

e-ASIA Joint Research Program (the e-ASIA JRP)
Research Cooperation in the field of
‘Agriculture (Food)’
on the topic of ‘Climate-Smart Food Production’
13th Joint Call for Proposals to be submitted by 29 March 2024

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 Member Organizations of the e-ASIA JRP listed below have agreed to implement a joint call for proposals of multilateral cooperative research activities.

Participating Member Organizations (listed in alphabetical order)

- 1) Cambodia: Ministry of Industry, Science, Technology and Innovation (MISTI)
- 2) Indonesia: National Research and Innovation Agency (BRIN)
- 3) Japan: Japan Science and Technology Agency (JST)
- 4) Myanmar: Ministry of Science and Technology (MOST)
- 5) Philippines: Department of Science and Technology (DOST-PCAARRD)
- 6) Thailand: National Research Council of Thailand (NRCT)

There are some additional requirements to fulfil the eligibility for the following organizations, please refer to below table:

Member Organizations	Eligibility/Additional requirements
(1) Indonesia: National Research and Innovation Agency (BRIN)	<ul style="list-style-type: none"> • Principal Investigator (PI) is an Indonesian citizen, a BRIN or non-BRIN researcher (university or other research institution, either from a business entity or community organization in Indonesia), civil servants or non-civil servants who has a doctoral education qualification and competency in conducting research with international partners. • One team member could only be participated maximum in 2 proposals (1 proposal as Principal Investigator and 1 proposal as member, or as member in both proposals).

Member Organizations	Eligibility/Additional requirements
	<ul style="list-style-type: none"> • The proposal must be written in English and submitted to Directorate of Research and Innovation Funding BRIN by email to dana-risnov@brin.go.id (Subject email: CFP13-eASIA-Topic-Name of PI-Institution of PI) and using the provided template. • Application submission and correspondence may send by email to dana-risnov@brin.go.id. The deadline for submitting your proposal is March 8th, 2024. You do not need to submit a proposal if you are merely a team member and not the Lead PI. Detail application process, links to guidance/ policy materials can be seen here https://pendanaan-risnov.brin.go.id
(2) Japan: Japan Science and Technology Agency (JST)	<ul style="list-style-type: none"> • Any independent researcher personally affiliated with and actively conducting research at a domestic Japanese research institution (or who will fulfil this requirement by the start of the research project), regardless of nationality, is eligible to apply as a Principal Investigator. JST can accept applications from Japanese researchers for which the proposals are with researchers from Cambodia, Indonesia, the Philippines or Thailand. • In addition to the common Application Forms in English (Form 1E-9E), Japan based applicants are required to complete and submit additional application forms in Japanese (Form 1J and 2J) to JST by “e-Rad” (https://www.e-rad.go.jp/index.html) before 14:00 (Japan Standard Time)

Member Organizations	Eligibility/Additional requirements
	29th March 2024.
(3) Myanmar: Ministry of Science and Technology (MOST)	<ul style="list-style-type: none"> The applicants must be Researchers and /or University Professor/Instructors who work in Public and Private Institute or University in Myanmar, and are competent in conducting a Research with International Partners.
(4) Philippines: Department of Science and Technology (DOST-PCAARRD)	<ul style="list-style-type: none"> 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 DOST-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. Interested parties should submit their proposals, using the DOST-GIA-prescribed proposal templates, through the DOST e-Proposal Portal (http://dpmis.dost.gov.ph) on or before 29 March 2024; 17:00 (Philippine Standard Time).
(5) Thailand: National Research Council of Thailand (NRCT)	<ul style="list-style-type: none"> Eligible for Thai nationality only. 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 research with international partners. Thai applicants who are interested to be granted by NRCT must submit a national proposal to NRCT through NRCT system (NRIIS: https://nriis.go.th) no later than 16.30 (Thai time) 26 March 2024.

