

#### **Funding opportunity**

# Sustainable and Resilient Aquaculture Systems in Southeast Asia

Opportunity status:	Open
Funders:	Biotechnology and Biological Sciences Research Council (BBSRC), Natural Environment Research Council (NERC)
Funding type:	Grant
Total fund:	£12,000,000
Award range:	£2,500,000 - £3,000,000
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Closing date:	9 May 2024 4:00pm UK time

Last updated: 19 January 2024 - see all updates

Apply for funding to undertake interdisciplinary research for the development of sustainable, resilient and productive aquaculture in Southeast (SE) Asia.

You must be based at a UK research organisation eligible for BBSRC funding.

Projects must include project co-leads (international) in the eligible country or countries (Indonesia, Malaysia, Philippines, Thailand and Vietnam), take a systems-approach to addressing challenges and be co-created with local partners and end-users.

A total of £12 million is available to fund four projects. UK Research and Innovation (UKRI) will fund £2.5 million to £3 million (cost to BBSRC) per

project.

This funding opportunity is being supported by a webinar. See 'Additional info' for more details.

# Who can apply

Before applying for funding, check the **Eligibility of your organisation**.

UKRI has introduced new role types for funding opportunities being run on the new UKRI Funding Service.

For full details, visit **Eligibility as an individual**.

All applications must meet all the **BBSRC eligibility criteria**.

Projects are required to:

- have a project lead (PL) based in a UK research organisation eligible for UKRI funding. All projects should include significant bioscience and natural science research components, and PL's primary disciplinary expertise should be in BBSRC or NERC remit
- have at least one project co-lead (international) (PcL (I)) based in Indonesia, Malaysia, Philippines, Thailand or Vietnam (as appropriate to the project's beneficiary country or countries)

## Who is not eligible to apply

PLs not based in a UK research organisation eligible for UKRI funding.

## International applicants

PLs from non-UK organisations are not eligible to apply for this funding opportunity. PcL (I)'s based in Indonesia, Malaysia, Philippines, Thailand or Vietnam (as appropriate to the project's beneficiary country or countries) are required for this funding opportunity and can receive funding for direct costs and some indirect costs. PcL (I)'s should be employed by an organisation of equivalence to a UK higher education institution.

International collaborators outside of the eligible SE Asian countries listed above, or from government, industry or civil society organisations are not eligible to receive funding and should be included as project partners only. If a collaborating individual or organisation is integral to the design and delivery of the project and is contributing to the project through financial or in-kind

contributions (for example, staff time, access to facilities, data, sites) then they should be included as a project partner.

# Equality, diversity and inclusion

We are committed to achieving equality of opportunity for all funding applicants. We encourage applications from a diverse range of researchers.

We support people to work in a way that suits their personal circumstances. This includes:

- career breaks
- support for people with caring responsibilities
- flexible working
- alternative working patterns

Find out more about equality, diversity and inclusion at UKRI.

# What we're looking for

#### Aim

This funding opportunity aims to enhance research and innovation capacity and capability that is driven by local needs in SE Asia to meet sustainable, resilient and productive aquaculture system challenges. Projects should specifically aim to promote economic development and welfare with tangible benefits to one or more of the eligible SE Asia beneficiary countries for this programme (Indonesia, Malaysia, Philippines, Thailand and Vietnam). Projects must clearly meet the criteria for Official Development Assistance (ODA) compliance.

Projects should contribute to sustainable, resilient and productive aquaculture systems which enhance food and nutrition security, the natural environment and climate, local community wellbeing, livelihoods and economic development, and that specifically adapt and build aquaculture systems that:

- are resilient to climate change and environmental variability, and that also protect and enhance the natural environment while improving the lives of local communities
- reduce losses of production due to disease while improving animal health and welfare, human health and wellbeing, plant health and the aquatic environment

# **Objectives**

This funding opportunity will meet the aims by supporting interdisciplinary research that:

- uses biosciences and natural sciences, along with collaborations across other Research Council remits and disciplines as appropriate, using diverse sources of knowledge in a systems-approach, to address challenges and opportunities for sustainable, resilient and productive aquaculture systems
- is driven by local needs and delivers tangible impact in SE Asia through equitable partnerships
- co-creates research needs and solutions with end-users, as appropriate to the project for example with industry, civil society organisations and local communities, local or national government, helping to inform and raise awareness of challenges, opportunities and solutions, and informing for policy and practice
- increases interdisciplinary research capacity and capability in SE Asia
- promotes connections between stakeholders in SE Asia and the UK

## Scope

Global demand for food is rising due to population growth and increased animal-source consumption associated with increasing affluence and urbanisation. Additionally, the current food system is facing strain from the impacts of climate change and must adopt practises to lower its emissions and impact on the environment, with a global need for sustainable protein sources. Land based agriculture alone cannot provide the nutrition required to maintain the global population within climate and biodiversity targets, therefore aquatic organisms and resources will play an increasingly important role in global food and nutrition security.

Currently, around 90% of the global fish stocks monitored by the United Nations Food and Agriculture Organisation are fully fished or overexploited. Therefore aquaculture, the controlled farming of aquatic organisms, presents a method by which to reduce the dependence on wild fisheries, which in turn will reduce ecosystem collapse and biodiversity loss. Taken together, these factors highlight the need for sustainable and resilient aquaculture and its role in addressing sustainability goals, biodiversity conservation, and food and nutrition security challenges, as well as enabling transition to food systems that are sustainable and will help to mitigate and adapt to climate change.

SE Asia is responsible for around 22% of world aquaculture production, supporting food and nutrition security both in the region and the wider world. Considerable challenges remain in the pursuit of sustainable aquaculture, with significant pollution of aquatic environments and pressure on coastal planning in the face of increased demand both associated with aquaculture. A better understanding is also required on how to improve animal health and welfare as well as building resilience in aquatic systems to environmental variability and climate change. As aquaculture continues to grow, mitigating these challenges will ensure the improvement of aquatic health and sustainable use of aquatic resources.

