

AFB/PPRC.28/25 4 October 2021

Adaptation Fund Board Project and Programme Review Committee Twenty-eighth Meeting Virtual meeting, 11-13 October 2021

Agenda Item 5 f)

PROPOSAL FOR CAMBODIA, LAO PEOPLE'S DEMOCRATIC REPUBLIC (PDR), MYANMAR, VIET NAM AND THAILAND

# Background

- 1. The strategic priorities, policies and guidelines of the Adaptation Fund (the Fund), as well as its operational policies and guidelines include provisions for funding projects and programmes at the regional, i.e. transnational level. However, the Fund has thus far not funded such projects and programmes.
- 2. The Adaptation Fund Board (the Board), as well as its Project and Programme Review Committee (PPRC) and Ethics and Finance Committee (EFC) considered issues related to regional projects and programmes on a number of occasions between the Board's fourteenth and twenty-first meetings but the Board did not make decisions for the purpose of inviting proposals for such projects. Indeed, in its fourteenth meeting, the Board decided to:
  - (c) Request the secretariat to send a letter to any accredited regional implementing entities informing them that they could present a country project/programme but not a regional project/programme until a decision had been taken by the Board, and that they would be provided with further information pursuant to that decision

(Decision B.14/25 (c))

- 3. At its eighth meeting in March 2012, the PPRC came up with recommendations on certain definitions related to regional projects and programmes. However, as the subsequent seventeenth Board meeting took a different strategic approach to the overall question of regional projects and programmes, these PPRC recommendations were not included in a Board decision.
- 4. At its twenty-fourth meeting, the Board heard a presentation from the coordinator of the working group set up by decision B.17/20 and tasked with following up on the issue of regional projects and programmes. She circulated a recommendation prepared by the working group, for the consideration by the Board, and the Board decided:
  - (a) To initiate steps to launch a pilot programme on regional projects and programmes, not to exceed US\$ 30 million;
  - (b) That the pilot programme on regional projects and programmes will be outside of the consideration of the 50 per cent cap on multilateral implementing entities (MIEs) and the country cap;
  - (c) That regional implementing entities (RIEs) and MIEs that partner with national implementing entities (NIEs) or other national institutions would be eligible for this pilot programme, and

(d) To request the secretariat to prepare for the consideration of the Board, before the twenty-fifth meeting of the Board or intersessionally, under the guidance of the working group set up under decision B.17/20, a proposal for such a pilot programme based on consultations with contributors, MIEs, RIEs, the Adaptation Committee, the Climate Technology Centre and Network (CTCN), the Least Developed Countries Expert Group (LEG), and other relevant bodies, as appropriate, and in that proposal make a recommendation on possible options on approaches, procedures and priority areas for the implementation of the pilot programme.

(Decision B.24/30)

- 5. The proposal requested under (d) of the decision above was prepared by the secretariat and submitted to the Board in its twenty-fifth meeting, and the Board decided to:
  - (a) Approve the pilot programme on regional projects and programmes, as contained in document AFB/B.25/6/Rev.2;
  - (b) Set a cap of US\$ 30 million for the programme;
  - (c) Request the secretariat to issue a call for regional project and programme proposals for consideration by the Board in its twenty-sixth meeting; and
  - (d) Request the secretariat to continue discussions with the Climate Technology Center and Network (CTCN) towards operationalizing, during the implementation of the pilot programme on regional projects and programmes, the Synergy Option 2 on knowledge management proposed by CTCN and included in Annex III of the document AFB/B.25/6/Rev.2.

(Decision B.25/28)

- 6. Based on the Board Decision B.25/28, the first call for regional project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on 5 May 2015.
- 7. At its twenty-sixth meeting the Board decided to request the secretariat to inform the Multilateral Implementing Entities and Regional Implementing Entities that the call for proposals under the Pilot Programme for Regional Projects and Programmes is still open and to encourage them to submit proposals to the Board at its 27th meeting, bearing in mind the cap established by Decision B.25/26.

(Decision B.26/3)

- 8. At its twenty-seventh meeting the Board decided to:
  - (a) Continue consideration of regional project and programme proposals under the pilot programme, while reminding the implementing entities that the amount set aside for the pilot programme is US\$ 30 million;
  - (b) Request the secretariat to prepare for consideration by the Project and Programme Review Committee at its nineteenth meeting, a proposal for prioritization among regional project/programme proposals, including for awarding project formulation grants, and for establishment of a pipeline; and
  - (c) Consider the matter of the pilot programme for regional projects and programmes at its twenty-eighth meeting.

(Decision B.27/5)

- 9. The proposal requested in (b) above was presented to the nineteenth meeting of the PPRC as document AFB/PPRC.19/5. The Board subsequently decided:
- a) With regard to the pilot programme approved by decision B.25/28:
  - (i) To prioritize the four projects and 10 project formulation grants as follows:
    - 1. If the proposals recommended to be funded in a given meeting of the PPRC do not exceed the available slots under the pilot programme, all those proposals would be submitted to the Board for funding;
    - 2. If the proposals recommended to be funded in a given meeting of the PPRC do exceed the available slots under the pilot programme, the proposals to be funded under the pilot programme would be prioritized so that the total number of projects and project formulation grants (PFGs) under the programme maximizes the total diversity of projects/PFGs. This would be done using a three-tier prioritization system: so that the proposals in relatively less funded sectors would be prioritized as the first level of prioritization. If there are more than one proposal in the same sector: the proposals in relatively less funded regions are prioritized as the second level of prioritization. If there are more than one proposal in the same region, the proposals submitted by relatively less represented implementing entity would be prioritized as the third level of prioritization;
  - (ii) To request the secretariat to report on the progress and experiences of the pilot programme to the PPRC at its twenty-third meeting; and

- b) With regard to financing regional proposals beyond the pilot programme referred to above:
  - (i) To continue considering regional proposals for funding, within the two categories originally described in document AFB/B.25/6/Rev.2: ones requesting up to US\$ 14 million, and others requesting up to US\$ 5 million, subject to review of the regional programme;
  - (ii) To establish two pipelines for technically cleared regional proposals: one for proposals up to US\$ 14 million and the other for proposals up to US\$ 5 million, and place any technically cleared regional proposals, in those pipelines, in the order described in decision B.17/19 (their date of recommendation by the PPRC, their submission date, their lower "net" cost); and
  - (iii) To fund projects from the two pipelines, using funds available for the respective types of implementing entities, so that the maximum number of or maximum total funding for projects and project formulation grants to be approved each fiscal year will be outlined at the time of approving the annual work plan of the Board.

(Decision B.28/1)

- 10. At its thirty-first meeting, having considered the comments and recommendation of the Project and Programme Review Committee, the Adaptation Fund Board (the Board) decided:
  - (a) To merge the two pipelines for technically cleared regional proposals established in decision B.28/1(b)(ii), so that starting in fiscal year 2019 the provisional amount of funding for regional proposals would be allocated without distinction between the two categories originally described in document AFB/B.25/6/Rev.2, and that the funding of regional proposals would be established on a 'first come, first served' basis; and
  - (b) To include in its work programme for fiscal year 2019 provision of an amount of US\$ 60 million for the funding of regional project and programme proposals, as follows:
    - (i) Up to US\$ 59 million to be used for funding regional project and programme proposals in the two categories of regional projects and programmes: ones requesting up to US\$14 million, and others requesting up to US\$5 million; and
    - (ii) Up to US\$ 1 million for funding project formulation grant requests for preparing regional project and programme concepts or fully-developed project and programme documents.

(Decision B.31/3)

- 11. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.
- 12. The following project pre-concept document titled Enhancing Climate Resilience of Mekong River Communities through Strengthening Climate Services (ECR-MEKONG) was submitted for Cambodia, Lao People's Democratic Republic (PDR), Myanmar, Viet Nam and Thailand by the World Meteorological Organization (WMO), which is a Multilateral Implementing Entity of the Adaptation Fund.
- 13. This is the first submission of the regional project pre-concept proposal using the three-step submission process.
- 14. The current submission was received by the secretariat in time to be considered in the thirty-eighth Board meeting. The secretariat carried out a technical review of the project proposal, with the diary number AF00000268, and completed a review sheet.
- 15. In accordance with a request to the secretariat made by the Board in its 10th meeting, the secretariat shared this review sheet with WMO, and offered it the opportunity of providing responses before the review sheet was sent to the PPRC.
- 16. The secretariat is submitting to the PPRC the summary and, pursuant to decision B.17/15, the final technical review of the project, both prepared by the secretariat, along with the final submission of the proposal in the following section. In accordance with decision B.25.15, the proposal is submitted with changes between the initial submission and the revised version highlighted.



# ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Pre-Concept for a Regional Project

Countries/Region: Cambodia, Lao People's Democratic Republic (PDR), Myanmar, Viet Nam and Thailand

Project Title: Enhancing Climate Resilience of Mekong River Communities through Strengthening Climate Services (ECR-

MEKONG)

**Thematic focal area:** Disaster risk reduction and early warning systems

Implementing Entity: World Meteorological Organization (WMO)

**Executing Entities:** National Meteorological and Hydrological Services (NMHSs) of Cambodia, Lao PDR, Myanmar, Thailand and Viet

Nam, Australian Bureau of Meteorology, RMIT University, United Nations Food and Agriculture Organization

(FAO) and Global Water Partnership (GWP)

AF Project ID: AF00000268

IE Project ID: Requested Financing from Adaptation Fund (US Dollars): 13,662,862

Reviewer and contact person: Hugo Remaury Co-reviewer(s): Ulrich Apel

**IE Contact Person(s):** Jean-Paul Gaudechoux, Robert Stefanski

# Technical Summary

The project "Enhancing Climate Resilience of Mekong River Communities through Strengthening Climate Services" (ECR-MEKONG) aims to reduce vulnerability and increase resilience of the Mekong River communities in Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam to climate variability and change by implementing climate-smart decision-making networks for better disaster risk management of drought and floods, agriculture management, and water resources management encompassing hydropower generation. This will be done through the four components below:

Component 1: Development of user-centred integrated Early Warning Systems for drought and floods (USD 3,500,000).

