Costs

Costs for student research assistants can be covered if their work is related to the research project, by referring to the Regulation of the Minister of Finance of the Republic of Indonesia, specifically the "Standar Biaya Masukan (Standard of input cost)".

Mobility of Indonesian and foreign researcher and experts For Indonesian researcher to the country of research partner:

- Flight to and from destination: economy class flight
- Visa costs
- Transfer to and from the airport
- Daily allowance (the amount depends on the destination, check the standard of input cost)

- Insurance fees

For Foreign researcher:

Our research grant is restricted with Indonesian Financial regulation that limits the use for Indonesian researcher only.

Equipment

Indonesian grant could not be used for equipment.

Scientific events and project meetings in Indonesia or country of research partner

- Room rent
- Catering
- Other costs necessary for the implementation
- Publications
- Travel costs and accommodation for external experts based on the regulation above
- The costs for the event have to be requested by the project partner in the hosting country

Please adjust the simlitabmas guidelines as a reference for funding from Indonesia.

Contact Information

Ms. Anggun Amalia Fibriyanti/ Mr. Adhi Indra Hermanu Directorate Research and Community Engagement Ministry of Research and Technology / National Research and Innovation Agency (RISTEK/BRIN) Tel: +62-21-3169119 e-mail: anggunamalia11@gmail.com, manoe@ristekdikti.go.id

2) Lao PDR: Ministry of Science and Technology (MOST)

Ministry of Science and Technology is unable to fund Lao researchers; however MOST encourages Lao researchers contribute their work effort in-kind to the project. In the case Lao researchers requires certain support, he/she needs to consult with countries partners and with person in charge from MOST

Contact Information



Mr. Chittaphong ACHKHAVONG Deputy Director General of Planning and Cooperation Ministry of Science and Technology (MOST) Tel: +856 21 213470-132 Mobile: +85620 2239 9289 E-mail: chittaphong66@yahoo.com;

3) <u>Philippines: Department of Science and Technology – Philippine</u> <u>Council for Agriculture, Aquatic and Natural Resources Research and</u> <u>Development (DOST -PCAARRD)</u>

I. Review Procedures

Approval of proposals for research grants will be based on the following multi-level review process:

- 1. In-house screening in terms of alignment to the research priorities, duplication, and completeness of requirements.
- 2. Technical review by Experts' Pool based on the following criteria:
 - •Technical merit;
 - Data management;
 - Relevance/significance;
 - Marketability potential (for product-based proposals);
 - Feasibility (practicality, cost, time); and
 - Proponent's/Institution's capacity
- 3. Final approval by the PCAARRD Governing Council (GC) or the PCAARRD Directors' Council (DC) depending on the recommended total budgetary requirement of the proposal.
- 4. In each stage of the review process, the proponent may need to revise the proposal on the basis of the recommendations of the reviewers/evaluators. The review process will take 40 working days provided that all the requirements had been submitted.

II. Who may apply

Filipinos with at least a Master's Degree in a relevant field, have proven research competence/track record, and employed in universities **or** research agencies/institutes that are members of the PCAARRD National Agriculture, Aquatic and Natural Resources Research and Development Network (NAARRDN) or Regional R&D Consortia are eligible to apply for the research grant.

III. How to apply

The proponent should submit the following requirements using the DOST-GIA prescribed format/templates through <u>r.ebora@pcaarrd.dost.gov.ph</u>:

- 1. Detailed R&D Proposal (DOST Form 2A/2B)
- 2. Proposed Line-Item Budget (LIB) (DOST Form A)
- 3. Project Work Plan (DOST Form B)
- 4. Counterpart Funding of Implementing Agency
- 5. Endorsement of Agency Head
- 6. Curriculum Vitae of Proponent(s)

Letter of request should be addressed to:

MR. REYNALDO V. EBORA
Executive Director
Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD)
Department of Science and Technology (DOST)
Paseo de Valmayor, Timugan, Economic Garden, Los Baños, Laguna

The DOST forms are available at

http://www.pcaarrd.dost.gov.ph/home/portal/index.php/dost-forms

IV. Contact Information



Dr. Reynaldo V. Ebora Executive Director Department of Science and Technology (DOST) Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) Tel: +49 536-4990; 554-9670 E-mail: <u>rvebora@gmail.com</u>; <u>r.ebora@pcaarrd.dost.gov.ph</u>

4) Thailand: Agricultural Research Development Agency (ARDA)

I. Eligibility for Thai applicants

The applicants must be researchers and/or university professors/instructors who work in public research institute or university in Thailand, and are competent in conducting a research with international partners.

"ARDA will provide support only for the area of Functional Food and Native Chicken."

II. Support

The budget for a project may differ in each project and each year, depending on the content of activities.

III. Application

Thai applicants should submit a national proposal to ARDA through ARDA system (NRMS:http//nrms.go.th) no later than 23.59 (Thai time) 17 April 2020.

IV. Evaluation of Project Proposals

Proposals will be peer-reviewed, and evaluated by a committee according to ARDA internal rules and procedures. The final selection will be done by the international selection committee of e-ASIA.

IV.I Evaluation Criteria

To be funded, proposals must be internationally competitive. It should lead to the advancement of the research field, or novel applications or increase of research capacity.

Key evaluation criteria are:

- Significance and impact of the research
- Scientific Rationale: novelty, importance and timeliness of the research
- Design and feasibility of the project plan

- Partnership: including strength and clarity of collaborations and opportunities provided, quality of the project management structure proposed;
- Quality and suitability of the research environment and of the facilities;
- Ethical considerations and governance arrangements

V. Reporting

- Thailand PI should submit a progress report on the status of joint research according to ARDA's funding procedures.
- After completion of the period of joint research, the Thailand PI shall submit within two months a final report on the results of the joint research to ARDA.

Contact Information



Ms.Somying Theeradech Director Office of ARDA Executive Director Agriculture Research Development Agency (ARDA) Tel: 0-2579-7435 Ext. 3604

General inquiries



Yoshihide Kobayashi (Mr.) e-ASIA JRP Secretariat / Japan Science and Technology Agency Room 218 Innovation Cluster1 Building National Science and Technology Development Agency (NSTDA) 111 Thailand Science Park, Phahonyothin Road Khlong Nueng, Khlong Luang, Pathum Thani 12120 THAILAND Tel: +66-2-564-7713 H/P: +66-61-421-0316 E-mail: easia_secretariat@jst.go.jp