



ASEAN-AUSTRALIA DEVELOPMENT COOPERATION PROGRAM (AADCP) PHASE II

TERMS OF REFERENCE FOR

Assessment on Agricultural Techniques and Technologies to Mitigate the Potential Negative Effects of Climate Change in CLMV Countries

The ASEAN Secretariat and the Australian Government, through AADCP II, invite applications from consultants for the above-referenced project.

I. Background

The Initiative for ASEAN Integration (IAI) provides a policy framework to support the participation of ASEAN's newer member states (Cambodia, Lao PDR, Myanmar and Viet Nam or CLMV) in the ASEAN integration process. The IAI Work Plan III (2016-2020) as the guiding document for this initiative is in its last year of implementation. ASEAN has developed the successor IAI Work Plan IV (2021-2025), following series of consultations at the regional and national level. Development of the IAI Work Plan IV was led by the IAI Task Force, comprising of the ten Permanent Representatives to ASEAN. The IAI Task Force provides policy guidance and directions in the development and implementation of the IAI Work Plan.

During the consultation process, the ASEAN Member States (AMS) recognised the continuing relevance of the five *Strategic Areas* of the existing IAI Work Plan (food and agriculture; trade facilitation; micro, small and medium enterprises (MSMEs); education; and health and well-being) and agreed to have them carried forward to the next five years. Within each Strategic Areas are *Actions*, which are aligned with the commitments in the related ASEAN sectoral work plans. The IAI Work Plan IV also takes into consideration emerging trends, global and regional developments including the COVID-19 pandemic. The final draft of the IAI Work Plan IV was approved by the IAI Task Force on 31 August 2020. This will be submitted to the ASEAN Coordinating Council for endorsement and subsequently to the ASEAN Leaders in November 2020 for adoption.

AADCP II is supporting the development of the IAI Work Plan IV, as part of the "Work Planning Assistance for the Initiative for ASEAN Integration (IAI) 2021-2025" project. Following the completion of the new Work Plan, the project will support preparation of an IAI Implementation Plan to map out IAI Work Plan IV projects against ASEAN's and donors/ Partners' interests. Recognising CLMV countries' need for support in project development, it will also support drafting of up to ten project proposals addressing Actions under the strategic areas.

To provide a deeper understanding of context and challenges, assessments will be undertaken for up to five prioritised Actions, in parallel with the development of the IAI Implementation Plan and the drafting of project proposals. These assessments are to help ensure that project proposals under those five prioritised Actions are backed with evidence, up-to-date information on context, and a detailed understanding of the common issue(s)/problem(s) across CLMV countries (or minimum two countries). The assessments will inform the development of relevant project proposals.

This Term of Reference (TOR) focuses on the conduct of in-depth context assessment and problem analysis on **Agricultural Techniques and Technologies to Mitigate the Potential Negative Effects**

of Climate Change in CLMV Countries related to Action 5 under the Food and Agriculture Strategic Area of the IAI Work Plan IV.

The Action 5 focuses on studying and disseminating stress-tolerant crop varieties (e.g. cultivar seeds), climate smart agricultural techniques (e.g. soil management), and technologies (e.g. forecast warning systems, climate outlook databases) to farmers in CLMV countries to enhance regional food security. Promoting climate smart technologies and regional food security is aligned to the goals of the 2016-2025 Vision and Strategic Plan for ASEAN Cooperation in Food, Agriculture and Forestry. Adopting climate-smart solutions is especially important to address environmental sustainability, particularly the effects of climate change on rainfall patterns and rising sea levels that have been associated with more frequent inland flooding and drought days in AMS. This problem is particularly acute in CLMV countries, who mainly depend on rainwater for agriculture, and yet tend to have lower adoption levels of climate-resilient approaches when compared to other AMS. CLMV countries are at various stages of introducing solutions to address climate change and are currently facing challenges around developing a strong fact-base to identify and expand climate-resilient crops, fishes, and livestock. There is also an opportunity to increase access for female farmers, who tend to have lesser access to extension services and training.