Challenges are also present in how changes to policy and practice are introduced and implemented, as well as a need to integrate the management of aquatic resources, such as fisheries and conservation action, and prevent conflict between resource users. Evidence-based policy solutions require bringing together communities, the aquaculture sector, and governments to understand how aquaculture affects people in the region, enabling co-design of effective sustainable management frameworks that promote transparent decision-making and meet the needs of local stakeholders. Therefore, a systems-approach, driven by local challenges and needs, where research approaches and solutions are co-created with the local community and endusers is required. In particular, this should include as appropriate, marginalised and more vulnerable communities such as Indigenous People, women, and children as well as those who will be more impacted by this research, such as those working within the aquaculture sector or living in coastal communities.

#### Projects should:

- focus on diverse priority areas in aquaculture for the specified SE Asian country or countries, including but not limited to the examples specified under the 'Additional Information' section
- focus on one or more of the eligible beneficiary countries within SE Asia that are in scope for the funding opportunity:
  - Indonesia
  - Malaysia
  - Thailand
  - Philippines
  - Vietnam
- consider how to best focus their priorities within the region, that is, one beneficiary country versus more than one, considering the research questions, time and budget requirements available
- consider the transferability of their research and outputs across the SE Asia region, especially where the focus of a project is on one beneficiary country

Projects should contribute to both of the following themes. Examples of areas which contribute to these themes are provided below. We encourage you to explore how to systematically integrate these examples into research projects, as well as additional areas that are not listed, as appropriate to the research needs in local contexts, providing the proposal demonstrates how these meet the aims and remit of the programme.

Theme one: Adapt and build aquaculture systems that are resilient to climate change and environmental variability, and that protect and enhance the natural environment, while improving the lives of local communities

This theme concentrates on:

- development of environmental monitoring and early warning systems, easily accessible and driven by local community needs, that better understand, predict, and manage changes to environmental conditions. For example, algal blooms or flash floods, enabling timely decisions and responses by fish farmers, enhancing water quality, biodiversity, limiting disruption and waste
- exploration of nature-based and innovative systems that enhance sustainable aquaculture production, including integrated multi-trophic aquaculture, restoration and creation of shellfish reefs, restoration of mangroves and wetlands, and their impact on outcomes and stakeholders. For example, mitigation of contested space, use of aquatic resources, and trade-offs between users, to help enhance planning regulation and policy decisions for local community benefit
- exploration of climate and biodiversity smart aquaculture that sustainably increases productivity and reduces greenhouse gas emissions, while supporting biodiversity conservation, communities and climate resilience in the local context
- integration of citizen science and ocean literacy approaches to enhance engagement and participation of local communities with sustainable management of aquatic resources in support of food production, climate resilience and environmental improvement
- exploring interconnections, co-benefits and trade-offs of sustainable and resilient aquaculture systems for food and nutrition security for local communities, sustainable economic development and trade, and secure and resilient livelihoods
- exploring conditions that enable individual and collective action towards climate resilient, sustainable aquaculture systems in local contexts. For example, governance, diverse knowledge and values, finance and innovation and so on

Theme two: Adapt and build aquaculture systems that reduce losses of production due to disease, while also improving animal health and welfare, human health and wellbeing, plant health and the aquatic environment

This theme concentrates on:

- building an understanding of how different climatic and environmental conditions influence pathogens and spread of disease. For example, analysis and modelling on climate and environmental change scenarios and how these are likely to impact on aquaculture production and practices, including invasive species, pests and diseases, and harmful environmental events, as well as mitigation measures
- building on approaches, such as gene editing and selective breeding, that could lead to the production of lines that are more resilient to disease, have improved health in variable climatic and environmental conditions, and enhance productivity and reduce waste for fish farmers, and how to integrate diverse knowledge and values to explore barriers to and opportunities for uptake in local contexts

- exploration of approaches to better monitor, detect, diagnose, and treat animal and plant diseases, including toxin release and antimicrobial resistance, led by the needs of local contexts, to improve animal health and welfare, food safety and nutrition security, enhance productivity, minimise waste and enhance value chain, accreditation and trade opportunities for local producers
- understanding inter-relationships between farmed species (plant and animal) and wild organisms, including disease transmission and mitigation measures using a One Health approach, to enhance plant, animal and human health and wellbeing in local contexts
- exploration of how animal husbandry within aquaculture systems could improve animal health and welfare and how this could reduce waste and control antimicrobial resistance using a <u>One Health</u> approach, to enhance animal and human health and wellbeing in local contexts
- developing sustainable and climate resilient sources of fish feed that meets demand despite increasing climatic and environmental variability, including less reliance on wild-capture fish. For example, fish meal and fish oil (FMFO), maintains or improves fish nutrition and health, and improves aquatic environments, as well as end-product taste and quality, including less reliance on FMFO, and enhancing value chain, accreditation and trade opportunities for local producers

## Essential requirements of the programme

The funding opportunity is being funded from the UK government's International Science Partnerships Fund designed to enable potential and foster prosperity.

Projects need to clearly outline how the research being conducted addresses identified priorities and challenges of individual SE Asia countries, and how it will contribute to the realisation of the United Nation Sustainable Development Goals and the UK government's International Development Strategy.

## Official development assistance (ODA)

All research supported by this programme must meet the criteria for classification of expenditure as ODA, as defined by the Development Assistance Committee of the Organisation for Economic Co-operation and Development (OECD). Guidance on the definition and its interpretation is provided in the OECD What is ODA? web page.

Applications must complete an ODA compliance statement, outlining which country or countries on the Development Assistance Committee (DAC) list will directly benefit, and how the application is directly and primarily relevant to the development challenges of the country or countries.

The ODA relevance of the planned research should be clear throughout the proposal, in particular the strength of DAC list country partnerships and how the project will work to alleviate poverty and promote welfare. Please note that

proposals which are not considered to be ODA compliant will be rejected without peer review.