Member Organizations	Eligibility/Additional requirements
	<ul style="list-style-type: none"> • Thai PI need to prepare proposal in Thai language due to the internal process of NRCT to register the project. • <u>NRCT will not accept the proposal if the applicants fail to submit to NRCT system (NRIIS) and/or e-ASIA JRP Secretariat.</u>

*****It is very important to read call guidelines carefully. It may affect the eligibility of the whole research team. Please see Appendix for more information on Eligibility/Additional requirements.*****

I. Aim of Joint Call and Research Area

According to the Food and Agriculture Organization of the United Nations (FAO), Climate-Smart Agriculture (CSA) is an approach that helps guide actions to transform agri-food systems towards green and climate resilient practices. It aims to tackle three main objectives: sustainably increasing agricultural productivity and incomes; adapting and building resilience to climate change; and reducing and/or removing greenhouse gas emissions, where possible. Collaborative project could benefit the participating countries through the exchange of potential CSA technologies and investigation or validation on the field and evaluation in terms of the three CSA objectives; and determine how tradeoffs among these objectives can be managed. CSA also has strong potential to contribute to the achievement of the Sustainable Development Goals.

The Asia region, where paddy field farming is prevalent, is contributing to the emissions of about 44% of the greenhouse gas from the world agricultural field and needs more improvement.

There are countless climate change adaptation and mitigation options that can sustainably improve yields and minimize the harmful environmental impacts of production. Management practices and technologies for climate change adaptation and mitigation include practices with an explicit focus on adaptation and practices with a broader scope on reducing production risks and reducing emissions. Specific climate-smart approaches to crop production include increasing diversity and complexity within the agricultural ecosystem, which can be done in many ways (e.g. expanding the diversity of crops or crop varieties), at many spatial scales (e.g. within farms, and/or within the same crop) and over

different timeframes; increasing energy use efficiency; promoting sustainable mechanization (e.g. proper agronomic management to reduce greenhouse gas emissions from various farm and processing operations); developing simple and robust scientific tools to guide the decision-making of farmers on a seasonal and long-term basis.

These issues can be addressed by digital technologies. Utilizing ICT (including AI) to collect and analyze data from the practices and the surrounding environment enables inexperienced food producers to implement such intangible techniques. It can contribute to nurturing new farmers in the region. These technologies are expected to bring a huge change to the future of sustainable food production.

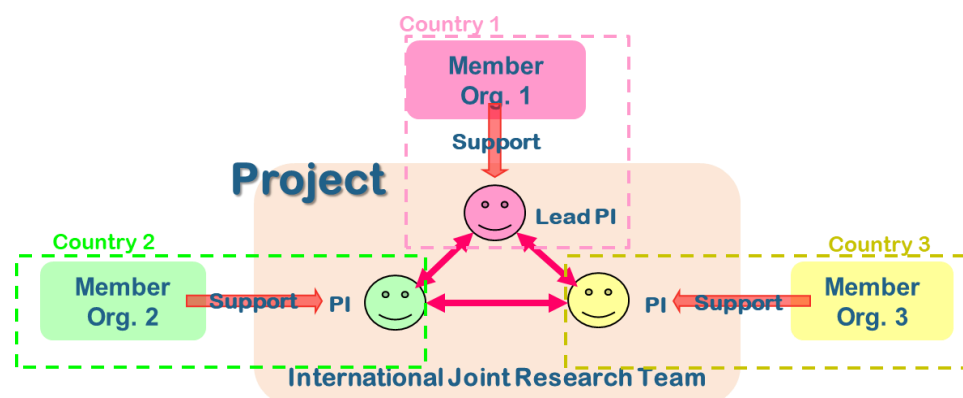
Possible research topics include, but are not limited to:

- Innovative sensing, data acquisition and analytical methods of soil, water, meteorology, crop, weed, disease, pest
- Design pest and disease outbreak warning systems and applications for plant disease diagnosis by using image analysis and AI
- AI and GPS, Unmanned Aerial Vehicle (UAV) and other automation technologies for integrated sustainable management at the field, harvest, post-harvest, transportation and packing
- Development of a track and trace system (inspection and certification system) for real-time monitoring of crops and foods including the field management conditions
- Educational materials on ICT for farmers for quality management and support shifting from small to large scale farms (personalized to regional or corporate farming), such as creating concepts and manuals (website, videos) and nurturing potential farmers (know-how sharing from experienced farmer to public)
- Development of an integrated agriculture data platform, a centralized data platform containing agricultural data and services
- Social Economic Analysis on climate-smart food production including new technologies financing