During the national consultations conducted with CLMV in May 2020, feedback from CLMV countries on specific needs and gaps where the IAI can support are as follows:

Cambodia

- The Cambodian Agricultural Research and Development Institute (CARDI) of the Ministry of Agriculture, Forestry and Fisheries has researched the construction of affordable greenhouses. While the research has been completed, awareness of how to construct greenhouses is limited. Smallholders also lack financial resources to purchase materials to build their greenhouse. Meanwhile, the livestock segment has been promoting the construction of barns to reduce direct sun exposure of farm animals. It has also begun research on how various straw varieties (i.e. animal feed) will be able to provide nutrition to animals during the long dry season. The aquaculture segment is planning to introduce heat-tolerant fishes that also mature faster. It has concluded a pilot project (for a single species) as a proof of concept.

Lao PDR

- As part of Lao PDR's national action plan on climate change, the country aims to promote climate resilience in farming systems and agriculture infrastructure. To address this, the agriculture sector is working with farmers to shift from crop farming to aquaculture in areas affected by flooding.
- The sector is also working with the Asian Development Bank (ADB) and World Bank on a pilot project on rain-harvest systems that provide water during the dry season. While the technology has proven to be effective, the country lacks the funds and the capacity to introduce this at large scale.

Myanmar

- In Myanmar, crops, livestock, and fisheries are at different stages of introducing stress-tolerant varieties into the sector. For fisheries, the government is working with the Food and Agriculture Organisation (FAO) to conduct studies on fish adaptability and subsequently develop guidelines to introduce these fish varieties for aquaculture. The livestock segment has recently introduced stress-tolerant livestock. However, the scale of this introduction is unclear. The crops segment is in the

early stages of research for salt-tolerant and cold-tolerant crops.

Viet Nam

- Viet Nam has implemented national research programmes on crops. These include research on weather tolerant crops and saline resilient crops (including rice, legumes, peanut, soybean). However, the number of varieties under study is limited at present.

The assessment will further investigate these issues, identify common gaps and problems, and generate recommendations for addressing them within the related actions of the IAI Work Plan IV.

II. Needs and Objectives

The objective for this assignment is to provide IAI Task Force, especially CLMV representatives, with a deeper understanding of the current status and awareness of relevant stakeholders, including farmers, on the adoption of agricultural techniques and technologies to safeguard against climate change. The assessment will help CLMV prepare well-defined, evidence-backed project proposals, in line with the objectives of the relevant IAI Work Plan Action.

III. Outputs

The expected output is an **assessment of agricultural techniques and technologies to mitigate the potential negative effects of climate change in CLMV** with focus on four main areas: (a) impact of climate change on the agriculture sector in CLMV countries; and (b) progress on developing techniques and technologies to safeguard against climate change. The assessment should consider emerging issues (such as the COVID-19 pandemic), identify the common gaps and problems amongst CLMV, and answer at least the following questions for each CLMV country:

- a. Impact of climate change on the agriculture sector in CLMV countries
 - What type of policy interventions are CLMV governments implementing to address the impact of climate change in the agricultural sector (e.g. relocation, subsidies to change segment)?
- b. Progress on developing techniques and technologies to safeguard against climate change in CLMV countries
 - Please provide an overview of the existing climate adaptation techniques and technologies introduced within each segment of the agricultural sector – with a focus on both agricultural techniques and technologies that have been developed in two or more CLMV countries (e.g. climate-resilient rice varieties in Viet Nam and Myanmar). The overview should also include farmers' adoption rate (gender disaggregated data) of introduced agricultural techniques and technologies, challenges encountered, success stories and lessons learned.
 - How are agricultural segments, techniques, and technologies selected (e.g. based on international case best practices, evidence from previous programmes in other countries, interest from donors, consultations with farmers/stakeholders (including gender disaggregated data)?
 - If applicable, what are the common challenges/gaps encountered during when conducting research and development of these techniques and technologies in CLMV countries (e.g. limited funding, lack of a strong research agenda, lack of experts)? Please provide examples to substantiate your assessment across all three segments (crops, livestock,

and fisheries).