## Equality, diversity and inclusion

Plans should be underpinned by a strong commitment to inclusion, equality and diversity, focusing on gender equality. ODA provided by UKRI must comply with the requirements of the International Development (Gender Equality) Act 2014, which states, the "desirability of providing development assistance that is likely to contribute to reducing poverty in a way which is likely to contribute to reducing inequalities between persons of different gender".

Applications must complete a Gender Equality Statement. All applications have to explain how meaningful, yet proportionate consideration has been taken as to how the project will contribute to reducing gender inequalities. It is expected that some projects will have less impact on gender and gender relations and professional judgement of the applicants should be exercised to ensure appropriate consideration of the context and intended aims of the project. You can reference other parts of your application within this statement, if relevant.

Read the <u>UKRI guidance on equality, diversity and inclusion</u>, which includes further information on the International Development (Gender Equality) Act.

## Equitable partnerships

Proposals must be led by an eligible project lead (PL) in the UK but are expected to be co-designed and delivered in equitable partnership with a SE Asian-based project lead (listed as project co-lead (international) PcL (I)), supported by UK and SE Asian-based PcL's, and other team members, as appropriate for the research, to deliver tangible benefits to the listed countries. Plans to build meaningful and lasting partnerships with researchers and other partners in SE Asia should be outlined including how they will be involved in identifying the specific research challenges that will be addressed, co-creation of the research questions and implementation of the pathways to impact.

Research partnerships should be transparent and based on mutual respect. Partnerships should aim to have clearly articulated equitable distribution of resources, responsibilities, efforts and benefits. Partnerships should recognise different inputs, different interests and different desired outcomes and should ensure the ethical sharing and use of data, which is responsive to the identified needs of society. All partners need to be appropriate, involved in the scoping and delivery of the research, and add value. To sustain research impact, consortia must also interact with stakeholders from industry, the third sector, local communities, and all relevant levels of government appropriate to the proposed research and should seek to build on Indigenous People and Local Community knowledge.

## Research ethics

All ODA projects must be underpinned by a strong research ethic based on mutual respect and understanding for different cultural, ethnic, social and economic beliefs and practices. Solutions to any development challenges must be rooted in, and acceptable to, the institutions, communities and societies where they will operate. Ethical issues should be interpreted broadly and may encompass areas where regulation and approval processes exist as well as areas where they do not. You must ensure that the proposed research will be carried out to a high ethical standard and must clearly state how you have considered any potential ethical and health and safety issues and how they will be addressed, ensuring that all necessary ethical approval is in place before the research commences and all risks are minimised. See further guidance on **UKRI Ethical research and innovation**.

For more information on the background of this funding opportunity, including information on SE Asian priorities, go to the 'Additional information' section.

## Due diligence

UKRI require research organisations that are involved in partnering with overseas organisations to have policies and processes in place regarding due diligence and to carry out the process using a risk-based approach. As part of UKRI funding assurance, non-UK research organisations may be requested to complete a UKRI Overseas Due Diligence questionnaire.

Research organisations may be contacted by UKRI at any point during the review process. This is to expedite our assurance process. If UKRI does contact any non-UK research partner organisation named on an application, the lead organisation will be informed.

#### **Duration**

The duration of this award is 36 months.

Projects must start by 14 February 2025.

## Funding available

Projects should be between £2.5 million to £3 million (BBSRC cost).

## **Example**

UK team:

Total cost estimate = £2.625 million 80% full economic cost (FEC) value (amount funded by BBSRC) = £2.1 million

SE Asian team:

Total cost estimate = 5,278,140 Malaysian Ringgit (exchange rate 5.8646 = £1 using HMRC December 2023) = £0.9 million (100% FEC funded by BBSRC)

Total funder contribution:

80% UK costs + 100% SE Asian costs = £3 million

## Eligible UK costs

Costs associated with the UK component should be costed on the basis of FEC. If the grant is awarded, we will provide funding on the basis of 80% FEC.

## Eligible international costs

Costs associated with PcL (I) employed by a university, other recognised higher education institution or other research institution based in the eligible SE Asian countries should be included in the submission as Exceptions. The following costs may be requested for PcL (I)'s:

- costs for PcL (I) and any locally employed staff, that is, percentage contribution of actual salary representing the proportion of each person's time to be spent working on the project. These costs must be entered as Exceptions under the Staff costs (at 100% FEC)
- travel and subsistence for PcL (I) must be entered as Exceptions under Travel and Subsistence (at 100% FEC)
- costs charged by the overseas organisation and associated with the project, for example consumables, field work etc. should be entered as Exceptions under the Other costs (at 100% FEC)
- a contribution towards Indirect and Estates costs at overseas organisation should be calculated as 20% of the overseas research organisation's Directly Incurred costs (the total of the resources required for the three bullets above). This should be entered as an Exception under the Other costs (at 100% FEC)

#### **Subcontracts**

Subcontracts are eligible costs on applications submitted to this funding opportunity where UK-based organisations will be funded at 80% FEC and international organisations will be funded at 100%. Subcontractors can be a:

- third-party individual not employed as staff on the grant
- third-party organisation, who is subcontracted by the host organisation to deliver a specific piece of work

Subcontractor costs should be outlined and fully justified in the proposal and will be subject to peer review.

## Ineligible costs

The following will not be funded under this funding opportunity in either the UK or SE Asian country:

- any types of studentships
- large items of equipment or other capital expenditure (anything costing £10,000 or greater)