II. Support/ Funding Modality

In principle, each Member Organization will support its own country's researchers in research projects selected for funding through this joint call with the type of

support available as defined under “Funding Modality” in the 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 should carefully consider information included in the Appendix for each Member Organization’s rules and regulations.



Participating Member Organizations and Funding Modality

Participating Member Organizations	Funding Modality
(1) Cambodia: Ministry of Industry, Science, Technology and Innovation (MISTI)	In-kind
(2) Indonesia: National Research and Innovation Agency (BRIN)	New, In-kind
(3) Japan: Japan Science and Technology Agency (JST)	New
(4) Myanmar: Ministry of Science and Technology (MOST)	In-kind
(5) Philippines: Department of Science and Technology (DOST-PCAARRD)	New
(6) Thailand: National Research Council of Thailand (NRCT)	New

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

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

In-kind: Each Member Organization 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. 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.

II. 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 consist of at least three eligible research teams 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 the home country of one of the Member Organizations participating 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

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

Deadline for Submission:
17:00 (Thai Standard Time, UTC+7) 29 March 2024

Please submit the proposal to:



Yukio Kemmochi, PhD. (Mr)
e-ASIA JRP Secretariat
E-mail: easia_secretariat@jst.go.jp

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.

< Important Notice to ALL PIs >

Make sure to submit all necessary application documents requested by each Member Organization of your country, in addition to the application to the e-ASIA JRP Secretariat (submitted by Lead PI only), because each Member Organization may request applicants of its country to submit another form of proposals with another deadline date. Proposals shall satisfy both common requirements written in this call guideline and individual requirements requested by each Member Organization. A research team that does not satisfy individual requirements of the Member Organization of your country will not be deemed as eligible research team.

For individual requirements by 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. PIs shall refer to the Appendix 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 respective Member Organization.

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 2024)

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. Applicants shall refer to the Appendix for each

Member Organization's requirement.**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) Cambodia: Ministry of Industry, Science, Technology and Innovation (MISTI)	Ms. SDOK Soksreymeng Director E-mail: sdok.soksreymeng@misti.gov.kh Mr. POK Piseth Deputy Director E-mail: pok.piseth@misti.gov.kh
(2) Indonesia: National Research and Innovation Agency (BRIN)	Dr. Ajeng Arum Sari Director of Research and Innovation Funding, National Research and Innovation Agency Phone: +62 811-1064-6771 E-mail: dana-risnov@brin.go.id
(3) Japan: Japan Science and Technology Agency (JST)	Ms. Wakana Yamanaka, Dr. Takumi Katsumata Tel: +81(0)3-5214-7375 Fax: +81(0)3-5214-7379 E-mail: easiajrp@jst.go.jp
(4) Myanmar: Ministry of Science and Technology (MOST)	Dr. Cho Cho Lwin Director of Department of Research and Innovation Tel: +95-9-884235932 H/P: +95-95135609
(5) Philippines: Department of Science and Technology (DOST-PCAARRD)	Dr. Reynaldo V. Eborá Executive Director Tel: +6349-536-4990; +6349-554-9670 E-mail: r.eborá@pcaarrd.dost.gov.ph , cc: oed-rd@pcaarrd.dost.gov.ph
(6) Thailand: National Research Council of Thailand (NRCT)	Miss Supapich Nunart International Relations Officer

	Tel: +66 2 561 2445 ext. 212 E-mail: supapich.n@nrct.go.th
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Applicants should contact the following for general inquiries:



Yukio Kemmochi, PhD. (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
E-mail: easia_secretariat@jst.go.jp