Component 2: Increased use of climate information and services by strengthening inter-institutional and inter-

sectorial capacity (USD 3,000,000).

Component 3: Enhanced capacity of communities to counter the adverse impact of drought and floods (USD 3,000,000).

<u>Component 4:</u> Strengthening regional cooperation and knowledge sharing among the NMHSs and stakeholders (USD 2,000,000).

# Requested financing overview:

Project/Programme Execution Cost: USD 1,092,500 Total Project/Programme Cost: USD 11,500,000

Implementing Fee: USD 1,070,362 Financing Requested: USD 13,662,862

The proposal includes a request for a project formulation grant of USD 19,980.

The initial technical review raised several issues, such as a lack of specificity in the proposed activities, a weak added value of the regional approach and unclear implementation arrangements, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review.

The final technical review finds that the proposal has not addressed some of the CR and CAR requests. Namely, the adequateness and relevance of the proposed investments, cohesion of components among themselves and concreteness of the proposed project remain to be demonstrated.

Date 20 September 2021

Review	Questions	Comments at Initial Technical Review	Comments at Final Technical Review
Criteria			
Country Eligibility	Are all of the participating countries party to the Kyoto Protocol?	Yes.	-

	2.	Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?	Yes. Participating countries are particularly vulnerable to climate change induced floods and droughts, which both frequency and severity are increasing. The region's rainfall is, among other factors, impacted by El Nino-Southern Oscillation (ENSO) often resulting in droughts or an excess of rainfall causing floods.	-
Project Eligibility	1.	Have the designated government authorities for the Adaptation Fund from each of the participating countries endorsed the project/programme?	Yes. As per the Endorsement letters dated 13 <sup>th</sup> April 2021 (Cambodia), 12 <sup>th</sup> July 2021 (Lao PDR), 28 <sup>th</sup> October 2020 (Myanmar), 15 <sup>th</sup> March 2021 (Thailand), 8 <sup>th</sup> February 2021 (Viet Nam).	-
	2.	Has the pre-concept provided necessary information on the problem the proposed project/programme is aiming to solve, including both the regional and the country perspective?	Not cleared. Regional climate-related challenges and existing NMHS gaps have been described. Such gaps include inadequate observation networks, insufficient databases, lack of management plans and policies and lack of technical capacity, among others. Nevertheless, context, challenges and gaps in each participating country are not described.  CR1: Please provide more specific	CR1: Not cleared. References have been

	information on the Mekong Region backed up by references (if possible please refer to the Sixth Assessment Report of the IPCC instead of the 5 <sup>th</sup> ). Please also provide a country-level perspective when describing context, challenges, and gaps that the project seeks to address.  CR3: Please briefly describe	added to the proposal, including to the Sixth assessment report of the IPCC are now included (p.1). A country-level perspective when describing context, challenges, and gaps that the project seeks to address is still missing.
	stakeholders and communities affected by the anticipated climate scenarios that the project aims to address.  CAR1: Please reduce the document length to 5 pages maximum (part I to III) to ensure compliance with page limit.	CR3: Not cleared. Tentative stakeholders and communities to be supported ("communities, agriculture, water management, and energy sectors") remain vague. The response sheet commits to identifying such stakeholders and communities when developing the concept proposal.  CAR1: Addressed.
3. Have the project/programme objectives, components and financing been clearly explained?	No. Information included in the proposal refers to various economic sectors (agriculture, energy and water), multiple technical and institutional dimensions, various level of technical expertise (hydrology, climate and weather advisories) and many stakeholders (no less than 9 executing entities are involved, with WMO providing execution	

services). Although denoting a strong ambition, the project scope and limits are blurred. Cohesion amongst components should be reinforced, too.

CR4: Please outline more clearly in the proposal what will be the exact project scope and its limits. This should help clarifying i) the specific concrete outcomes expected at the end of the project (including development and/or enhancement of climate services and/or products), ii) the economic sectors that will be covered, iii) reasons for involving or not involving relevant national institutions (e.g., Ministries of Agriculture, Energy and Water), and iv) the type of technical expertise provided, among others.

CR5: Using findings from recent gap analysis on participating countries' capacity and investment needs please describe how the project will build on and address gaps of any i) pre-existing nation and region-wide flood and drought Early Warnings Systems, models/forecast products and databases; and ii) regional data sharing agreements and associated mechanisms. If no capacity and

### CR4: Addressed.

The project would support the capacity of NHMS in generating services including Early Warning Systems, through the implementation of drought and flood risk assessment tools (response to point i). The economic sectors that the project will support include agriculture. energy, water, as well as disaster management offices (response to point ii). Ministries of Agriculture, Energy and Water as well as Disaster Management offices as well as the Mekong River Commission and the Lancang-Mekong Cooperation will all be involved in the project (response to point iii). The type of technical expertise provided will include building national and regional capacity and expertise in understanding Sub seasonal-to-Seasonal climate information, satellite precipitation, novel risk assessment methodologies, and novel approaches to generating and disseminating drought and flood early warnings (response to point iv).

#### CR5: Not addressed.

The response sheet provides a series of links which do not provide information on existing

investment needs has been conducted flood and drought EWS, information on models/forecast products and databases in yet, it seems of utmost importance to complete such analysis as part of the participating countries and in the region. Some links seem not to be publicly accessible. project formulation to ensure the adequateness and relevance of the Similarly, no information is provided regarding proposed investments. the existence of regional data sharing agreements and associated mechanisms. As a **CR6**: Please revise the proposal's result, the adequateness and relevance of the narrative to enhance cohesion amongst proposed investments are yet to be components, particularly between demonstrated. components 1, 2 and 3 and component 4, emphasizing on how the proposed investments will feed into each other and participate to the same overarching goal. The proposal should clarify the scope of Component 4, which "cooperation mechanisms" and CR6: Not addressed. "technical groups" remain vague and The additional information provided fail to clarify disconnected from other components. how the investments proposed under each component feed into each other. As a result, the cohesion of components among themselves remain to be demonstrated. 4. Has the No. project/programme been As it currently stands, the proposal is justified in terms of how: mainly devoted to enhancing capacity of - it supports concrete stakeholders from different standpoints adaptation actions? (operational, technical, inter-institutional, - it builds added value inter-sectorial as well as local through the regional communities' capacity). Investments in

# approach?

- it promotes new and innovative solutions to climate change adaptation?
- it is cost-effective?
- it is consistent with applicable strategies and plans?
- it incorporates learning and knowledge management?
- it will be developed through a consultative process with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund?
- it will take into account sustainability?

such soft adaptive measures question the visible and tangible results expected from the project on the ground. The concreteness of the proposal remains therefore to be demonstrated.

#### Concreteness:

CR7: Please revise the proposal to include concrete adaptation options and outline a clear rational of how they will address the climate change impacts and generates visible and tangible results on the ground for Mekong River communities. Without being prescriptive, options might include investments to tackle the acknowledged "inadequate observation networks, insufficient databases" or support to the actual implementation of the local climate risk and adaptation plans developed under 3.2.

CR8: Please clarify the extent to which the project will collaborate with DRR authorities and confirm whether it will work towards improving the response capability of local communities, which would be an important element to achieve concrete adaptation benefits.

# Regional approach:

#### CR7: Not addressed.

The pre-concept is vastly based on soft investments generating indirect adaptation benefits through capacity building, provision of observations-related tools and data, and strengthening of NMHS operations in participating countries. Only a few investments could possibly yield visible and tangible results on the ground (i.e., demonstration sites, improved observation networks and increased density of meteorological observations stations) but their scope remain unclear. As a result, the concreteness of the proposed project (as defined in para 10 of the AF Operational Policies and Guidelines) remain to be demonstrated.

## CR8: Addressed.

The project plans to collaborate with relevant DRR-related authorities, mainly through the provision of early warnings for drought and floods, hence assisting them in decision making. The project is therefore not likely to provide direct support to communities in responding to such enhanced EWS, hence not

CR9: Most activities proposed under Components 1, 2 and 3 seem geared towards national investments that could potentially be supported through separate national-level initiatives. Please clearly outline the regional dimension and added value of the project.

New and innovative solutions to climate change adaptation:

CR10: Please clarify how the "innovative deliverables" listed in this section are new and innovative in the context of the Mekong river. Please also explain the extent to which the project's proposed approach is new and innovative, too.

Consistency with applicable strategies and plans:

**CR11**: The proposal should take into account NMHS respective National Strategic Plans as well as relevant regional strategies and plans specific to the Mekong River, notably those developed in the context of the MRC, LMC and ASEAN.

Consultative process with particular reference to vulnerable groups, including gender considerations:

contributing to achieve concrete adaptation benefits.

CR9: Not cleared. The response sheet states that a regional initiative "requires that NMHSs consolidate their resources at regional level, adopt standardized good practices, share data and knowledge within the region". Although data and knowledge may be shared thanks to the proposed initiative, the pre-concept note is not fully geared towards consolidating resources at regional level nor adopting standardized good practices. The regional dimension and added value of the project should be significantly reinforced.

**CR10:** Addressed, as per information included on page 4 and in the response sheet (although the later have not been included directly into the proposal).

**CR11: Not cleared.** Regional strategies and plans are listed in the response sheet but not all of them are included in the proposal. No references are made to the NMHS respective

CR12: Please provide more details on the consultations conducted so far (dates and institutions consulted), and outline plans for how local communities, especially the most vulnerable groups will be consulted during project preparation, and what gender considerations will be made, in compliance with the Environmental and Social Policy of the Adaptation Fund. Please also clarify why some institutions proposed to act as executing entities (RMIT University, Australian Bureau of Meteorology) do not appear in this section.