#### What we will fund

#### We will fund:

- projects that focus on the diverse aquaculture research opportunities that are identified as priorities in the eligible SE Asia countries
- projects that use interdisciplinary bioscience and environmental science approaches that take a systems-approach to addressing challenges, including other research council remits and disciplines, as appropriate to the project
- projects that directly contribute to both research themes (listed above).
   Please note: Projects do not need to focus on both themes 50:50 but they must demonstrate a strong contribution to both themes
- projects that have a primary focus on enhancing the development of sustainable, resilient, and productive aquaculture systems in one or more of the SE Asian countries named in this funding opportunity (that is, Indonesia, Malaysia, Thailand, Philippines and Vietnam), in line with ODA classification requirements. Projects may also have secondary benefits to the UK or other countries
- projects that work with one or more eligible SE Asian countries in bilateral or multilateral partnerships. While projects should consider how to best focus their research on priorities of their partner country or countries, projects are strongly encouraged to also take into account transferability of outcomes to other eligible SE Asian countries and the broader SE Asian region
- projects that integrate research across other research council remits and disciplines, as project co-leads (PcL), as appropriate to the project
- projects that include collaboration with local stakeholders, for example, local and national government agencies, the private sector, civil society organisations and local communities, within at least one of the eligible SE Asian countries, as appropriate to the project for the generation of local impact and benefits
- projects that demonstrate an approach and commitment to championing diversity and inclusion by removing barriers to research activities and promoting an open and inclusive research community, and in particular how they meet the International Development (Gender Equality) Act 2014
- projects that demonstrate how effective collaboration with end-users, as appropriate to the project (for example with industry, civil society organisations, local communities, local or national governments), will be integrated

## What we will not fund

We will not fund:

- projects that do not at least include a large proportion of both biological and environmental science in the work proposed, or where other discipline areas brought in are not properly integrated to maximise tangible impacts
- projects that do not take a systems-approach, that is, those which do not seek to understand the purpose and goal of the system, the different elements of the system, and the interconnections between the different components of the system, and how these influence the research challenges, questions and implementation
- projects that are not ODA-compliant

All applicants will be required to submit an ODA Compliance Statement. For details, please see the 'Official development assistance (ODA)' section of the application.

UKRI expects credible plans of how outputs and outcomes will be taken forward. We recognise that not all of the impact will be achieved within the lifetime of the grant, but steps must be in place for it to be fully realised.

# How to apply

There are two stages to apply for this funding opportunity:

- notification of intent (NOI)
- full application

#### Notification of intent

A notification of intent (NOI) is a mandatory requirement for this funding opportunity.

Full applications submitted without a prior NOI will be rejected.

Please complete all the questions within the **NOI survey** by the deadline.

You will not be contacted following submission of an NOI. We reserve the right to reject your full application if it is deemed out of scope or otherwise ineligible.

# Full application

We are running this funding opportunity on the new UKRI Funding Service. You cannot apply on the Joint Electronic Submissions (Je-S) system.

The project lead is responsible for completing the application process on the Funding Service, but we expect all team members and project partners to contribute to the application.

Only the lead research organisation can submit an application to UKRI.

## To apply

Select 'Start application' near the beginning of this Funding finder page.

- 1. Confirm you are the project lead.
- 2. Sign in or create a Funding Service account. To create an account, select your organisation, verify your email address, and set a password. If your organisation is not listed, email <a href="mailto:support@funding-service.ukri.org">support@funding-service.ukri.org</a> Please allow at least 10 working days for your organisation to be added to the Funding Service.
- 3. Answer questions directly in the text boxes. You can save your answers and come back to complete them or work offline and return to copy and paste your answers. If we need you to upload a document, follow the upload instructions in the Funding Service. All questions and assessment criteria are listed in the How to apply section on this Funding finder page.
- 4. Allow enough time to check your application in 'read-only' view before sending to your research office.
- 5. Send the completed application to your research office for checking. They will return it to you if it needs editing.
- 6. Your research office will submit the completed and checked application to UKRI.

Where indicated, you can also demonstrate elements of your responses in visual form if relevant. If using visual elements, you must:

- use images sparingly and only to convey important information that cannot easily be put into words
- insert each new image onto a new line
- provide a descriptive legend for each image immediately underneath it (this counts towards your word limit)
- files must be smaller than 5MB and in JPEG, JPG, JPE, JFI, JIF, JFIF, PNG, GIF, BMP or WEBP format

Watch our research office webinars about the new Funding Service.

For more guidance on the Funding Service, see:

- how applicants use the Funding Service
- how research offices use the Funding Service
- how reviewers use the Funding Service

#### **Deadline**

You must submit your NOI by Friday 23 February 2024 at 4.00pm UK time.

BBSRC must receive your application by 9 May 2024 at 4.00pm UK time.

You will not be able to apply after this time.

Make sure you are aware of and follow any internal institutional deadlines.

Following the submission of your application to the funding opportunity, your application cannot be changed, and applications will not be returned for amendment. If your application does not follow the guidance, it may be rejected.

#### Personal data

#### **Processing personal data**

BBSRC, as part of UKRI, will need to collect some personal information to manage your Funding Service account and the registration of your funding applications.

We will handle personal data in line with UK data protection legislation and manage it securely. For more information, including how to exercise your rights, read <u>our privacy notice</u>.

#### **Publication of outcomes**

BBSRC, as part of UKRI, will publish the outcomes of this funding opportunity at What BBSRC has funded.

If your application is successful, we will publish some personal information on the **UKRI Gateway to Research**.

## **Summary**

Word limit: 550

In plain English, provide a summary we can use to identify the most suitable experts to assess your application.

We may make this summary publicly available on external-facing websites, so make it suitable for a variety of readers, for example:

- opinion-formers
- policymakers
- the public
- the wider research community

## Guidance for writing a summary

Clearly describe your proposed work in terms of:

- context
- the challenge the project addresses
- aims and objectives
- potential applications and benefits

#### Core team

List the key members of your team and assign them roles from the following:

- project lead (PL)
- project co-lead (UK) (PcL)
- project co-lead (international) (PcL (I))
- researcher co-lead (RcL)
- specialist
- grant manager
- professional enabling staff
- research and innovation associate
- technician
- visiting researcher

Only list one individual as project lead.

Projects must include at least one PcL (I) based in Indonesia, Malaysia, Thailand, Philippines or Vietnam, as appropriate to the beneficiary country or countries.

There is a separate section to list project partners who are not eligible to receive funding. Do not list them here.

Find out more about **UKRI's core team roles in funding applications**.

## Application questions

#### **Vision**

Word limit: 1,000

What are you hoping to achieve with your proposed work?