**e-ASIA Joint Research Program (the e-ASIA JRP)
Research Cooperation in the field of
'Agriculture (Food)'
on the topic of 'Climate-Smart Food Production'
13th Joint Call for Proposals to be submitted by 29 March 2024**

Information about each Member Organization (alphabetical order by country)

- 1) Cambodia: Ministry of Industry, Science, Technology and Innovation (MISTI)
- 2) Indonesia: National Research and Innovation Agency (BRIN)
- 3) Japan: Japan Science and Technology Agency (JST)
- 4) Myanmar: Ministry of Science and Technology (MOST)
- 5) Philippines: Department of Science and Technology (DOST-PCAARRD)
- 6) Thailand: National Research Council of Thailand (NRCT)

1) Cambodia: Ministry of Industry, Science, Technology and Innovation (MISTI)

Cambodian researchers can participate in research projects only on an "In-kind" basis, as there will be no new or additional support available from the MISTI of Cambodia.

Please consult the person in charge directly.

Contact Information



Department of Technology Research and Development

Ms. SDOK Soksreymeng

Director

E-mail: sdok.soksreymeng@misti.gov.kh

Mr. POK Piseth

Deputy Director

E-mail: pok.piseth@misti.gov.kh

2) Indonesia: National Research and Innovation Agency (BRIN)

BRIN is supporting the following topics Agriculture (Food):

Subtopic 1: Development of good seeds that are resistant to climate change through phenotyping (DNA).

Subtopic 2: Automation technology for sustainable and integrated land, harvest, and post-harvest management.

Subtopic 3: Socio-Economic Analysis and its Application to Climate-Smart Food Production in the Global Market.

The following funding modalities will be supported:

- New
- In-kind

I. Eligibility for Indonesian Applicants

- Principal Investigator (PI) is an Indonesian citizen, a BRIN or non-BRIN researcher (university or other research institution, either from a business entity or community organization in Indonesia), civil servants or non-civil servants who has a doctoral education qualification and competency in conducting research with international partners;
- Team members may come from across institutions, universities, and/or other research institutions from business entities or independent research institutions;
- Both Principal Investigator and research team members have an experience and expertise relevant to the proposed research and proven by evidence of a track record (portfolio) of research activities;
- One team member could only be participated maximum in 2 proposals (1 proposal as Principal Investigator and 1 proposal as member, or as member in both proposals).

II. Support

BRIN will support up to 5 applications. Research funding can be implemented for a maximum period of 3 (three) years based on the results of evaluations each year with a maximum amount of IDR 1,000,000,000 per project/year (including researcher mobility and infrastructure sharing).

List country specific eligible costs:

- Purchase/procurement of chemicals/consumables such as raw materials or production components;
- Honorarium for field workers;
- Domestic travel, directly related to the research activities;
- Indonesian grant could not be used for equipment;
- Mobility of Indonesian and foreign researchers and experts refers to the BRIN researcher mobility scheme (post-doctoral and/or visiting researcher). The Researcher Mobility Scheme is restricted to BRIN researchers only. For Indonesian researchers who will use the Researcher Mobility Scheme, they must engage the BRIN research group.

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

III. How to Apply

The proposal must be written in English and submitted to Directorate of Research and Innovation Funding BRIN by email to dana-risnov@brin.go.id (Subject email: CFP13-eASIA-Topic-Name of PI-Institution of PI) and using the provided template. All documents must be complete and original. The awardee selected proposed funding will be subject to assessment by BRIN reviewer. The amount of funds will be determined through the evaluation process by the reviewer assigned by BRIN. Shortlisted participants would be invited to give presentations if needed.

Application submission and correspondences may send by email to dana-risnov@brin.go.id. The deadline for submitting your proposal is March 8th, 2024. You do not need to submit a proposal if you are merely a team member and not the Lead PI.

Additional application materials are required to be submitted directly to BRIN (email to: dana-risnov@brin.go.id) after the awardee list has been announced by the e-ASIA Secretariat of the Joint Research Program (the e-ASIA JRP).