#### Sustainability:

CR13: Please describe how the project will work towards building regional-level efforts' sustainability, beyond the national-level sustainability described, and how relevant project activities could be anchored within existing regional institutional frameworks (such as those developed in the context of ASEAN) to support long-term sustainability.

**CR14**: Please consider building synergies and avoiding overlap with other AF-funded on-going initiatives in the region (UNEP/Mekong EbA South,

National Strategic Plans although this would help in ensuring consistency of the proposed project with applicable strategies and plans.

CR12: Not cleared. Some information is provided on p.4. The response sheet includes information on the consultative process planned to be undertaken during project preparation, with reference to vulnerable groups, including gender considerations. Nevertheless, such information is not included in the proposal itself. The pre-concept proposal confirms that RMIT University and the Australian Bureau of Meteorology participated in the initial consultations.

**CR 13: Not cleared.** Although the response sheet confirms that the project would build on ASEAN Climate Outlook Forum, such information is not included in the proposal itself.

**CR14: Not cleared.** Although the response sheet commits to identify synergies with AFfunded on-going initiatives in the region (UNEP/Mekong EbA South, UN-Habitat projects in Viet Nam and Cambodia), such

	UN-Habitat projects in Viet Nam and Cambodia).	information is not included in the proposal itself.
5. Does the pre-concept briefly explain which organizations would be involved in the proposed regional project/programme at the regional and national/subnational level, and how coordination would be	Not clear. A total of 9 executing entities are listed in the proposal. The role of each entity is ambiguous. The narrative provided in this section should be enhanced to better reflect roles of each executing entity in implementing the components and associated outputs.	
arranged? Does it explain how national institutions, and when possible, national implementing entities (NIEs) would be involved as partners in the project?	CR15: Please provide more clarity on the role of each executing entity in the project execution, and provide some insight on how coordination of all these executing entities will be ensured. Kindly clarify the role of the Australian Bureau of Meteorology.  Please also clarify if WMO will be providing execution services through one of its programmes. (the proposal states that "WMO GPC LRFs and other programmes hosted by the [WMO] Secretariat such as the Associated Programme on Flood Management and the Integrated Drought Management Programme, will assist the NMHS"). As a reminder, Execution services can only be provided by Implementing Entities on an exceptional basis and at the written request by the recipient country,	CR15: Not cleared. Additional information is provided on p.5 of the pre-concept proposal. The response sheet and the pre-concept proposal confirm that nine executing entities will be involved in the project. Nevertheless, the role of each executing entity in executing the proposed components/outputs remain to be described, as is the process through which a smooth coordination among the myriad of EEs will be ensured.  Finally, according to the information provided in the pre-concept proposal and in the response sheet, some activities will be executed by the Australian Bureau of Meteorology-hosted WMO Global Producing Centre for Long-range Forecasts. Annex 7 of the AF Operational Policies and Guidelines contains guidance related to implementing entities providing execution services, whether in part or in full. Both WMO/GWP joint programmes (the

involving designated authorities in the process, and providing rationale for such a request.

CR16: The proposal states that "WMO GPC LRFs. RMIT University SPACE Centre, FAO and GWP will also be taking the role for the stakeholders' engagement both at national and local level", and also that "FAO and GWP will be implementing activities at level of local communities based on their extensive experience in assisting communities to make agriculture more productive and sustainable, enabling inclusive and efficient agricultural and food systems, and increasing the resilience of livelihoods to threats and crises." Please explain the rationale for not relying on relevant national institutions for such activities.

CR17: The proposal states that component 4 will provide support to the NMHSs "in Mekong River Commission Member States" which would exclude Myanmar from such activity. Please confirm whether Myanmar will participate in Component 4 activities and rephrase the proposal as needed.

Associated Programme on Flood Management and the Integrated Drought Management Programme) have been removed from the list of executing agencies in the revised pre-concept proposal.

**CR16:** Addressed. The proposal confirms that NMHS and other relevant national institutions will be supporting stakeholders' engagement and implementation of activities on the ground. This should be reflected when clarifying how the project will ensure a smooth coordination amongst EEs (see response to CR 15 above).

**CR17: Addressed.** The proposal has been rephrased to reflect the involvement of Myanmar in activities proposed under Component 4.

		CR18: The proposal refers often to activities that will be implemented in "Mekong River countries" and "Mekong River communities", although the People's Republic of China is not included in the list of activities. Please rephrase the proposal to reflect this.	CR18: Addressed. The proposal has been rephrased to reflect the specific countries the project will support.
Resourc e Availabili ty	6. Is the requested project / programme funding within the funding windows of the programme for regional projects/programmes?	Yes.	-
	7. Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme budget?	Yes, if WMO confirms that it will not be providing execution services (see CR15).	This criterion may need to be re-assessed in future submission, as per the above response to CR 15.
Eligibility of IE	8. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?	Yes.	-



# ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: Pre-Concept for a Regional Project

Countries/Region: Cambodia, Lao People's Democratic Republic (PDR), Myanmar, Viet Nam and Thailand

Project Title: Enhancing Climate Resilience of Mekong River Communities through Strengthening Climate Services (ECR-

MEKONG)

**Thematic focal area:** Disaster risk reduction and early warning systems

Implementing Entity: World Meteorological Organization (WMO)

**Executing Entities:** National Meteorological and Hydrological Services (NMHSs) of Cambodia, Lao PDR, Myanmar, Thailand and Viet

Nam, Australian Bureau of Meteorology, RMIT University, United Nations Food and Agriculture Organization

(FAO) and Global Water Partnership (GWP)

AF Project ID: AF00000268

IE Project ID: Requested Financing from Adaptation Fund (US Dollars): 13,662,862

Reviewer and contact person: Hugo Remaury Co-reviewer(s): Ulrich Apel

IE Contact Person(s): Jean-Paul Gaudechoux, Robert Stefanski

# Technical Summary

The project "Enhancing Climate Resilience of Mekong River Communities through Strengthening Climate Services" (ECR-MEKONG) aims to reduce vulnerability and increase resilience of the Mekong River communities in Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam to climate variability and change by implementing climate-smart decision-making networks for better disaster risk management of drought and floods, agriculture management, and water resources management encompassing hydropower generation. This will be done through the four components below:

Component 1: Strengthening operational capacity of national meteorological and hydrological services (USD 3,500,000).

Component 2: Strengthening inter-institutional and inter-sectorial capacity to utilise weather, climate, and

	hydrological information and services (USD 3,000,000).
	<u>Component 3:</u> Capacity development of local communities in understanding and application of weather, climate, and hydrological information (USD 3,000,000).
	Component 4: Strengthening regional transboundary cooperation between the NMHSs and key stakeholders in agriculture, energy and water sectors (USD 2,000,000).
	Requested financing overview: Project/Programme Execution Cost: USD 1,092,500 Total Project/Programme Cost: USD 11,500,000 Implementing Fee: USD 1,070,362 Financing Requested: USD 13,662,862
	The proposal includes a request for a project formulation grant of USD 19,980.
	The initial technical review raises several issues, such as a lack of specificity in the proposed activities, a weak added value of the regional approach and unclear implementation arrangements, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review.
Date	25 August 2021
Date	Total Project/Programme Cost: USD 11,500,000 Implementing Fee: USD 1,070,362 Financing Requested: USD 13,662,862  The proposal includes a request for a project formulation grant of USD 19,980.  The initial technical review raises several issues, such as a lack of specificity in the proposed activities, a weak added value of the regional approach and unclear implementation arrangements, as is discussed in the number of Clarification Requests (CRs) and Corrective Action Request (CAR) raised in the review.

Review	Questions	Comments	Response to Comments
Criteria			
Country Eligibility	Are all of the participating	Yes.	
g,	countries party to		
	the Kyoto Protocol?		
	4. Are all of the	Yes.	

	participating countries developing countries particularly vulnerable to the adverse effects of climate change?	Participating countries are particularly vulnerable to climate change induced floods and droughts, which both frequency and severity are increasing. The region's rainfall is, among other factors, impacted by El Nino-Southern Oscillation (ENSO) often resulting in droughts or an excess of rainfall causing floods.	
Project Eligibility	9. Have the designated government authorities for the Adaptation Fund from each of the participating countries endorsed the project/programme?	Yes. As per the Endorsement letters dated 13 <sup>th</sup> April 2021 (Cambodia), 12 <sup>th</sup> July 2021 (Lao PDR), 28 <sup>th</sup> October 2020 (Myanmar), 15 <sup>th</sup> March 2021 (Thailand), 8 <sup>th</sup> February 2021 (Viet Nam).	
	10. Has the pre- concept provided necessary information on the problem the proposed project/programme is aiming to solve, including both the regional and the country	Not cleared. Regional climate-related challenges and existing NMHS gaps have been described. Such gaps include inadequate observation networks, insufficient databases, lack of management plans and policies and lack of technical capacity, among others. Nevertheless, context, challenges and gaps in each participating country are not described.	CR1: Clarified. Reference on IPCC AR6 included. More specific information on the Mekong Region (rather than for the SE Asia Region) backed up by references - Asian Development Bank "Asian Development Outlook (ADO) 2019: Strengthening Disaster Resilience" and WMO Report No 1267 published in 2021 "The Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970–2019)" - has been provided.

# perspective?

**CR1**: Please provide more specific information on the Mekong Region backed up by references (if possible please refer to the Sixth Assessment Report of the IPCC instead of the 5<sup>th</sup>). Please also provide a country-level perspective when describing context, challenges, and gaps that the project seeks to address.

**CR3**: Please briefly describe stakeholders and communities affected by the anticipated climate scenarios that the project aims to address.

**CAR1**: Please reduce the document length to 5 pages maximum (part I to III) to ensure compliance with page limit.

Over the past three decades, droughts and floods have affected more than 100 million people in the Participating Countries (Asian Development Bank; WMO 2021).

NB: Hereinafter Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam are referred to as the Participating Countries.