What the assessors are looking for in your response

Explain how your proposed work:

- is of excellent quality and importance within or beyond the field(s) or area(s)
- has the potential to advance current understanding, or generate new knowledge, thinking or discovery within or beyond the field or area, with specific reference to how both research themes will be addressed

- is timely given current trends, context, and needs
- impacts world-leading research, society, the economy, or the environment

Within the 'Vision' section we also expect you to:

 identify the potential direct and indirect benefits and who the beneficiaries might be

You may demonstrate elements of your responses in visual form if relevant. Further details are provided in the Funding Service.

#### **Approach**

Word limit: 3,000

How are you going to deliver your proposed work?

What the assessors are looking for in your response

Explain how you have designed your approach so that it:

- is effective and appropriate to achieve your objectives
- is feasible, and comprehensively identifies any risks to delivery and how they will be managed
- uses a clearly written and transparent methodology (if applicable)
- summarises the previous work and describes how this will be built upon and progressed (if applicable)
- will maximise translation of outputs into outcomes and impacts, including how transferability across the broader SE Asia region will be considered
- describes how your, and if applicable your team's, research environment (in terms of the place and relevance to the project) will contribute to the success of the work
- delivers an equitable partnership between UK and SE Asian researchers, including equitable distribution of resources, responsibilities, efforts and benefits
- encourages capacity development as part of, and not separate to, the stated research approach

You may demonstrate elements of your responses in visual form if relevant. Further details are provided in the Funding Service.

Within the 'Approach' section we also expect you to:

 provide a detailed and comprehensive project plan including milestones and timelines in the form of an embedded Gantt chart or similar (please make sure to check sizing and readability of the image using 'read view' prior to submission) BBSRC's action plan for EDI outlines our commitment to removing barriers to participation in our programmes, ensuring investments do not inadvertently prevent access or usage by individuals from minority groups, for example disabled researchers. To this end, applications should identify how accessibility and inclusiveness in the widest sense have been incorporated into the design of the project. For example, you may wish to reference relevant institutional strategies and policies which support equality, diversity, and inclusion as they relate to access to equipment and facilities and indicate how the proposed project has been designed and will be delivered with broad access in mind.

#### References

Word limit: 1,000

List the references you have used to support your application.

What the assessors are looking for in your response

Include all references in this section, not in the rest of the application questions.

You should not include any other information in this section.

We advise you not to include hyperlinks, as assessors are not obliged to access the information they lead to or consider it in their assessment of your application.

If linking to web resources, to maintain the information's integrity, include persistent identifiers (such as digital object identifiers) where possible.

You must not include links to web resources to extend your application.

## Applicant and team capability to deliver

Word limit: 2,000

Why are you the right individual or team to successfully deliver the proposed work?

What the assessors are looking for in your response

Evidence of how you, and if relevant your team, have:

- the relevant experience (appropriate to career stage) to deliver the proposed work
- the right balance of skills and expertise to cover the proposed work
- the appropriate leadership and management skills to deliver the work and your approach to develop others
- contributed to developing a positive research environment and wider community

You may demonstrate elements of your responses in visual form if relevant. Further details are provided in the service.

The word count for this section is 1,500 words: 1,500 words to be used for R4RI modules and, if necessary, a further 500 words for Additions.

Use the Résumé for Research and Innovation (R4RI) format to showcase the range of relevant skills you and, if relevant, your team (project and project coleads, researchers, technicians, specialists, partners and so on) have and how this will help deliver the proposed work. You can include individuals' specific achievements but only choose past contributions that best evidence their ability to deliver this work.

Complete this section using the R4RI module headings listed. Use each heading once and include a response for the whole team, see the <u>UKRI</u> <u>guidance on R4RI</u>. You should consider how to balance your answer, and emphasise where appropriate the key skills each team member brings:

- contributions to the generation of new ideas, tools, methodologies, or knowledge
- the development of others and maintenance of effective working relationships
- contributions to the wider research and innovation community
- contributions to broader research or innovation users and audiences and towards wider societal benefit

#### Additions

Provide any further details relevant to your application. This section is optional and can be up to 500 words. You should not use it to describe additional skills, experiences, or outputs, but you can use it to describe any factors that provide context for the rest of your R4RI (for example, details of career breaks if you wish to disclose them).

Complete this as a narrative. Do not format it like a CV.

UKRI has introduced new role types for funding opportunities being run on the new Funding Service.

For full details, see **<u>Eligibility as an individual</u>**.

#### Ethics and responsible research and innovation (RRI)

Word limit: 1,000

What are the ethical or RRI implications and issues relating to the proposed work? If you do not think that the proposed work raises any ethical or RRI issues, explain why.

What the assessors are looking for in your response

Demonstrate that you have identified and evaluated:

- the relevant ethical or responsible research and innovation considerations
- how you will manage these considerations

You may demonstrate elements of your responses in visual form if relevant. Further details are provided in the Funding Service.

#### Genetic and biological risk

Word limit: 700

Does your proposed research involve any genetic or biological risk?

What the assessors are looking for in your response

In respect of animals, plants or microbes, are you proposing to:

- use genetic modification as an experimental tool, like studying gene function in a genetically modified organism
- release genetically modified organisms
- ultimately develop commercial and industrial genetically modified outcomes

If yes, provide the name of any required approving body and state if approval is already in place. If it is not, provide an indicative timeframe for obtaining the required approval.

Identify the organism or organisms as a plant, animal or microbe and specify the species and which of the three categories the research relates to.

Identify the genetic and biological risks resulting from the proposed research, their implications, and any mitigation you plan on taking. Assessors will want to know you have considered the risks and their implications to justify that any identified risks do not outweigh any benefits of the proposed research.

If this does not apply to your proposed work, you will be able to indicate this in the Funding Service.

#### Research involving the use of animals

Word limit: 10

Does your proposed research involve the use of vertebrate animals or other organisms covered by the Animals Scientific Procedures Act?

What the assessors are looking for in your response

If you are proposing research that requires using animals, download and complete the **Animals Scientific Procedures Act template (DOCX, 74KB)**,

which contains all the questions relating to research using vertebrate animals or other Animals (Scientific Procedures) Act 1986 regulated organisms.