- How are information sharing sessions and training on climate adaptation techniques and technologies carried out (e.g. through extension services, cooperatives, mobile phones)? Who are the main beneficiaries? Please share how many women (as a percentage of all beneficiaries) have taken part in these sessions.
- What are the common challenges encountered during the implementation of these information sharing and training sessions in CLMV countries (e.g. lack of funding to scale, difficulties in reaching remote areas, lack of manpower)?

The report will be submitted in two stages:

1. Draft assessment report containing four country-level assessments for each CLMV country (each maximum 30 pages in length, not including annexes) and initial multi-country (regional) analysis. Annexes should at least include records of national consultations, regional workshop, and stakeholders' forum held during the formulation of the IAI Work Plan IV (2021-2025) as well as further consultations with CLMV countries.
2. Final assessment report consolidating the country level assessments, specifically summarizing regional commonalities (or between at least 2 countries) and providing general multi-country recommendations that can be transformed into IAI project proposals or used to refine existing project proposals. The final assessment report should be approximately 20 pages in length, not including annexes.

Submission of these deliverables is based on the target completion dates specified in the project work plan.

IV. Tasks/Activities

The following activities will need to be undertaken to achieve the outputs presented above. The bidder should provide details on its approach to each activity in its bid and is free to recommend additional activities.

	Deliverable	Activity	Person working days	Completion Date	Person(s) responsible
1	Project inception report	Conceptualisation of approach, detailed framework, and preparation of project work plan.	3 working days	One week after signing of the Special Services Agreement (SSA)	Consultant IAI & NDG Division
		Preparation of project inception report.			
		Finalisation and submission of project inception report.			
	Approval of project inception report by the ASEAN Secretariat (2 weeks)				
2	Draft assessment report	Data collection, which may include desk review, survey/ questionnaire, focus group discussion, interviews, etc.	45 working days	Week 6	Consultant
		Preparation and submission of initial draft assessment report.	5 working days	Week 7	Consultant
		Feedback on draft assessment report from CLMV countries, relevant division(s) of the ASEAN Secretariat and/or consultants of sectoral work plans/strategies under development.	-	Week 9	IAI&NDG Division and CLMV countries
	Approval of draft assessment report by the ASEAN Secretariat (3 weeks)				
3	Final assessment report	Finalised assessment incorporating feedback from CLMV countries, sector experts, and the ASEAN Secretariat. The draft should be in the agreed format and contain the complete sections i.e. full draft.	5 working days	Week 10	Consultant
		Approval of final assessment report by the ASEAN Secretariat (3 weeks)			

	Output	Activity	Person working days	Completion Date	Person(s) responsible
4	Project Completion Report	Preparation and finalisation of project completion report.	2 working days	Week 13	Consultant
	<i>Approval of Project Completion Report by the ASEAN Secretariat (2 weeks)</i>				

V. Reporting

In addition to the project output described in Section III, the Consultant will be expected to submit an Inception Report and a Project Completion Report, according to the timeline set out in Section IV. These reports will be submitted based on AADCP II Guidelines for Contractors in draft format to IAI & NDG Division of the ASEAN Secretariat (with a copy to AADCP II) and, following the ASEAN Secretariat's approval, in final form. All outputs and reports must be written in a way that is suitable for publication, although the decision on publication lies with the ASEAN.

The contractor will also provide regular (weekly, bi-monthly or as agreed with the ASEAN Secretariat) summation of activities undertaken and issues that have arisen. These will be submitted to IAI & NDG Division and AADCP II via email.

Financial reports will be submitted at invoicing in line with a payment schedule to be specified in the Special Services Agreement (SSA).

VI. Project Management

The project will be funded by the ASEAN-Australia Development Cooperation Program II and managed by the ASEAN Secretariat. The consultant should be responsible for organising and conducting the scheduled activities in collaboration with the host countries and the ASEAN Secretariat.

The Program Planning and Monitoring Support Unit (PPMSU) of AADCP II will provide technical support to IAI&NDG Division for the implementation of this project, as required.

VII. Scope of Services

The consultancy will be undertaken over a **continuous effective period of fifteen (15) calendar weeks** with approximately **sixty (60) person days** of professional services. Work will commence immediately after contract signing.