2.NDCs – An analysis of the updated Nationally Determined Contributions (NDCs) submitted by the participating countries to the UNFCCC, indicate flood and drought as the main climate impact drivers in the region.

A detailed analysis of NDCs will be presented in the next phase of the proposal development where we will list the countries climate risks and adaptation needs

#### CR3:

Clarified. Brief description of stakeholders and communities affected by the anticipated climate scenarios that the project aims to address has been added.

The Mekong is a trans-boundary river which runs through the Participating Countries. The availability of water is fundamental for communities, agriculture, water management, and energy sectors – key stakeholders in the Participating Countries affected by the anticipated climate scenarios that the project aims to address

At the concept developing stage, in consultations with the NMHSs of the Participating Countries, FAO and GWP, several local at-risk communities in all five

		countries will be identified, to work with them on case studies for five years over the duration of the project.  CAR1: Corrected. Parts I, II and III of the document have been reduced to the total length of 5 pages.
11. Have the project/programme objectives, components and financing been clearly explained?	No. Information included in the proposal refers to various economic sectors (agriculture, energy and water), multiple technical and institutional dimensions, various level of technical expertise (hydrology, climate and weather advisories) and many stakeholders (no less than 9 executing entities are involved, with WMO providing execution services). Although denoting a strong ambition, the project scope and limits are blurred. Cohesion amongst components should be reinforced, too.  CR4: Please outline more clearly in the proposal what will be the exact project scope and its limits. This should help clarifying i) the specific concrete outcomes expected at the end of the	CR4: Clarified. The exact project scope has been clarified. (i) Specifically, concrete outcomes for strengthening climate information services revised as follows:  Increased operational capacity of the NMHSs in the Participating Countries to generate and disseminate end-to-end users' demand-driven services including early warnings which will be achieved through implementing drought and flood risk assessment tools and user-centred integrated EWSs.  These drought and flood risk assessment tools and EWSs are expected to be operational at NMHSs in five Mekong Region countries (Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam) at the end of the project. The new risk assessment tools will feed in the NAP processes in each country especially in Thailand and Viet Nam.
	project (including development and/or enhancement of climate services and/or products), ii) the economic sectors that	(ii) The economic sectors that will be covered include agriculture, energy, water, as well as disaster management

will be covered, iii) reasons for involving or not involving relevant national institutions (e.g., Ministries of Agriculture, Energy and Water), and iv) the type of technical expertise provided, among others.

CR5: Using findings from recent gap analysis on participating countries' capacity and investment needs please describe how the project will build on and address gaps of any i) pre-existing nation and region-wide flood and drought Early Warnings Systems, models/forecast products and databases; and ii) regional data sharing agreements and associated mechanisms. If no capacity and investment needs has been conducted vet, it seems of utmost importance to complete such analysis as part of the project formulation to ensure the adequateness and relevance of the proposed investments.

**CR6**: Please revise the proposal's narrative to enhance cohesion amongst components, particularly between components 1, 2 and 3 and component 4, emphasizing on how the proposed investments will feed into each other

offices.

(iii) Ministries of Agriculture, Energy and Water, disaster management officers, are key stakeholders who will benefit from obtaining accurate and timely information about risk of drought and floods, as well as apply proactive drought and flood management approaches / implementing the developed Standard Operating Procedures (SOPs) receiving early warnings about expected hazardous hydrometeorological conditions. This is the reason for involving those relevant national institutions. In addition, regional actors - Mekong River Commission, Langcang-Mekong Cooperation – will be important stakeholders on this project.

Stakeholders groups in demonstration/validation sites that will be defined in the next proposal development stage and that will include the direct beneficiaries of the climate services: agriculture associations, smallholder farmers, water resources irrigation managers, civil protection at municipality levels.

(iv) The type of technical expertise provided will include building national and regional capacity and expertise in understanding S2S climate information provided by the WMO GPC LRFs, satellite precipitation estimates provide by the WMO SWCEM, novel risk assessment methodologies, and novel approaches to generating and disseminating

and participate to the same overarching goal. The proposal should clarify the scope of Component 4, which "cooperation mechanisms" and "technical groups" remain vague and disconnected from other components.

drought and flood early warnings.

#### CR5:

Clarified. Preliminary capacity and investment needs assessments have been conducted by the WMO.

#### [References:

**ECCC-CREWS SeA country profiles** 

https://wmoomm.sharepoint.com/:f:/s/XB Projects/Egi6zog 9qtlocl8ALIHwRIBS57RnaL0e2mz46M8KrEu5g?e=KB87Pt

WMO 2020 State of Climate Services: Risk Information and Early Warning Systems

https://public.wmo.int/en/media/press-release/state-ofclimate-services-2020-report-move-from-early-warningsearly-action

WMO The state of Climate Services report for Agriculture and food security

https://library.wmo.int/doc\_num.php?explnum\_id=10089

# Hydromet Gap Report

https://alliancehydromet.org/wp-content/uploads/2021/07/Hydromet Report updated.pdf

These WMO assessments identified where and how investments could be made in effective early warning systems that strengthen countries' resilience to multiple weather, climate and water-related hazards.

Based on WMO preliminary assessments, needs to strengthen capacity of Climate Information Services has been identified, including investing in turning early warning information into impact-based forecasting and early action; expanding surface-based observation networks, utilizing space-based observations and using sub-seasonal to seasonal (S2S) climate information for risk assessments and early warnings.

Therefore, needs to develop user-centered integrated EWS for drought and floods has been identified as the priority, to assist at-risk communities in five Mekong region countries (Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam) with climate change adaptation and building resilience. These needs will be addressed under the proposed project.

An assessment at regional level is in WMO report <a href="https://wmoomm.sharepoint.com/:b:/s/XB">https://wmoomm.sharepoint.com/:b:/s/XB</a> Projects/EZdjqgccEZBHI5n1K2 <a href="mbtSoBsGqLLo6qT4pq7XFCp31mlw?e=GJGJpu">mbtSoBsGqLLo6qT4pq7XFCp31mlw?e=GJGJpu</a> and it recommends strengthening the regional climate center and the ASEANCOF.

#### CR6:

Clarified. The proposal has been revised to improve clarity and explain cohesion amongst all four components, emphasizing interconnections between the components and their contribution to the overarching goal of enhancing climate resilience of Mekong River Communities through strengthening climate services. A diagram to demonstrate cohesion has been added on page 3.

Clarification on technical groups was provided in the revised document as follows " ... regional technical working groups of

12. Has the
project/programme
been justified in
terms of how:
- it supports
concrete
adaptation actions?
- it builds added
value through the
regional approach?
- it promotes new
and innovative

#### No.

As it currently stands, the proposal is mainly devoted to enhancing capacity of stakeholders from different standpoints (operational, technical, inter-institutional, inter-sectorial as well as local communities' capacity). Investments in such soft adaptive measures question the visible and tangible results expected from the project on the ground. The concreteness of the proposal remains therefore to be demonstrated.

#### national experts from agriculture, energy, water sectors".

This is based on the following consideration. Establishing or invigorating regional technical working groups (TWGs) of national experts under the aegis of WMO's Regional Association II is proposed. TWGs coordination efforts to support some of the activities to strengthen climate services value chain, for example, coordinate the assessment of skill (or performance) of S2S forecasts of regional climate to be produced by the Participating Countries using established procedures and metrics. These TWGs also may be tasked with proposing appropriate procedures for space/time downscaling of S2S forecasts. TWGs will strengthen interaction among disciplinary scientific communities such as climate and hydrology experts.

Clarification on regional mechanism – it is the Regional Climate Outlook Forum (RCOF).

## CR7:

General Comment.

In general, we would like to respond to this comment that the new capacity, new tools, improved climate services will be demonstrated in pilot areas with the help of FAO and GWP. At these demonstration sites or case studies we will implement the climate services in concrete adaptation measures and we will measure the socio-economic benefits of improved climate services.

Concreteness - Clarified.

solutions to climate change adaptation?

- it is costeffective?
- it is consistent with applicable strategies and plans?
- it incorporates learning and knowledge management?
- it will be
  developed through
  a consultative
  process with
  particular reference
  to vulnerable
  groups, including
  gender
  considerations, in
  compliance with
  the Environmental
  and Social Policy
  of the Adaptation
  Fund?
- it will take into account sustainability?

#### Concreteness:

CR7: Please revise the proposal to include concrete adaptation options and outline a clear rational of how they will address the climate change impacts and generates visible and tangible results on the ground for Mekong River communities. Without being prescriptive, options might include investments to tackle the acknowledged "inadequate observation networks, insufficient databases" or support to the actual implementation of the local climate risk and adaptation plans developed under 3.2.

CR8: Please clarify the extent to which the project will collaborate with DRR authorities and confirm whether it will work towards improving the response capability of local communities, which would be an important element to achieve concrete adaptation benefits.

# Regional approach:

**CR9**: Most activities proposed under Components 1, 2 and 3 seem geared towards national investments that could potentially be supported through separate national-level initiatives.

In line with the general comment above, we would like to clarify that working with the participating countries we will identify demonstration sites to develop user-centred climate services and adaptation solutions, as well as we will quantify the socio-economic benefits of such implemented measures.

The identified gap of inadequate observation networks (see response to CR5 above) will be addressed though improving observation networks and increasing density of meteorological observation stations to measure temperature, rainfall etc.

The identified gap of insufficient databases will be addressed providing space-based observations thought new WMO flagship initiative Space-based Weather and Climate Extreme Monitoring (SWCEM). Concept methodology for using WMO SWCEM satellite precipitation estimates and products for drought risk assessment and EWS has been successfully implemented in other countries in the Asia-Pacific Region (Australia, Papua New Guinea) [1-3]. In this project, SWCEM products will be tailored to suit needs of atrisk communities in Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam.