Save it as a PDF. The Funding Service will provide document upload details when you apply. If this does not apply to your proposed work, you will be able to indicate this in the Funding Service.

#### Conducting research with animals overseas

Word limit: 700

Will any of the proposed animal research be conducted overseas?

What the assessors are looking for in your response

If you are proposing to conduct overseas research, it must be conducted in accordance with welfare standards consistent with those in the UK, as in Responsibility in the use of animals in bioscience research, page 14.

Ensure all named applicants in the UK and overseas are aware of this requirement. Provide a statement to confirm that:

- all named applicants are aware of the requirements and have agreed to abide by them
- this overseas research will be conducted in accordance with welfare standards consistent with the principles of UK legislation
- the expectation set out in Responsibility in the use of animals in bioscience research will be applied and maintained
- appropriate national and institutional approvals are in place

Overseas studies proposing to use non-human primates, cats, dogs, equines or pigs will be assessed during **NC3Rs review** of research applications. Provide the required information by completing the template from the question 'Research involving the use of animals'.

For studies involving other species, select, download, and complete the relevant Word checklist or checklists from this list:

- Additional questions on the use of rodents overseas (DOCX, 49.1KB)
- Additional questions on the use of rabbits overseas (DOCX, 49.2KB)
- Additional questions on the use of sheep overseas (DOCX, 50.9KB)
- Additional questions on the use of goats overseas (DOCX, 47.3KB)
- Additional questions on the use of pigs overseas (DOCX, 51.4KB)
- Additional questions on the use of cattle overseas (DOCX, 57.0KB)
- Additional questions on the use of Xenopus laevis and Xenopus tropicalis overseas (DOCX, 57.3KB)

Save as a PDF. If you use more than one checklist, save it as a single PDF.

The Funding Service will provide document upload details when you apply. If this does not apply to your proposed work, you will be able to indicate this in the Funding Service.

#### Research involving human participation

Word limit: 700

Will the project involve the use of human subjects or their personal information?

#### What the assessors are looking for in your response

If you are proposing research that requires the involvement of human subjects, provide the name of any required approving body and whether approval is already in place.

Justify the number and the diversity of the participants involved, as well as any procedures.

Provide details of any areas of substantial or moderate severity of impact.

If this does not apply to your proposed work, you will be able to indicate this in the Funding Service.

#### Research involving human tissues or biological samples

Word limit: 700

Does your proposed research involve the use of human tissues, or biological samples?

## What the assessors are looking for in your response

If you are proposing work that involves human tissues or biological samples, provide the name of any required approving body and whether approval is already in place.

Justify the use of human tissue or biological samples specifying the nature and quantity of the material to be used and its source.

If this does not apply to your proposed work, you will be able to indicate this in the Funding Service.

## Resources and cost justification

Word limit: 1,000

What will you need to deliver your proposed work and how much will it cost?

We are able to pay between £2.5 million to £3 million per project. We pay on the basis of full economic cost (FEC) principles where we can pay:

- 80% of the UK costs
- 100% of the international costs (as per the eligible international costs section above)

For example, if £2.625 million are the UK costs (funded at 80% FEC which equates to £2.1 million) and £0.9 million are the international costs (funded at 100% FEC), we will fund £3 million and your research organisation will be expected to fund £0.525 million, resulting in the total costs being £4.05 million.

#### What the assessors are looking for in your response

Justify the application's more costly resources, in particular:

- project staff
- significant travel for field work or collaboration (but not regular travel between collaborating organisations or to conferences)
- any consumables beyond typical requirements, or that are required in exceptional quantities
- all facilities and infrastructure costs
- all resources that have been costed as 'Exceptions'

Assessors are not looking for detailed costs or a line-by-line breakdown of all project resources. Overall, they want you to demonstrate how the resources you anticipate needing for your proposed work:

- are comprehensive, appropriate, and justified
- represent the optimal use of resources to achieve the intended outcomes
- maximise potential outcomes and impacts

## Official development assistance (ODA) statement

Word limit: 1,000

How does your proposed work meet ODA compliance eligibility?

#### What the assessors are looking for in your response

This funding opportunity is part of the UK's ODA commitment. This is government aid that promotes and specifically targets the economic development and welfare of developing countries as its primary objective.

You should ensure that your proposal focuses on the challenges specific to the partner country or countries and not broader global issues, meaning those that are transboundary beyond low and middle income countries. It is accepted that ODA-funded research may have benefits to the UK or other high-income countries, however, these should be secondary to be development objectives of the project.

You should consider whether these countries are likely to continue to be eligible for the duration of the research, noting that ODA funding cannot be used to support research that does not promote a DAC list country. Please note there may be eligibility restrictions specific to the funding opportunity you are applying to; you and other applicants should refer to the **Funding Finder** to confirm eligibility before applying. When assessing whether an activity is eligible for ODA funding under this funding opportunity, BBSRC will consider whether projects satisfy **OECD criteria on eligibility**.

We expect an ODA-compliant proposal to include:

- research to address a specific problem or seek a specific outcome that will contribute to the economic development and welfare of developing country or countries in the immediate or longer-term
- evidence of engagement with in-country stakeholders and consideration of local needs and capacity from the onset to shape aims and objectives
- details that suggest the applicants have a clear understanding of the problem that they are trying to address and how their research will lead to change and improvements
- consideration of potential negative impacts and ways to mitigate them
- appropriately developed and resource-costed impact activities
- early plans of how, and by whom, outputs and outcomes will be taken forward beyond the end of the proposed activity
- elements of co-design with interested parties

#### **ODA** impact

We define ODA impact as:

- an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, that promotes and specifically targets the economic development and welfare of a developing country or countries
- impact includes, but is not limited to, an effect on, change or benefit to:
  - the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
  - of an audience, beneficiary, community, constituency, organisation or individuals
  - in countries on the OECD DAC list of ODA recipients (DAC list).
- impact includes the reduction or prevention of harm, risk, cost or other negative effects

Applications will be assessed through a competitive peer review process with ODA eligibility being a criterion for approval, that is, projects must be fully ODA compliant to be considered for funding. Initial ODA compliance checks will be carried out by UKRI; proposals that do not meet the eligibility criteria may be

rejected without reference to peer review. Peer reviewers will also be provided with this guidance and asked to comment on ODA compliance and likelihood of significant development impact.