Detail application process, links to guidance/policy materials can be seen here <https://pendanaan-risnov.brin.go.id>.

IV. Evaluation

Once BRIN has approved the proposal, PI must submit it to the e-ASIA Secretariat for assessment and evaluation based on the general evaluation criteria of the e-ASIA JRP. Applications submitted to the e-ASIA Secretariat will be reviewed according to the published e-ASIA JRP evaluation process and criteria.

V. Reporting

- The Indonesian PI shall promptly submit a progress report on the status of joint research to BRIN, in accordance to the second term disbursement.
- After completion of the period of joint research, the Indonesian PI shall submit within a month a final report on the results of the joint research to BRIN.

Ethical Clearance and Foreign Research Permit

Researchers and Foreign Parties have to obtain a research permit. To obtain a research permit, Researchers and Foreign Parties must apply for Research Ethical Clearance and foreign research permit request. This application is done through the Research Ethical Clearance information system (<https://klirensetik.brin.go.id/>)

Material Transfer Agreement

Awardee agree that any tangible research materials required to be taken from the Republic of Indonesia for research purposes of the approved collaborative project shall be transferred through a Material Transfer Agreement (MTA) between concerned research organizations in strict compliance with the legislation of the Republic of Indonesia.

Intellectual Property

In the event of joint research cooperation, it is the responsibility of the respective member of the collaborating project partners to determine in advance how any exploited IP will be divided amongst the partners in accordance with the prevailing laws and regulations of the respective countries of the institutions Participants and the institutions' policies and procedures. Details of this agreement shall be included in the collaborative agreement.

Genetic Resources and Traditional Knowledge

1. The Parties recognize the importance of the protection of genetic resources and traditional knowledge associated with genetic resources (hereinafter referred to as the “GRTK”). Awardee to carry out any research activities in accordance with the provisions of International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) FAO, the Convention on Biological Diversity (CBD) and other international agreements, particularly taking into account the principle of prior informed consent and of fair and equitable benefit sharing.
2. Details regarding the management of GRTK shall be included in the Collaborative Agreement of any collaborative projects.

Data and Material Management

Data and information resulting from the research activities shall be submitted and stored at the Indonesian national repository (Repositori Ilmiah Nasional) through the page <https://rin.brin.go.id/> in accordance with applicable laws and regulations;

Material or specimens resulted from the research activities must be lodged with the BRIN cq. Directorate of Scientific Collection Management.

VI. Contact Information

Dr. Ajeng Arum Sari

Director of Research and Innovation Funding

National Research and Innovation Agency

Phone: +62 811-1064-6771

E-mail: dana-risnov@brin.go.id

3) Japan: Japan Science and Technology Agency (JST)

<IMPORTANT>

Japan-based applicants must complete all the requirements designated by JST. Information on additional requirements applied to Japan-based applicants are available at the official domestic call announcement on the JST website.

https://www.jst.go.jp/inter/program/announce/announce_easia_jrp_13th.html

(in Japanese only)

JST is supporting the following topics: 'Agriculture (Food)' on the topic of 'Climate-Smart Food Production'

JST can support a maximum of three (3) applications. The following funding modalities will be supported:

- New

JST can accept applications from Japanese researchers for which the proposals are with researchers from Cambodia, Indonesia, the Philippines or Thailand.

I Eligibility

1. Any independent researcher personally affiliated with and actively conducting research at a domestic Japanese research institution (or who will fulfil this requirement by the start of the research project), regardless of nationality, is eligible to apply as a Principal Investigator.

Note: "Domestic Japanese research institution" in Japan refers to universities, independent administrative institutions, national/public testing and research institutions, specially authorized corporations, public service corporations and enterprises, etc. that must satisfy predetermined requirements designated by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). Please refer to the MEXT homepage for more information:

https://www.mext.go.jp/a_menu/kansa/houkoku/1324571.htm (in Japanese only).

Japan-based researchers from industry are also eligible to apply as a Principal Investigator in the joint research project in the Japan-based team.