 Kuleshov, Y., T. Kurino, T. Kubota, T. Tashima and P. Xie, 2019: WMO Space-based Weather and Climate Extremes Monitoring Demonstration Project (SEMDP): First Outcomes of Regional Cooperation on Drought and Heavy Precipitation Monitoring for Australia and Southeast Asia, In book "Rainfall - Extremes, Distribution and Properties", DOI: 10.5772/intechopen.85824, pp. Please clearly outline the regional dimension and added value of the project.

New and innovative solutions to climate change adaptation:

**CR10**: Please clarify how the "innovative deliverables" listed in this section are new and innovative in the context of the Mekong river. Please also explain the extent to which the project's proposed approach is new and innovative, too.

# Consistency with applicable strategies and plans:

CR11: The proposal should take into account NMHS respective National Strategic Plans as well as relevant regional strategies and plans specific to the Mekong River, notably those developed in the context of the MRC, LMC and ASEAN.

Consultative process with particular reference to vulnerable groups, including gender considerations:

**CR12**: Please provide more details on the consultations conducted so far (dates and institutions consulted), and outline plans for how local communities, especially the most vulnerable groups 51-70.

- Chua Z-W, Kuleshov Y, Watkins AB. 2020: Drought Detection over Papua New Guinea Using Satellite-Derived Products. Remote Sensing, 2020, 12(23), 3859; https://doi.org/10.3390/rs12233859.
- 3. Bhardwaj J., Kuleshov, Y., Chua, Z-W., Watkins, A.B., Choy, S., Sun, C., 2021: Building capacity for a user-centred Integrated Early Warning System for drought in Papua New Guinea. Remote Sensing, https://doi.org/10.3390/rs13163307

**CR8:** Clarified. The project will collaborate with DRR authorities / disaster management offices providing them with valuable information / early warnings for drought and floods (e.g., three stages - watch, alert and critical) which will assist them in decision making.

The developed in the project EWS for drought and floods will be targeting local communities which will improve the response capability of local communities and build their resilience, which will result in achieving concrete adaptation benefits.

EWS will be a user-centred, it will be co-designed together with local communities and local authorities, implemented and tested at community level to ensure that EWS contributes meaningfully into concrete actions.

#### CR9:

Clarified. The project will strengthen the operationalisation of

will be consulted during project preparation, and what gender considerations will be made, in compliance with the Environmental and Social Policy of the Adaptation Fund. Please also clarify why some institutions proposed to act as executing entities (RMIT University, Australian Bureau of Meteorology) do not appear in this section.

#### Sustainability:

CR13: Please describe how the project will work towards building regional-level efforts' sustainability, beyond the national-level sustainability described, and how relevant project activities could be anchored within existing regional institutional frameworks (such as those developed in the context of ASEAN) to support long-term sustainability.

**CR14**: Please consider building synergies and avoiding overlap with other AF-funded on-going initiatives in the region (UNEP/Mekong EbA South, UN-Habitat projects in Viet Nam and Cambodia).

the Climate Services Information System on sub-regional scales in support of service delivery of tailored products and services addressing national and sub-regional priorities. It is well-known that the participating countries share common climate drivers (IPCC AR6 WG1) and it is important to ensure consistency in the way the regional information is optimised and integrated into national and sub-national climate services. The capacity of the WMO Regional Climate Network in South East Asia will need to be strengthened in parallel with the capacity of NMHSs in order to access, use, verify, exchange, analyse and interpret high-quality, relevant and skilful probabilistic seasonal forecasts at regional and national levels. The regional approach of CSIS consists of the cascading climate forecasts from global to regional and national level. The WMO Global Data Processing and Forecasting System (GDPFS), the Global Producing Centres of Long Range Forecasts (GPCs-LRF) and the Regional Climate Centers generate global and regional products that feed into national operations. The country and local levels are where demand for products and services is identified through stakeholder interactions. Thus, the challenge is to link together all of the CSIS components and support the full climate services value chain that will meet the specific needs of stakeholder groups (e.g., governmental agencies, farmers, energy planners and providers, health authority services, water resource managers). For this architecture to function it requires that NMHSs consolidate their resources

at regional level, adopt standardized good practices, share data and knowledge within the region.

#### CR10:

Clarified. The "innovative deliverables" listed in the project proposal are new and innovative for Mekong Region countries, as they are based on modern risk assessment methodology, i.e., risk is evaluated including hazard, exposure and vulnerability components. Also, drought and flood early warnings will be disseminated to at-risk communities through user-centered integrated EWSs – a novel approach developed by the team from RMIT University / Bureau of Meteorology [4].

The project's proposed approach is new and innovative; the methodology was very recently developed and successfully implemented in Australia [5] providing drought risk information to at-risk communities via drought risk analyzer web app [5]. This novel approach will be implemented to develop drought and flood risk assessment tools and EWSs tailored to needs of communities in Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam.

HydroSOS for Mekong River basin will be a transboundary innovative hydrological system for identifying present status and outlook from local level to the basin level helping endusers to develop concrete adaptation strategies and measures to climate extreme events.

- Bhardwaj, J., Asghari, A., Aitkenhead, I., Jackson, M., and Kuleshov, Y., 2021: Climate Risk and Early Warning Systems: Adaptation Strategies for the Most Vulnerable Communities, Journal of Science Policy & Governance (JSPG) 18(2) https://doi.org/10.38126/JSPG180201.
- Sun, C., Choy, S., Chua, Z., Aitkenhead, I. and Kuleshov, Y. 2020: Geographic information system for drought risk mapping in Australia - drought risk analyser web app. *International Archives* of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, XLIV-3/W1-2020, 139–144, https://doi.org/10.5194/isprs-archives-XLIV-3-W1-2020-139-2020, 2020.

#### CR11:

Clarification added to the section on Consistency with Regional and National strategies:

- Sanya Declaration of the 1st Lancang-Mekong Cooperation Leaders' Meeting (2016)
- The Lancang-Mekong Environmental Cooperation Strategic Framework (2019-2023)
- Mekong River Commission Basin Development Strategy 2016-2020
- Mekong River Commission Strategic Plan 2016-2020
- Mekong Adaptation Strategy and Action Plan
- The Greater Mekong Subregion Economic Cooperation Program

Strategic Framework 2012–2022

#### CR12:

#### Clarification A.

Initial consultation and project idea was done in November 2029 at 13th session of ASEANCOF in Bangkok Thailand. The project idea was discussed with NMHSs experts of the participating countries. Due to COVID subsequent consultations with WMO and executing entities where done in virtual mode with MSTeams: Consultation where done on monthly bases with individual NMHSs from March 2020 onward. WMO held a virtual meeting with MRC in October 2020. Regular exchanges with FAO, GWP, BoM and WMO took place on email. In the next phase of the proposal preparation, when we have identified the demonstration sites, the NMHSs will plan participatory meetings and consultation with national stakeholders and the local authorities and users, depending on COVID situation in each country. The NMHSs will work with local extensions to reach the most vulnerable communities to collect information for the project design. A Gender assessment will be conducted in the demonstration sites to inform on gender-specific climate information needs for ensuring women and men the equal opportunity to build resilience in accordance with AF Gender Policy and Gender Action Plan https://www.adaptation-fund.org/wp-

content/uploads/2016/04/OPG-Annex-4 GP-and-GAP approved-March2021pdf-1.pdf

#### Clarification B.

Omission was corrected. Institutions proposed to act as executing entities - RMIT University, Australian Bureau of Meteorology – are listed in this section of the revised project proposal.

#### CR 13:

Clarified. The project will work towards building regionallevel efforts' sustainability using well established mechanism of RCOFs. In particular case of five Participating Countries, members of ASEA, the relevant project activities will be anchored within existing regional institutional framework such as ASEANCOF, to support long-term sustainability of proejct activites.

#### CR14:

The project will be designed taking into consideration the two AF ongoing project in the region: Mekong EbA South

(https://www.adaptation-fund.org/project/mekong-eba-south-enhancing-climate-resilience-in-the-greater-mekong-sub-region-through-ecosystem-based-adaptation-in-the-context-of-south-south-cooperation-thailand-viet-nam/)

and the project Enhancing the resilience inclusive and sustainable eco-human settlement development through small scale infrastructure interventions in the coastal regions of the Mekong Delta in Viet Nam (<a href="https://www.adaptation-fund.org/project/enhancing-the-resilience-inclusive-and-sustainable-eco-human-settlement-development-through-small-scale-infrastructure-interventions-in-the-coastal-regions-of-the-mekong-delta-in-viet-nam-2/">https://www.adaptation-fund.org/project/enhancing-the-resilience-inclusive-and-sustainable-eco-human-settlement-development-through-small-scale-infrastructure-interventions-in-the-coastal-regions-of-the-mekong-delta-in-viet-nam-2/">https://www.adaptation-fund.org/project/enhancing-the-resilience-inclusive-and-sustainable-eco-human-settlement-development-through-small-scale-infrastructure-interventions-in-the-coastal-regions-of-the-mekong-delta-in-viet-nam-2/</a>

13. Does the preconcept briefly explain which organizations would be involved in the proposed regional project/programme at the regional and national/subnational level, and how coordination would be arranged? Does it explain how national institutions, and when possible,

#### Not clear.

A total of 9 executing entities are listed in the proposal. The role of each entity is ambiguous. The narrative provided in this section should be enhanced to better reflect roles of each executing entity in implementing the components and associated outputs.

**CR15**: Please provide more clarity on the role of each executing entity in the project execution, and provide some insight on how coordination of all these executing entities will be ensured. Kindly clarify the role of the Australian Bureau of Meteorology.

Please also clarify if WMO will be providing execution services through one of its programmes. (the proposal

In addition, the project will also work with the CREWS project in Cambodia and Lao

(https://public.wmo.int/en/projects/reinforcing-capacities-of-meteorological-and-hydrological-services-and-enhancing-early) as well as build on our experience in risk assessment and EWSs developed under CREWS-PNG project (https://www.crews-initiative.org/en/projects/papua-newguinea-weather-and-climate-early-warning-system).

