



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 ¹ : | 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:

Southeast Asia depends on the summer monsoon and when it is late or weak the region's economy suffers. The region's rainfall is among other factors impacted by EL Nino / Southern Oscillation (ENSO) often resulting in drought or an excess of rainfall. Frequency and severity of drought/floods in Southeast Asia is increasing; over the past three decades, droughts have affected more than 66 million people. Most of the economic impact of drought – around four-fifths – is absorbed by agriculture; however, impact extends to water management, energy and other sectors.

According to the WMO, drought is defined as a period of abnormally dry weather sufficiently prolonged for the lack of precipitation to cause a serious hydrological imbalance. Conversely, flooding is defined by the overflowing by water of the normal confines of a stream or other body of water, or the accumulation of water by drainage over areas which are not normally submerged. The Mekong is a trans-boundary river which runs through Southeast Asia countries - Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam. The availability of water is fundamental for the Mekong River communities for many socio-economic sectors including agriculture, industry, and energy. The focus of the Mekong River countries' development is on planning comprehensive programs for agricultural and community development in areas where water is available.

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 disaster risk management and increase economic productivity. The impact of drought/floods on vulnerable communities in Mekong River 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.

In addition, flooding is also an important issue in this region. According to the 5th Assessment Report of the IPCC, the annual number of flood-related deaths since 1980 has been increasing of 75% in southern, south-eastern and eastern Asia. 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 Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam have limited capacity to provide stakeholders in agriculture, energy and water sectors as well as local communities with weather and climate information for monitoring and prediction of rainfall tailored to their specific needs. Analysing current situation in the Mekong River countries and evaluating technical and technological capacities of the NMHSs in the region, 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. Therefore, this project proposal responds to addressing these needs through WMO-led coordination of partnership and cooperation among the NMHSs in the region, and technical support to and capacity building of the NMHSs. The project will address the current

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

limitations of the partner countries to produce and deliver relevant weather and climate information to a complex multi-institutional framework, sectorial stakeholders, national, sub-national and local authorities in support of 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 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. The sub-objectives of the project, which are in line with the project components below, and the Adaptation Fund outcomes, are:

- Increased operational capacity of national meteorological and hydrological services (NMHSs) in Cambodia, Laos, Myanmar, Thailand and Viet Nam to generate and disseminate end-to-end users' demand-driven services including early warnings;
- Enhanced national and local inter-institutional/sectorial stakeholder networks to co-design and co-produce sector specific services in support of disaster risk management, long-term adaptation and food, water, and energy security;
- Empowered communities to use weather, climate and hydrological services for disaster risk management and adaptation;
- Strengthened regional cooperation for mutual technical assistance among the NMHSs and enhanced capacity in weather, climate and hydrological monitoring, prediction and tailored sectorial information that can also be expanded to other countries in Southeast Asia and South Asia.

Project / Programme Components and Financing:

The proposed project will implement activities to address the identified needs. Brief overview of the proposed activities is presented below.

| Project/Programme Components | Expected Outcomes | Expected Outputs | Countries | Amount (US\$) |
|--|---|--|--|---------------|
| 1. Strengthening operational capacity of national meteorological and hydrological services | Improved decision making based on support services delivered by the NMHSs | 1.1. Updated national data management systems, archives, and integrated regional meteorological, climatological, and hydrological databases. 1.2. Improved seasonal climate predictions for flood and drought early warnings by establishing an optimized cascading system involving the regionalization of global forecast products. 1.3. Sustained delivery of weather, climate, hydrological and related advisories to support decision-making for national and local agriculture, water, and energy stakeholders. 1.4. End-to-end services through customization of weather, climate, and hydrological information, communication and user feedback system. | Cambodia Lao PDR Myanmar Thailand Viet Nam | 3,500,000 |
| 2. Strengthening inter-institutional and inter-sectorial capacity to utilise weather, climate, and hydrological information and services | Operational Co-production of Climate, Weather, and Hydrological tools/products demonstrated through pilot cases | 2.1 Implemented contributions for the establishment, consolidation and monitoring of National Frameworks for Climate Services in each country. 2.2 Implemented / improved sectorial local multi-stakeholder networks to support the co-design and co-production of tailored climate services. 2.3 Demonstrated tools/products for local and regional stakeholders to effectively manage water resources due to droughts and floods. | Cambodia Lao PDR Myanmar Thailand Viet Nam | 3,000,000 |
| 3. Capacity development of local | Better weather, climate and | 3.1 Strengthened capacity of local and regional stakeholders and communities | Cambodia Lao PDR | 3,000,000 |