2. Early career researchers who completed his/her doctorate in the last 10 years are strongly encouraged to apply.

II Support

II-1. Funding Modality

JST will support up to 3 application(s), with a maximum budget of 27 million Japanese Yen as direct cost for 36 months. The overhead cost of 30% of direct cost will be added separately. The budget for a project may differ each year, depending on the content of activities. The amounts will be adjusted each year due to the budgetary limitations for this program.

II-2. Expenditure/costs eligible for funding

This program is designed to support expenses related to cooperation by a Japan based researcher with their counterparts, such as expenses for travel and/or conducting seminars/symposia. Funding provided within this call is intended to enhance the capacity of the applicants to collaborate. Funding will therefore be provided mainly in support of collaborative activities but may also cover some of the local research costs that are necessary for the collaboration. In principle, eligible direct costs are those costs directly necessary for accomplishing the research, indicated below. Please refer to the guidance documents available at the following link for further details of eligible direct costs:

<https://www.jst.go.jp/inter/research/contract/contract.html> (in Japanese only).

1. Eligible Direct Costs:

- i) Facilities, Equipment and Consumables: costs of research equipment, spare parts, prototypes.
- ii) Travel Costs: travel costs and associated living expenses of the project members registered in the project plan, and travel costs of inviting external experts.
- iii) Salaries and Honoraria: salaries of the researchers, temporary staff, PhD students, post-docs, etc., who are hired for the research, and other costs such as honoraria for invited lecturers.
- iv) Others: costs for organizing meetings in Japan including rental costs for the venue, food & beverage (excluding alcohol) costs and other costs which are deemed to be necessary for organizing the event. Expenses for creating software, renting or leasing equipment, transporting equipment, etc.

2. Overhead cost shall be 30% of direct costs.

Note: Please refer to the following link for the provisions regarding indirect costs: https://www8.cao.go.jp/cstp/compefund/kansetsu_sikkou.pdf (in Japanese only).

II-3. Payments

Payments will be made according to a contract for commissioned research entered into between JST and a "Domestic Japanese Research Institution". The

contract for commissioned research will be renewed each year over the cooperative research period. Since the contract is agreed on condition that all administrative procedures related to this project will be handled within the institution, the PI should consult with the department in charge at his/her institution.

III **How to Apply**

Applicants of each Japan-based team are required to complete necessary submission as specified below.

III -1. Submission of Application Forms (Form 1E-9E) (from the Lead PI)

Proposals must be submitted by e-mail to the e-ASIA JRP Secretariat.

III -2. Additional Application Forms (For Japan-based applicants only)

In addition to the common Application Forms in English (Form 1E-9E),

Japan based applicants are required to complete and submit additional application forms in Japanese (Form 1J and 2J) to JST by “e-Rad”

(<https://www.e-rad.go.jp/index.html>).

Form 1J and 2J are available from the JST website:

https://www.jst.go.jp/inter/program/announce/announce_easia_jrp_13th.html

(in Japanese only)

The deadline for the “e-Rad” submission: 14:00 (Japan Standard Time) 29th March 2024

IV **Evaluation**

Independent Committees consisting of experts will evaluate all proposals. Based on the results of the evaluation, a common decision will be decided jointly among Member Organizations participating in the call regarding funding of the selected proposals.

IV-1. Evaluation Criteria

The following evaluation criteria, incorporated with the e-ASIA JRP evaluation criteria

(see IV-2. Evaluation Criteria in the Call Guideline), will apply to each application:

i) Conformity with Program Aims and Designated Research Fields

The proposed activity shall conform to the aims of the program and the research fields that the program designates. In addition, the applicants shall already have a good research foundation for their proposed activity.

ii) Capability of Principal Investigators

The principal investigators of collaborating countries shall have the insight or experience for pursuing the activity and the ability to manage the cooperation and reach the project goals during this program's period of support. The call aims to take into account the potential of early career researchers who have completed their doctorate in the last 10 years in this role.