### CR15:

Clarification on the role of the Australian Bureau of Meteorology (BoM). BoM hosts the WMO Global Producing Centre for Long-range Forecasts (WMO GPC LRFs) and is a provider of global, regional and national climate information for NMHSs and other stakeholders in WMO Region II (Asia) and Region V (South-west Pacific). The climate information provided by BoM through the WMO GPC LRFs includes, but not limited to, sub-seasonal to seasonal (S2S) outlooks for temperature and rainfall, etc. This information will be used by the project partners - the RMIT University SPACE Centre, NMHSs of five Mekong River countries (Cambodia, Lao PDR, Myanmar, Viet Nam and Thailand) and other stakeholders for drought and flood risk assessment, as well as for Early Warning Systems for drought and floods.

Clarification on WMO providing execution services through one of its programmes.

WMO confirms that it will not be providing execution

national implementing entities (NIEs) would be involved as partners in the project?

states that "WMO GPC LRFs and other programmes hosted by the [WMO] Secretariat such as the Associated Programme on Flood Management and the Integrated Drought Management Programme, will assist the NMHS"). As a reminder, Execution services can only be provided by Implementing Entities on an exceptional basis and at the written request by the recipient country, involving designated authorities in the process, and providing rationale for such a request.

CR16: The proposal states that "WMO GPC LRFs. RMIT University SPACE Centre. FAO and GWP will also be taking the role for the stakeholders' engagement both at national and local level", and also that "FAO and GWP will be implementing activities at level of local communities based on their extensive experience in assisting communities to make agriculture more productive and sustainable, enabling inclusive and efficient agricultural and food systems, and increasing the resilience of livelihoods to threats and crises." Please explain the rationale for not relying on relevant national

services.

#### CR16:

Clarified. Omission of mentioning relevant national corrected. The text has been revised as follows:

WMO GPC LRFs, RMIT University SPACE Centre, FAO, GWP, NMHSs and relevant national institutions will also be taking the role for the stakeholders' engagement both at national and local level to ensure the utilization of climate information services is supporting the decision-making processes on the ground.

FAO, GWP, the NMHSs and relevant national institutions will be implementing activities at level of local communities based on their extensive experience in assisting communities to make agriculture more productive and sustainable, enabling inclusive and efficient agricultural and food systems, and increasing the resilience of livelihoods to threats and crises.

institutions for such activities.

#### CR17:

Confirming that Myanmar will participate in Component 4 activities. This was rephrased in the proposal to ensure clarity "Mekong River countries".

**CR18:** Clarification: the proposal refers to activities that will be implemented in "Mekong River countries" and "Mekong River communities" - specifically, in Cambodia, Lao PDR, Myanmar, Viet Nam and Thailand. The People's Republic of China is not included in any proposed activities under this project.

		institutions for such activities.
		CR17: The proposal states that component 4 will provide support to the NMHSs "in Mekong River Commission Member States" which would exclude Myanmar from such activity. Please confirm whether Myanmar will participate in Component 4 activities and rephrase the proposal as needed.
		CR18: The proposal refers often to activities that will be implemented in "Mekong River countries" and "Mekong River communities", although the People's Republic of China is not included in the list of activities. Please rephrase the proposal to reflect this.
Resourc e Availabili ty	14. Is the requested project / programme funding within the funding windows of the programme for regional projects/programm es?	Yes.
	15. Are the administrative costs	Yes, if WMO confirms that it will not be providing execution services (see CR15).

# AFB/PPRC.28/25

		(Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme		
ŀ	Eli aila ilitur	budget?	Vac	
	Eligibility	16. Is the	Yes.	
	of IE	project/programme		
		submitted through		
		an eligible		
		Implementing		
		Entity that has		
		been accredited by		
		the Board?		



# PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

#### PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme: Enhancing Climate Resilience of Mekong River Communities

through Strengthening Climate Services (ECR-MEKONG)

Countries: Cambodia, Lao People's Democratic Republic (PDR), Myanmar,

Viet Nam and Thailand

Thematic Focal Area<sup>1</sup>: Disaster risk reduction and early warning systems

Type of Implementing Entity: MIE

Implementing Entity: World Meteorological Organization (WMO)

Executing Entities: National Meteorological and Hydrological Services (NMHSs) of

Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam, Australian Bureau of Meteorology, RMIT University, United Nations Food and Agriculture Organization (FAO) and Global Water Partnership (GWP)

Amount of Financing Requested: 13,662,862 (in U.S Dollars Equivalent)

### **Project / Programme Background and Context:**

Frequency and severity of drought and floods in Southeast Asia is increasing and will continue to increase for the next decades (IPCC Sixth Assessment Report); high variability of the region's rainfall is, among other factors, impacted by the El Nino / Southern Oscillation (ENSO). Least developed and developing countries in the region such as Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam (hereinafter referred to as the Participating Countries) are particularly vulnerable to the adverse effects of climate change induced droughts and floods. Based on WMO assessments, all five countries indicated that floods, drought and storms are the most common hazards that affect them. Moreover in the past three decades, droughts and floods have affected more than 100 million people in these Countries (Asian Development Bank).

The Mekong is a trans-boundary river which runs through the Participating Countries. The availability of water is fundamental communities, agriculture (including crops, livestock and inland fisheries), water management, and energy sectors, and disaster management offices - key stakeholders in the Participating Countries affected by the anticipated climate scenarios that the project aims to address. A substantial majority of the people who live along the Mekong River are engaged in agriculture; it is the primary source of employment in Lao PDR (61%), Viet Nam (41%) and Cambodia (27%). As such, decision-informed agriculture and water management offer major opportunities to improve proactive disaster risk management and increase economic productivity. The impact of drought/floods on vulnerable communities in the Participating Countries has been demonstrated using the disastrous consequences of drought induced by the 2015-16 El Niño. These included: *Cambodia* - an estimated 2.5 million people were affected by drought; *Thailand* - the total rice production fell to 27 million tonnes, the lowest since 2000-2001; *Viet Nam* – it was the worst drought in the past 90 years, affecting 52 out of 63 provinces, 1.1 million people were food insecure and more than 2 million faced damaged or lost livelihoods.

Accurate and actionable knowledge about rainfall, its spatial and temporal distribution, and rainfall forecasts on various time scales from days to months are vital for sustainable economic development of the Mekong River countries and planning purposes. However, the National Meteorological and Hydrological Services (NMHSs) of the Participating Countries have limited capacity to provide stakeholders in agriculture, energy and water sectors as well as local communities with climate information for monitoring and prediction of rainfall tailored to their specific needs. Analysing current situation in the Participating Countries and evaluating technical and technological capacities of their NMHSs, inadequate observation networks, insufficient databases, lack of management plans and policies and lack of technical capacity to generate climate information tailored to specific needs of sectors and communities have been identified as the priorities to improve climate services. This project proposal responds to addressing these needs through WMO-led coordination of partnership and cooperation

<sup>&</sup>lt;sup>1</sup> Thematic areas are: Food security; Disaster risk reduction and Early Warning Systems (EWS); Transboundary water management; Innovation in adaptation finance.

among the NMHSs in the region, and technical support to and capacity building of the NMHSs. The project will address the current limitations of the Participating Countries to produce and deliver relevant climate information such as risk assessments and impact-based early warnings systems to a complex multi-institutional framework, sectorial stakeholders, national, sub-national and local authorities in support of proactive risk management and adaptation plans at the community level of flood and drought events in the Mekong River region.

## **Project / Programme Objectives:**

The overall objective of the project is to reduce vulnerability and increase resilience of communities in the Participating Countries to climate variability and change by implementing climate-smart decision-making networks for better disaster risk management of drought and floods, agriculture management, and water resources management encompassing hydropower generation. The sub-objectives of the project, which are in line with the project components below, and the Adaptation Fund outcomes, are:

- Risk assessments and user-centred early warnings for drought and floods based on the increased operational capacity of the NMHSs in the Participating Countries to are generated and disseminated to end-users to meet the demand-driven needs for climate services;
- Enhanced regional, national and local inter-institutional/sectorial stakeholder networks support the codesign and co-development of sector specific climate services tailored for community focused disaster risk management, food, water, and energy security;
- Smallholders farmers, vulnerable households and communities are empowered to use climate services for disaster risk management and adaptation;
- Regional cooperation is strengthened to support mutual technical assistance among the NMHSs to enhance national capacity in climate monitoring, prediction and tailored sectorial information. Regional cooperation enables upscaling of the project outcomes to other countries in Southeast Asia and South Asia.

### **Project / Programme Components and Financing:**

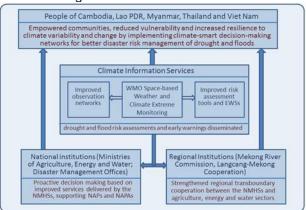
Based in WMO preliminary assessments of NMHSs current capacity, needs to strengthen the Climate Services Information System has been identified, including: guidance on enhancing DRR, early warning and response mechanisms, capacity building on forecasting for climate-sensitive sectors and enhanced sector specific advisories, increased collaboration among agencies in disseminating warnings and emergency response, and interagency sharing of base maps, hazard parameters, exposure and vulnerability data. The proposed project will implement activities to address the identified needs for both services production and services delivery. The full value-chain of climate services will be demonstrated in pilot sites that the Participating countries will identify. Socio-economic benefits of resilience and adaptation measures based on user-centred EWSs will be quantified at communities' level.