To demonstrate how your proposed work meets ODA compliance criteria, please explain:

- which country or countries on the <u>DAC list</u> will directly benefit from this proposal
- how your proposal is directly and primarily relevant to the development challenges of these countries
- how you expect the outcomes of your proposed activities will promote the economic development and welfare of a country or countries on the DAC list
- how the proposed activity is appropriate to address the development need
- the approaches you will use to deliver development impact within the lifetime of the project and in the longer term, considering the potential outcomes, the key beneficiary and stakeholder groups and how they will be engaged to enable development impact to be achieved

#### **ODA** gender equality statement

Word limit: 500

How does your proposed work demonstrate sufficient consideration of gender equality?

What the assessors are looking for in your response

Provide a Gender Equality statement that explains:

- what measures have been put in place to ensure equal and meaningful opportunities for people of different genders to be involved throughout the project, including the development of the project, the participants of the research and innovation and the beneficiaries of the research and innovation
- the expected impact of the project (benefits and losses) on people of different genders, both throughout the project and beyond
- the impact on the relations between people of different genders and people of the same gender. For example, changing roles and responsibilities in households, society, economy, politics, power and so on
- how any risks and unintended negative consequences on gender equality will be avoided or mitigated against, and monitored
- if there are any relevant outcomes and outputs being measured, with data disaggregated by age and gender (where disclosed)

#### Your organisation's support

Word limit: 10

Provide details of support from your research organisation.

#### What the assessors are looking for in your response

Provide a Statement of Support from your research organisation detailing why the proposed work is needed. This should include details of any matched funding that will be provided to support the activity and any additional support that might add value to the work.

The committee will be looking for a strong statement of commitment from your research organisation.

BBSRC recognises that in some instances, this information may be provided by the Research Office, the Technology Transfer Office (TTO) or equivalent, or a combination of both.

You must also include the following details:

- a significant person's name and their position, from the TTO or Research Office, or both
- office address or web link

Upload details are provided within the service on the actual application.

#### **Project partners**

If a collaborating individual or organisation is integral to the design and delivery of the project and is contributing to the project through financial or in-kind contributions (for example, staff time, access to facilities, data, sites) then they should be included as a project partner.

If there are no project partners, you can indicate this on the Funding Service.

Add the following project partner details:

- the organisation name and address (searchable via a drop-down list or enter the organisation's details manually, as applicable)
- the project partner contact name and email address
- the type of contribution (direct or in-direct) and its monetary value

If a detail is entered incorrectly and you have saved the entry, remove the specific project partner record and re-add it with the correct information.

For audit purposes, UKRI requires formal collaboration agreements to be put in place if an award is made.

## Project partners: letters or emails of support

Word limit: 10

Upload a single PDF containing the letters or emails of support from each partner you named in the 'Project partner' section.

#### What the assessors are looking for in your response

Enter the words 'attachment supplied' in the text box, or if you do not have any project partners enter N/A. Each letter or email you provide should:

- confirm the partner's commitment to the project
- clearly explain the value, relevance, and possible benefits of the work to them
- describe any additional value that they bring to the project

Save letters or emails of support from each partner in a single PDF no bigger than 8MB. Unless specially requested, please do not include any sensitive personal data within the attachment.

For the file name, use the unique Funding Service number the system gives you when you create an application, followed by the words 'Project partner'.

If the attachment does not meet these requirements, the application will be rejected.

The Funding Service will provide document upload details when you apply. If you do not have any project partners, you will be able to indicate this in the Funding Service.

Ensure you have prior agreement from project partners so that, if you are offered funding, they will support your project as indicated in the contributions template.

For audit purposes, UKRI requires formal collaboration agreements to be put in place if an award is made.

Do not provide letters of support from host and project co-leads' research organisations.

## Data management and sharing

Word limit: 500

How will you manage and share data collected or acquired through the proposed research?

What the assessors are looking for in your response

Provide a data management plan that clearly details how you will comply with UKRI's published **data sharing policy**, which includes detailed guidance notes.

You will need to indicate:

- which NERC data centre is required to archive the data
- whether the total volume of data is likely to be larger than 1TB

any other detail on how you will comply with NERC data policy

#### **Facilities**

Word limit: 500

Does your proposed research require the support and use of a facility?

#### What the assessors are looking for in your response

If you will need to use a facility, follow your proposed facility's normal access request procedures. Ensure you have prior agreement so that if you are offered funding, they will support the use of their facility on your project.

For each requested facility you will need to provide the:

- name of facility, copied and pasted from the <u>facility information list (DOCX, 35KB)</u>
- proposed usage or costs, or costs per unit where indicated on the facility information list
- confirmation you have their agreement where required

If you will not need to use a facility, you will be able to indicate this in the Funding Service.

# How we will assess your application

## Assessment process

We will assess your application using the following process.

#### **Panel**

We will be convening an assessment panel, comprised of relevant experts from a range of disciplines within the UK and internationally.

The panel members will individually assess the applications assigned to them and their comments will be returned to you for your response. You will then have 14 calendar days to compile and return an applicant response.

Your application and applicant response will then be re-considered by the assigned panel members before all panel members will collectively discuss and review the applications.

The panel will assign a score to your application, rank it alongside other applications and make a funding recommendation.

BBSRC and NERC will make the final funding decision.

#### **Feedback**

We will give feedback with the outcome of your application by email.

# Principles of assessment

We support the <u>San Francisco declaration on research assessment</u> and recognise the relationship between research assessment and research integrity.

Find out about the **UKRI** principles of assessment and decision making.

We reserve the right to modify the assessment process as needed.