iii) Effectiveness and Synergy of Cooperative Research Project

The proposed research activity shall be eminent, creative and at an internationally high level in an attempt to produce a significant impact on the development of future science and technology or to solve global and regional common issues or to create innovative technological seeds that can contribute to the creation of new industries in the future. Moreover, proposed research activities that can be expected to create synergy through collaborative research with the counterpart institution will be preferred. Such synergy could be attained through, for example, the acquisition and/or application of knowledge, skill and/or know-how of the counterpart researcher.

iv) Validity of Research Plan

The sharing of research activities with the counterpart research institution and the planning of research expenses shall be adequate to realize the proposed research activity.

v) Effectiveness and Continuity of Exchange

Activities characterized by the following examples shall be involved to enhance sustainable research exchange and networking.

Nurturing of researchers through human resource exchange.

Sustainable development of research exchange with the counterpart countries initiated by this activity.

Enhancing the research network between collaborating countries including researchers other than the research leader and members of this activity.

Improving the presence of science and technology in Japan and the counterpart country.

vi) Validity of Exchange Plan

The planning of exchange activities and their expenses with the counterpart research institute shall be adequate to realize the proposed research activity.

VI **Reporting**

VI -1. Progress report to JST

At the end of each fiscal year, the PI of the Japan-based team shall promptly submit an annual progress report on the status of research exchange, and the institution with which the PI is affiliated shall promptly submit a financial report on research expenses to JST.

VI -2. Final report to JST

After completion of the period of joint research, the Japan-based team's PI shall submit within two months a final report on the results of the joint research. The final report shall include a general summary compiled jointly by all members of the Japan-based research group. The institution with which the PI is affiliated shall submit a financial report on research expenses within the same time frame.

VII **Contact Information**



Ms. Wakana Yamanaka, Dr. Takumi Katsumata

Department of International Affairs, Japan Science and Technology Agency (JST)

Tel: +81(0)3-5214-7375 Fax: +81(0)3-5214-7379

E-mail: easiajrp@jst.go.jp

5) Myanmar: Ministry of Science and Technology (MOST)

I. Funding modality

The following funding modalities will be supported:

➤ In-Kind

II. Eligibility

➤ The applicants must be Researchers and /or University Professor/Instructors who work in Public and Private Institute or University in Myanmar, and are competent in conducting a Research with International Partners.

III. Contact point



Dr. Cho Cho Lwin
Director
International Relation and Technical Cooperation
Division
Department of Research and Innovation

Ministry of Science and Technology, Myanmar
No.6, Kabar Aye Pagoda Road, Yankin Township, Yangon, Myanmar
Tel: +95-9-884235932 H/P: +95-95135609

Foreign Relation Department
Ministry of Science and Technology
Office Number (21), Naypyitaw, Myanmar

6) Philippines: Department of Science and Technology (DOST-PCAARRD)

DOST-PCAARRD is supporting the following topics:

‘Agriculture (Food)’ on the topic of ‘Climate-Smart Food Production’

- Innovative sensing, data acquisition and analytical methods of soil, water, meteorology, crop, weed, disease, pest
- Design pest and disease outbreak warning systems and applications for plant disease diagnosis by using image analysis and AI
- AI and GPS, Unmanned Aerial Vehicle (UAV) and other automation technologies for integrated sustainable management at the field, harvest, post-harvest, transportation and packing
- Development of a track and trace system (inspection and certification system) for real-time monitoring of crops and foods including the field management conditions
- Development of an integrated agriculture data platform, a centralized data platform containing agricultural data and services

DOST-PCAARRD can support a maximum of one (1) application. The following funding modalities will be supported:

- New

I. 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 DOST-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.

II. Support

DOST-PCAARRD will support up to one (1) application, with a maximum budget of P10 million for one (1) research project with maximum duration of three (3) years. The DOST-Grants-in-Aid Guidelines shall be applied.

III. How to Apply

Interested parties should submit their proposals, using the DOST-GIA-prescribed proposal templates, through the DOST e-Proposal Portal (<http://dpmis.dost.gov.ph>) **on or before 29 March 2024; 17:00** (Philippine Standard Time).