Project/Progra mme Components	Expected Outcomes	Expected Outputs	Countries	Amount (US\$)
1. Development of user-centred integrated early warning systems for drought and floods	Improved decision making based on support services delivered by the NMHSs	Improved observation networks and databases, drought and flood risk assessment tools which lead to user-centred integrated EWSs available through the specialised web portal to support decision-making for national, provincial and community agriculture, water, and energy stakeholders.	Cambodia Lao PDR Myanmar Thailand Viet Nam	3,500,000
2. Increased use of climate information and services by strengthening inter-institutional and inter-sectorial capacity	Operational Co- production of Climate tools/products demonstrated through pilot cases	Implemented contributions for the establishment, consolidation and monitoring of Regional and National Frameworks for Climate Services and improved sectorial local multi-stakeholder networks to support the co-design and co-production of tailored climate services.	Cambodia Lao PDR Myanmar Thailand Viet Nam	3,000,000

3. Enhanced capacity of communities to counter the adverse impact of drought and floods 4. Strengthening regional cooperation and knowledge sharing among the NMHSs and stakeholders	Better climate risk management through the developing adaptation plans  Increased cooperation Mechanisms (RCOFs) among the NMHSs and stakeholders	Local and regional stakeholders and communities are able to adapt to climate change by understanding and proactively applying climate information tailored to their needs for risk management and adaptation.  Development of regional plans / policies and sustained capacity building through regional transboundary strategic alliances and partnerships coordinated by consolidated Mekong River regional technical working groups from of agriculture, energy and water sectors and disaster management offices	Cambodia Lao PDR Myanmar Thailand Viet Nam  Cambodia Lao PDR Myanmar Thailand Viet Nam	2,000,000
5 Project/Program	nme Evecution cos	+		\$1,092,500
5. Project/Programme Execution cost 6. Total Project/Programme Cost				
1 2				\$11,500,000
			\$1,070,362	
Amount of Financing Requested \$			\$13,662,862	

Project Duration: 5 years (2023 – 2027)

Interconnections between the four components are presented on the diagram below. At this pre-concept stage, the proposed activities in Participating Countries are indicative and broadly describe suggested improvements in generation and delivering climate information services.



#### PART II: PROJECT / PROGRAMME JUSTIFICATION

### **Project Justification**

The project is advancing a multi-sectoral (agriculture, energy and water) climate risk reduction approach to reduce vulnerability of the Mekong River communities and to increase their adaptive capacity to climate variability and change. Given high vulnerability of local communities in the Participating Countries to impact of drought and floods and needs to build resilience of the communities to these hazards, the project will be focused on enhancing EWSs for drought and flood monitoring and prediction, effective management of water resources through improved availability of and access to climate products tailored to specific needs of sectors and communities. Based on preliminary consultations, the following gaps and needs to improve resilience to climate change, and disaster risks were identified:

climate information and early warnings;

Lack of technical capacity to generate and disseminate

climate information and early warnings

Lack of capacity to use climate information for proactive

decision-making;

Lack of national capacity to produce relevant climate information and vulnerability assessments and exchange information among the countries;

 Lack of institutional capacity for cross-sectoral and crossnational coordination and co-production of information.

To address the identified needs, the proposed project will implement activities through four project components:

- 1. Development of user-centred integrated Early Warning Systems for drought and floods
- 2. Increased use of climate information and services by strengthening inter-institutional and inter-sectorial capacity
- 3. Enhanced capacity of communities to counter the adverse impact of drought and floods
- 4. Strengthening regional cooperation and knowledge sharing between the NMHSs and stakeholders

The identified gaps of inadequate observation networks and insufficient databases will be addressed though improving surface-based observation networks and providing satellite observations through the WMO flagship initiative Space-based Weather and Climate Extreme Monitoring (SWCEM). The project will collaborate with DRR authorities / disaster management offices providing them with early warnings for drought and floods which will assist them in decision making. The developed in the project EWSs for drought and floods will be targeting local communities which will improve their response capability and build their resilience.

It is well-known that the participating countries share common climate drivers (IPCC AR6 WG1) and it is important to ensure consistency in the way the regional information is optimised and integrated into national and subnational climate services. The regional approach of strengthening Climate Information Services consists of cascading information from global to regional and national level; for this architecture to function it requires that the NMHSs in the Participating Countries consolidate their resources, share data and knowledge at regional level. It is essential that climate products are aligned across national borders and therefore regional cooperation and interaction is needed.

#### Promotion of new and innovative solutions

Expected innovative deliverables through this project include:

- Improved availability of and access to climate data, satellite
  observations and global and regional climate model outputs, for use by both intensive and extensive
  agriculture, water management and energy sectors; a user requirement process and a gap analysis will
  help identifying possible additional monitoring.
- A wide portfolio of climate services to agriculture, water management and energy sector, such as databasesS2S forecasts for medium and long-term climatic and hydrological variables, drought and flood risk assessments and early warnings, capacity building workshops and training;
- Optimization of decision-making on water use based on precipitation monitoring, expected climate outlook scenarios, Hydrological Status and Outlook System (HydroSOS) and impact-based forecasts. This will be particularly important to solve potential conflicts in water use between agriculture, energy and water management using multipurpose infrastructures.

These deliverables are new and innovative for the Participating Countries, as they are based on modern risk assessment methodology, i.e., risk is evaluated including hazard, exposure and vulnerability components. Also, drought and flood early warnings will be disseminated to at-risk communities through a user-centered integrated EWSs which is a novel approach. In addition, drought and flood hazards are usually treated separately. This project will develop and promote common adaptation measures to both hazards at a regional, national and local level.

#### **Cost Effectiveness**

The project will build on the existing global and national climate services information system coordinated by the WMO and national authorities involved in the project. That system will produce and deliver authoritative climate services through existing operational mechanisms, technical standards and communication. Duplication of efforts and maximum efficiency of intervention will be avoided by strengthening WMO GPC LRFs and the NMHSs in the Participating Countries. The impact and cost-effectiveness will be reflected in enhanced on-going collection, updating and processing of data at the regional level, in delivering climate data and forecast model outputs to countries, in providing technical assistance in model downscaling outputs and developing tailored products for country-level decision support systems.

#### Consistency with national or subnational strategies

The Project will be consistent with national and regional sustainable development strategies, among them:

- Cambodia: National Climate Change Adaptation Plan, the Agricultural Development Plan, the Climate Change Strategic Plan for Water Recourses and Meteorology, the Nationally Determined Contribution to the Paris Agreement
- Laos: The National Strategy on Climate Change, the National Adaptation Program of Action
- Myanmar: The National Environmental Policy, the Myanmar Climate Change Policy, the National Climate Change Strategy and Action Plan 2016-2030, the National Adaptation Programme of Action, Climate Change Action Plan (CCAP) for Water Resources and Meteorology, CCAP for Gender, CCAP for Agriculture
- Thailand: Thailand Climate Change Master Plan 2015-2050, 12th National Economic and Social Development Plan (NESDP) 2017-2021, Nationally Appropriate Mitigation Actions
- Viet Nam: The Climate Change Action Plan for Agriculture and Rural Development, the National Adaptation Programme for Climate Change, the National Climate Change Strategy
- Regional: Mekong River Commission Strategic Plan 2016-2020 and The Lancang-Mekong Environmental Cooperation Strategic Framework (2019-2023)

#### Learning and Knowledge management

A learning and knowledge management component to capture and disseminate lessons learned will be provided by WMO GPC LRFs, Regional and National Climate Outlook Forums which are a platform for regular interactions between climate specialists and users in a regional/national context. The climate services information system will comprise a set of tools, including an online web interface and sharing platform to facilitate access and networking. Lessons learnt from knowledge management in this project will facilitate the dissemination of best practices. This learning and knowledge management component will target three different levels: 1) learning among the NMHSs (specialist level); 2) learning among local governments and communities (local application level), and 3) learning and collaboration over shared resources (the Mekong River, as being the major and significant river in the region that would be affected by climate change).

#### **Consultative Process**

This proposal was developed by national institutions, WMO, GWP, FAO, RMIT University, Australian Bureau of Meteorology following national consultations with meteorological services of Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam. The national consultations were undertaken in November 2019 at the ASEAN RCOF and then virtually during the COVID-19 pandemic. Other organizations such as UNDP, WFP, ADPC and WB will be consulted during the next stage of the project proposal process. The Mekong River Commission will also be consulted as a main stakeholder of the project. In addition to this, the ongoing discussions among six countries (China, Myanmar, Laos, Cambodia, Thailand and Viet Nam) facilitated by Lancang-Mekong Water Resources Cooperation Centre (LMWRCC) in 2018 and 2019 have shown that climate variability and change makes the urgency of climate information services over the upper and lower Mekong River basin is even more higher, thus it requires transboundary cooperation of all riparian countries starting by data and information exchange on climate information as the basis of integrated river basin planning in the region.

#### Sustainability of the project

The participating NMHSs are sustainable institutions within their national governments. The project sustainability will be guaranteed by the Cambodia Department of Meteorology and Department of Hydrology and River Works under the Ministry of Water Resources and Meteorology , Lao PDR Department of Meteorology and Hydrology , the Thai Meteorological Department and the Viet Nam Meteorological and Hydrological Administration in their roles of government agencies supported by public funding with officially mandated duties. In the Participating Countries, policies for adaptation to climate change in agriculture are spearheaded by the relevant Ministries at a national level. The NMHSs of five Participating Countries and WMO GPC LRFs provide climate services on operational bases.

#### Economic, social and environmental benefits

Investments in risk reduction and preventive adaptation measures based on authoritative climate information spanning the historical recurrence and the future new trends should result in economic benefits for local communities and the entire Participating Countries given the potential avoided costs associated with lack of preparedness. The comprehensive description of social and environmental benefits will be provided in the final proposal, after due assessments (EIA and SIA including screening of the 15 environmental, social, and gender principles of the Adaptation Fund) and consultations are carried out with the respective authorities and communities.

#### Compliance with Adaptation Fund Environmental and Societal Policy

In compliance with the Environmental and Social Policy (ESP) of the Adaptation Fund, the proposal will be screened for its environmental and social impacts. With the information available at this stage the project is expected to have no adverse environmental or social impacts and would therefore be in category C. Information required to confirm this classification will be provided at the concept stage.