VIII. Qualifications

In its proposal, the bidder should demonstrate:

- A minimum of 8-years work experience (for individual consultant, or the team leader of an entity/consortium) of conducting applied research activities, particularly within the context of designing development project or intervention;
Extensive knowledge of climate-smart agricultural technologies and practices (including climate change vulnerability and risk assessments and identifying adaptation measures for agri-food value chains), agronomy, water management, climate change mitigation and adaption in agriculture, forestry, and rural economics, particularly in ASEAN and CLMV countries;
- In-depth knowledge of institutional principles and policies on climate change mitigation and adaptation in agriculture;
- Experience in facilitating engagements with government, private sector, academe, and wider civil society;
- Experience in preparing analytical reports of the same scale and nature;
- Understanding of gender and social inclusion dimensions in the use of agriculture techniques and technologies;
- Having local offices/associates in CLMV countries will be an advantage;
- Experience working with the ASEAN Secretariat and AADCP II on projects with similar scope

and characteristics will be considered added value.

IX. Bidding

Interested consulting firms are invited to submit a proposal in response to these Terms of Reference. This proposal should be in two parts: **Technical** and **Financial components**.

The Technical component should present the following information:

- A brief discussion indicating the bidder's understanding of the needs of the project;
- A brief analysis of key issues;
- A methodological discussion of how the bidder proposes to address those needs including assessment of key issues, analytical strategies that will underlie the project, specific techniques to be utilised including sampling techniques, and practical discussion of possible limitations in carrying out the project;
- A detailed work plan that specifies activities to be undertaken, expected outputs and deliverables, resources to be utilised and timing;
- Staffing and management plan;
- A discussion on how measures to ensure the future sustainability of the outcomes of the project will be addressed;
- CVs of all proposed experts;
- Brief discussion of firm's past experience in undertaking similar work and brief summaries of all projects undertaken.

The Financial component should specify:

- 1) Professional fees of expert(s);
- 2) Management and/or operational fees (if any), which include all costs incurred by the person/entity/company for internal coordination, communication, travels and any other associated project management cost;
- 3) Applicable taxes such as VAT, GST, PPN. See Section IX point 3 for an additional note on tax liability.

Activity costs for experts and participants such as reimbursable expenses for airfare, other travel costs and daily subsistence allowance for workshops, meetings, and all other agreed activities do not need to be included in the Financial Component. These items will be discussed with the preferred contractor during the finalisation of the scope of services. Costs will be based on prevailing ASEAN Secretariat's rates.

X. Submission of Application

Applicants should send their application with a cover letter, materials specified in Section IX above and other supporting documents with "**Assessment on Agricultural Techniques and Technologies to Mitigate the Potential Negative Effects of Climate Change in CLMV Countries**" as the subject via email to tender@aadcp2.org, no later than **30 November 2020 at 05:00pm Jakarta time**.

For Frequently Asked Questions (FAQ), please visit <http://aadcp2.org/questions-and-clarifications-assessments-in-support-of-iai-work-plan-iv-project-proposals/>

Any queries on the TOR should be sent to contact@aadcp2.org with the subject line: "**Query Assessment on Agricultural Techniques and Technologies to Mitigate the Potential Negative Effects of Climate Change in CLMV Countries**".

XI. Additional Notes on Terms and Conditions of the Project

1. Any future studies/reports/analysis in any form of intellectual property rights (including but not limited to patents, copyright and any related rights) submitted by the Contractor to ASEAN arising out of or in connection to the services performed by the Consultant to ASEAN shall belong to the ASEAN Secretariat under the name of **ASEAN** only;
2. Successful bidder shall agree to be bound and sign the Special Services Agreement (SSA) with all requirements under the terms and conditions provided therein, including but not limited to the AADCP II Guidelines for the Contractors attached to the SSA.
3. As an intergovernmental organisation, ASEAN shall not be responsible for any tax(es), levy, tax claim or any tax liability which may be imposed by any law in relation to any amount payable by the ASEAN Secretariat.