Note: Applications with incomplete documents will not be accepted.

IV. Review of proposals

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 DOST-Executive Committee (EXECOM); and
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.

V. Timeline

<u>Deadline of Proposal Submission:</u> (Both to e-ASIA and DOST/PCAARRD)	<u>March 29, 2024</u>
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<u>DOST-PCAARRD's Technical Review of Proposals: (Directors' Council (DC), Governing Council (GC), and DOST EXECOM)</u>	<u>April 29 to July 29, 2024</u>
<u>Start of Implementation</u>	<u>January to March 2025</u>

VI. Reporting

Semi-annual and annual technical and financial reports will be required in compliance with DOST-GIA guidelines. The final reports must be submitted within 90 calendar days after the completion of the period of performance. Required forms are downloadable from the DOST-PCAARRD website and may be provided by the DOST-PCAARRD to accepted applications.

VII. Contact Information



Dr. Reynaldo V. Eborá

Executive Director

Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD)

Department of Science and Technology (DOST)

Tel: +6349-536-4990; +6349-554-9670

e-Mail: r.ebora@pcaarrd.dost.gov.ph, cc: oed-rd@pcaarrd.dost.gov.ph

7) Thailand: National Research Council of Thailand (NRCT)

NRCT is supporting the following topics: Climate-Smart Food Production, with particular interest in:

- Innovative sensing, data acquisition and analytical methods of soil, water, meteorology, crop, weed, disease, pest
- Design pest and disease outbreak warning systems and applications for plant disease diagnosis by using image analysis and AI
- AI and GPS, Unmanned Aerial Vehicle (UAV) and other automation technologies for integrated sustainable management at the field, harvest, post-harvest, transportation and packing

NRCT can support a maximum of 2 applications. The following funding modalities will be supported:

- New

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 research with international partners.

II. Support

The total budget for the Thai researcher over a full 3-year period is up to 3,000,000 THB per project. The budget for a project may differ each year, depending on the content of activities.

III. How to Apply

1. Thai applicants who are interested to be granted by NRCT must submit a national proposal to NRCT through NRCT system (NRIIS: <https://nriis.go.th>) no later than 16.30 (Thai time) 26 March 2024.

Note:

Thai PI need to prepare proposal in Thai language due to the internal process of NRCT to register the project.

2. Lead PI must also submit proposal by e-mail to the e-ASIA JRP Secretariat no later than 17:00 (Thai Standard Time, UTC+7) 29 March 2024.

***NRCT will not accept the proposal if the applicants fail to submit to NRCT system (NRIIS) and/or e-ASIA JRP Secretariat.

IV. Evaluation

1. Project must consist of Thai research team collaborating with research teams seeking support from a minimum of two e-ASIA member organisations participated in this call topic.
2. Lead PI or PI from at least one of the following participating member organisations must be included:
 - Cambodia
 - Indonesia
 - Japan
 - Philippines
3. Proposals will be peer-reviewed, and evaluated by a committee according to NRCT internal rules and procedures. The final selection will be done at the joint panel meeting among the participating Member Organizations, followed by approval at the e-ASIA JRP Board Meeting

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, research impact and research utilization;

Note:

1. Based on research utilization, NRCT requires that application have to clearly identify or include Thai stakeholders who can positively or negatively impact the output of the project.
2. Thai PI have to deliver research result that benefit to those stakeholders in community-society or commercial sector at the completion of each year project.

- 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

1. Thailand PI should submit a progress report on the status of joint research according to NRCT's funding procedures aligned to NRCT regulation.
2. A final report on the results of the joint research period shall be submitted by the Thailand PI to NRCT within two months after the completion of the joint research period.

VI. Contact Information



Miss Supapich Nunart
International Relations Officer
Group of International Affairs
National Research Council of Thailand
Tel: +66 2 561 2445 ext. 212
E-mail: supapich.n@nrct.go.th

General inquiries



Yukio Kemmochi, PhD. (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

E-mail: easia_secretariat@jst.go.jp