#### Overlap with other funding sources and engagement with NIEs

The project will not duplicate efforts of other initiatives or funding sources. Instead the project will identify synergies with ongoing and planned initiatives (the AF projects in Lao PDR and Myanmar, CREWS projects in

South East Asia, PNG and the Pacific, and De-Risk South East Asia, ) to ensure coherence with regional programs, as well as will seek engagement with the regional and national institutions in the region. There are no regional projects that bring Mekong River countries together to address common climate related to impacts and apply similar approaches for drought and flood EWS. The project will explore whether a regional system could be setup to address the national needs.

#### PART III: IMPLEMENTATION ARRANGEMENTS

WMO will be the implementing entity for this project. The NMHSs of the Participating Countries will play the key role in developing partnerships for the project implementation by taking the lead on national consultations and climate information co-production. WMO GPC LRFs hosted by the Australian Bureau of Meteorology will provide global, regional and national climate information and support the NMHSs in the project implementation. WMO GPC LRFs will assist the NMHSs with enhancing EWS promoting the development and provision of reliable, consistent and high-quality data and products for drought and flood monitoring and prediction available to end-users assisting them with decision making in resilient food production, hydropower generation and water management. RMIT University SPACE Centre, drawing on its expertise in space-based observations and application of geographic information systems (GIS) to climate monitoring, will develop tailored methodologies for risk assessments and produce web-based information tools for multi-layered GIS mapping of drought and flood risk combined with relevant exposure and vulnerability information at regional, national, sub-national and community level.

FAO, GWP, NMHSs and relevant national institutions will be implementing activities at level of local communities based on their extensive experience in assisting communities to make agriculture more productive and sustainable, enabling inclusive and efficient agricultural and food systems, and increasing the resilience of livelihoods to threats and crises. There are also actors such as the Mekong River Commission, ADPC, RIMES, UNDP, WFP etc. that are active in the region. Their activities will need to be reviewed to to ensure there is no overlapping with this project. WMO GPC LRFs, RMIT University SPACE Centre, FAO, GWP, NMHSs and relevant national institutions will also be taking the role for the stakeholders' engagement both at national and local level to ensure the utilization of climate information services is supporting the decision-making processes on the ground.

The identified country level project partners are:

- Cambodia: Department of Meteorology (DOM) and Department of Hydrology and River Works (DHRW), Ministry of Water Resources and Meteorology
- Lao PDR: Department of Meteorology and Hydrology, Ministry of Natural Resources and Environment
- Myanmar: Department of Meteorology and Hydrology, Ministry of Transportation and Communication
- Thailand: Thai Meteorological Department, Ministry of Digital Economy and Society
- Viet Nam: Meteorological and Hydrological Administration, Ministry of Environment

# PART IV: ENDORSEMENT BY GOVERNMENTS AND CERTIFICATION BY THE IMPLEMENTING ENTITY

**A.** Record of endorsement on behalf of the government<sup>2</sup> Provide the name and position of the government official and indicate date of endorsement for each country participating in the proposed project/programme. Add more lines as necessary. The endorsement letters should be attached as annexes to the project/programme proposal.

H.E. U Ohn Winn	Date: 28 October 2020
Union Minister	
Ministry of Natural Resources and	
Environmental Conservation	

Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

Myanmar	
Tin Ponlok Secretary of State Ministry of Environment	Date: 13 April 2021
Cambodia Syamphone Sengchandala Director General Department of Climate Change Ministry of Natural Resources and Environment Lao PDR	Date: 12 July 2021
Jatuporn Buruspat Permanent Secretary, Ministry of Natural Resources and Environment Thailand	Date: 15 March 2021
Dr Tran Hong Ha Minister of Natural Resources and Environment Viet Nam	Date: 8 February 2021

**B.** Implementing Entity certification Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (<u>Cambodia</u>: National Climate Change Adaptation Plan; <u>Laos</u>: The National Strategy on Climate Change, the National Adaptation Program of Action; <u>Myanmar</u>: The National Environmental Policy, the Myanmar Climate Change Policy, the National Climate Change Strategy and Action Plan 2016-2030, the National Adaptation Programme of Action; <u>Thailand</u>: Thailand Climate Change Master Plan 2015-2050; <u>Viet Nam</u>: The Climate Change Action Plan for Agriculture and Rural Development, the National Adaptation Programme for Climate Change, the National Climate Change Strategy), and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.</u>

Jean-Paul Gaudechoux Head, Regional Strategic Division Regional Strategy Office Member Services and Development Department World Meteorological Organization

Implementing Entity Coordinator

Date: 2 August 2021 Tel. and email: +41 79 514 4261

jpgaudechoux@wmo.int

Project Contact Person: Robert Stefanski

Tel. And Email: +41 22 730 8305 / rstefanski@wmo.int



# KINGDOM OF CAMBODIA Nation Religion King

Phnom Penh 13, April, 2021.

To: The Adaptation Fund Board Secretariat

c/o Global Environment Facility Secretariat 1818H Street, NW, MSN P-4-400 Washington DC, United State of America Email: secretariat@adaptation-fund.org

Fax: +1 202 522 3240/5

Subject: Endorsement for "Enhancing Climate Resilience of Mekong River Communities Through Strengthening Climate Service (ECR-MEKONG)\*

#### Dear Sir/Madam,

In my capacity, as designated authority for the Adaptation Fund in Cambodia, I confirm that the above regional project proposal is in accordance with my government's national and regional priorities, especially with the specific commitments to the Cambodia Climate Change Strategic Plan (2014-2023), the Mekong Climate Change Adaptation Strategy and Action Plan (MASAP), and Cambodia's Updated Nationally Determined Contribution (Updated NDC) in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Mekong River basin.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support from the Adaptation Fund. If approved, the project will be implemented by World Meteorological Organization (WMO) and executed by the National Meteorological and Hydrological Services of the Ministry of Water Resource and Meteorology, Cambodia

I sincerely hope that this proposal will be considered trustably by the Adaption Fund.

Sincerely yours,

Secretary of State

Vientiane Capital, Date: 12 July 2021



# Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity

Ministry of Natural Resources and Environment Department of Climate Change

To: The Adaptation Fund Board

c/o Adaptation Fund Board Secretariat Email: Secretariat@Adaptation-Fund.org

Fax: 202 522 3240/5

Subject: Endorsement for "Enhancing Climate Resilience of Mekong River Communities Through Strengthening Climate Services"

In my capacity as designated authority for the Adaptation Fund in Lao PDR, I confirm that the above regional project proposal is in accordance with the government's national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Mekong River basin.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project will be implemented by WMO and executed by the National Meteorological Service in Lao PDR.

Sincerely,

Syamphone Sengchandala

Director General

Department of Climate Change

Ministry of Natural Resources and Environment

Designated Authority for Lao PDR



# THE REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL CONSERVATION

To:

Adaptation Fund Board secretariat
Email : afbsec@adaptation-fund.org
Cc : sdobardzic@adaptation-fund.org

mdorigo@adaptation-fund.org

Phone: +1 202 473-5943 Fax: +1 202 522-3240

Subject: Endorsement for "Enhancing Climate Resilience of Mekong River Communities through Strengthening Climate Services"

In my capacity as designated authority for the Adaptation Fund in the Republic of the Union of Myanmar, I confirm that the above regional project proposal is in accordance with the government's national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Mekong River basin.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project will be implemented by World Meteorological Organization (WMO) and executed by the Department of Meteorology and Hydrology in Myanmar and Food and Agriculture Organization of the United Nations.

Sincerely,

H.E. U Ohn Winn

Adaption Fund National Designated Authority

Union Minister

Ministry of Natural Resources and Environmental Conservation

Nay Pyi Taw, Myanmar



# SOCIALIST REPUBLIC OF VIET NAM MINISTRY OF INATURAL RESOURCES AND ENVIRONMENT

Ha Noi, 08 February, 2021 Ref. No: 06 /MONRE

To: The Adaptation Fund Board

c/o Adaptation Fund Board Secretariat Email: Secretariat@Adaptation-Fund.org

Fax: 202 522 3240/5

Subject: Endorsement for "Enhancing Climate Resilience of Mekong River Communities through Strengthening Climate Services"

In my capacity as designated authority for the Adaptation Fund in the Socialist Republic of Viet Nam, I confirm that the above regional project proposal is in accordance with the government's national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in the Mekong River basin, the Socialist Republic of Viet Nam.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by World Meteorological Organization (WMO) and executed by Viet Nam Meteorological and Hydrological Administration, under Ministry of Natural Resources and Environment of Viet Nam and national partners.

ours sincerely,

Dr Wan Hong Ha

Minister of Natural Resources and Environment

Socialist Republic of Viet Nam



No 1007.4/ 674

Ministry of Natural Resources and Environment 92 Soi Phohol Yothin 7, Phohol Yothin Road, Phaya Thai, Bangkok 10400 Thailand Tel./Fax +66 2 265 6692

15

March B.E. 2564 (2021)

Sir/Madam,

Subject: Endorsement for Enhancing Climate Resilience of Mekong River Communities through Strengthening Climate Services (ECR-MEKONG)

In my capacity, as designated authority for the Adaptation Fund in the Kingdom of Thailand, I confirm that the above regional pre-concept note is in accordance with the government's national and sub-regional priorities in implementing adaptation activities to strengthen the capacity on climate information and services for relevant agencies, increase collaboration network within Thailand and among Mekong river countries, and support Thailand's National Adaptation Plan implementation on water management sector, and agriculture and food security sector.

Accordingly, I am pleased to endorse the above pre-concept note for your consideration. If approved, the project will be implemented by World Meteorological Organization and executed by Thai Meteorological Department.

Yours sincerely

Tupuan Brauspat

(" Permanent Secretary

Additional Haspurges and Units assent

Adaptation Fund Board Secretariat
c/o Global Environment Facility
1818 H Street NW, Washington DC 20433, USA

Email: secretariat@adaptation-fund.org