#### Assessment areas

The assessment areas we will use are:

- Vision of the project
- Approach to the project
- Applicant and team capability to deliver
- Official Development Assistance (ODA) Statement and project's likelihood to generate impact for development
- Gender Equality Statement

The panel will be asked to take a portfolio approach and consider the balance of projects across the eligible SE Asian countries when ranking applications to be recommended for funding. Research quality will remain a priority and so panel recommendations could potentially not include projects in all five eligible SE Asian countries.

Find details of assessment questions and criteria under the 'Application questions' heading in the 'How to apply' section.

## **Contact details**

## Get help with your application

If you have a question and the answers aren't provided on this page

Important note: The helpdesk is committed to helping users of the UKRI Funding Service as effectively and as quickly as possible. In order to manage cases at peak volume times, the helpdesk will triage and prioritise those queries with an imminent funding opportunity deadline or a technical issue. Enquiries

raised where information is available on the Funding Finder opportunity page and should be understood early in the application process (for example, regarding eligibility or content/remit of a funding opportunity) will not constitute a priority case and will be addressed as soon as possible.

#### Contact details

For help and advice on costings and writing your proposal please contact your research office in the first instance, allowing sufficient time for your organisation's submission process.

For questions related to this specific funding opportunity please contact <a href="mailto:ispf-bbsrc@bbsrc.ukri.org">ispf-bbsrc@bbsrc.ukri.org</a>

Any queries regarding the system or the submission of applications through the Funding Service should be directed to the helpdesk.

Email: support@funding-service.ukri.org

Phone: 01793 547490

Our phone lines are open:

- Monday to Thursday 8:30am to 5:00pm
- Friday 8:30am to 4:30pm

To help us process queries quicker, we request that users highlight the council and opportunity name in the subject title of their email query, include the application reference number, and refrain from contacting more than one mailbox at a time.

Find out more information on **submitting an application**.

## Sensitive information

If you or a core team member need to tell us something you wish to remain confidential, email <a href="mailto:ispf-bbsrc@bbsrc.ukri.org">ispf-bbsrc@bbsrc.ukri.org</a>

Include in the subject line: [the funding opportunity title; sensitive information; your Funding Service application number].

Typical examples of confidential information include:

- individual is unavailable until a certain date (for example due to parental leave)
- declaration of interest
- additional information about eligibility to apply that would not be appropriately shared in the 'Applicant and team capability' section
- conflict of interest for UKRI to consider in reviewer or panel participant selection

the application is an invited resubmission

For information about how UKRI handles personal data, read <u>UKRI's privacy</u> notice.

#### **Additional info**

## Webinar for potential applicants

We will hold a webinar on 30 January 2024. This will provide more information about the funding opportunity and a chance to ask questions.

To attend the webinar, you need to register here.

Science and Innovation Network contacts within SE Asia have undertaken stakeholder engagement within their respective countries to identify some examples of their national interests and priorities. You may use this information to help provide country-specific context in your application. Please note that you may choose to address research challenges that have not been identified below and you should use country and regional strategies, and yours and your team's own sources of knowledge, to support your application.

This information is provided in good faith but is not an exhaustive list of priority areas, and funding is not restricted to these areas.

#### Indonesia

Species of interest: shrimp, seaweed, lobster, tilapia and crab

Priority areas include:

- reducing pressure on and from capture fisheries by increasing and developing sustainable aquaculture systems
- sustainably enhancing the productivity and yields of key aquaculture species
- addressing effluent water treatment challenges to minimise impact on the environment
- preventing, monitoring, diagnosing and treating diseases while moving towards more intensive production systems

# Malaysia

Species of interest: N/A

Priority areas include:

- addressing gaps and challenges related to pollution and the carbon footprint of aquaculture
- using sensor technologies to support production in land and sea-based systems. For example, organism behaviour, monitoring water quality and so on
- lower trophic or non-feed aquaculture to address the carbon footprint of aquaculture systems and food security challenges
- raising awareness and education of aquaculture challenges and practices with local communities and aquaculture producers
- projects focused on enabling a National Hatchery for Seeds to help address bottlenecks in production, especially for smaller producers, including training and technological opportunities
- integrated multi-trophic aquaculture opportunities

#### **Thailand**

Species of interest: horse crab

Priority areas include:

- coral preservation and restoration
- improving practices of horse crab farming

# **Philippines**

No specific priorities identified in the limited time available.

#### Vietnam

Species of interest: seaweed, molluscs, and marine fish

Priority areas include:

- circular aquaculture (low water exchange rate, water circulation, solid waste treatment)
- automation of environmental monitoring and prevention of aquatic diseases in aquaculture areas (biological and molecular biology markers)
- smart aquaculture models to adapt to climate change (applicable to smallscale community aquacultural farms)
- improving existing farming processes towards emission reduction and energy saving. For example, feed coefficient reduction and improving the quality of aquacultural products
- developing pilot models of integrated multi-trophic aquaculture farms

# Research disruption due to COVID-19

We recognise that the COVID-19 pandemic has caused major interruptions and disruptions across our communities. We are committed to ensuring that individual applicants and their wider team, including partners and networks, are not penalised for any disruption to their career, such as:

- breaks and delays
- disruptive working patterns and conditions
- the loss of ongoing work
- role changes that may have been caused by the pandemic

Reviewers and panel members will be advised to consider the unequal impacts that COVID-19 related disruption might have had on the capability to deliver and career development of those individuals included in the application. They will be asked to consider the capability of the applicant and their wider team to deliver the research they are proposing.

Where disruptions have occurred, you can highlight this within your application if you wish, but there is no requirement to detail the specific circumstances that caused the disruption.

# **Updates**

#### 19 January 2024

Species of interest and priority areas for Vietnam updated in the 'Additional info' section.

# **Timeline**

15 January 2024 9:00am
 Opening date

30 January 2024 9:00am
 Webinar

23 February 2024 4:00pm
 Notification of Intent (NOI) deadline

9 May 2024 4:00pm

Closing date

# Guidance on good research

Good research resource hub

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https://www.ukri.org/opportunity/sustainable-and-resilient-aquaculture-systems-in-southeast-asia