| | | | | |
|---|--|---|--|---------------------|
| communities in understanding and application of weather, climate, and hydrological information. | hydrological risk management through the development of adaptation plans and their adoption by local stakeholders. | to access, use and apply weather, climate, and hydrological information for risk management and adaptation. 3.2 Co-designed local climate risk management and adaptation plans with all stakeholders (local authorities, public and private institutions). | Myanmar Thailand Viet Nam | |
| 4. Strengthening regional transboundary cooperation between the NMHSs and key stakeholders in agriculture, energy and water sectors | Increased cooperation mechanisms to all five NMHSs in Mekong River countries | 4.1 Consolidated Mekong River technical groups of agriculture, energy and water sector, data base developers, S2S climate and hydrological predictions and operational drought and flood Early Warning Systems (EWS). 4.2 Implemented strategic regional alliances and partnerships for sustained capacity building. | Cambodia Lao PDR Myanmar Thailand Viet Nam | 2,000,000 |
| 5. Project/Programme Execution cost | | | | \$1,092,500 |
| 6. Total Project/Programme Cost | | | | \$11,500,000 |
| 7. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable) | | | | \$1,070,362 |
| Amount of Financing Requested | | | | \$13,662,862 |

Project Duration: 5 years (2021 – 2026)

PART II: PROJECT / PROGRAMME JUSTIFICATION

Project Justification

The project is advancing a multi-sectoral (agriculture, energy and water) weather, climate and hydrological 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 Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam to impact of drought and floods and needs to build resilience of the communities to this hydro-meteorological hazard, the project will be focused on enhancing EWS for drought monitoring and prediction as well as effective management of water resources through improved availability of and access to weather, climate, and hydrological products tailored to specific needs of sectors and communities in the Mekong River basin. Based on preliminary consultations, the following gaps and needs to improve resilience to climate variability and change, and disaster risks were identified:

- Lack of technical capacity to generate and disseminate weather, climate, and hydrological information and early warnings;
- Lack of capacity to use weather, climate, and hydrological information for decision-making;
- Lack of national capacity to produce relevant weather, climate, and hydrological information and vulnerability analysis and exchange between the countries;
- Lack of institutional capacity for cross-sectoral and cross-national coordination and co-production of information.

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

1. Strengthening operational capacity of national meteorological, climatological and hydrological services and the collaboration between them;
2. Strengthening national and local inter-institutional and inter-sectorial capacity to utilise weather, climate and hydrological information and exchange weather, climate, and hydrological information between the countries and in the region
3. Capacity development of local communities in understanding and application of weather, climate and hydrological information;
4. Strengthening regional transboundary cooperation between the NMHSs and key stakeholders in agriculture, energy and water sectors in partner countries.

The first three components will strengthen the national value chain of services assisting communities with bringing weather, climate, and hydrological information to concrete actions. The fourth component will enhance the regional cooperation among partner countries by sharing knowledge, expertise and good practices with the support of the WMO Regional Climate Center. At this pre-concept stage, the proposed activities in partner countries are indicative and broadly describe suggested improvements in generation and delivering climate information.

Promotion of new and innovative solutions

Expected innovative deliverables through this project include (further information will be included at the concept note stage):

- Improved availability of and access to weather, climate, and hydrological 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 based on a modern measurement network design, combining all possible sources of data, including citizen science and emerging technologies.
- A wide portfolio of services to agriculture, water management and energy sector, such as databases, sub-seasonal and seasonal forecasts for medium and long-term climatic and hydrological variables, assessment, compliance with international standards of the hydro-meteorological networks, 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.
- Develop innovative hydrological observations systems through the WMO HydroHub initiative which will augment the existing hydrological observation system.

The NMHSs are increasingly coordinating with other national and local authorities, private institutions and NGOs to deliver advisories and warnings for extreme events including droughts and floods. Weather, climate and hydrological information co-production will constitute core activities among them. The WMO Global Producing Centre for Long-range Forecasts (GPC LRFs) Melbourne will provide support to the NMHSs in Mekong River Commission Member States through sharing products, methods, technologies and knowledge as necessary to put the regional component of the operational system in place, and supporting the countries to develop the necessary capacities for their continued operation and delivery of associated services.

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 weather, climate, and hydrological services through existing operational mechanisms, technical standards, communication and authentication. Duplication of effort and maximum efficiency of intervention will be avoided by strengthening WMO GPC LRFs and the NMHSs in Mekong River 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 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 (NDC) 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

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 (e.g., ASEANCOF) which are a platform for regular interactions between climate specialists and user agencies 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 and other projects in the region will facilitate the dissemination of best practices. This learning and knowledge management component will target three different levels: 1) learning among national meteorological and hydrological institutions (specialist level); 2) learning among local

governments and community level (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 and FAO following national consultations with meteorological services of Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam. Other organizations such as RIMES, 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 (DOM) and Department of Hydrology and River Works (DHRW) under the Ministry of Water Resources and Meteorology, Lao PDR Department of Meteorology and Hydrology (DMH), Myanmar Department of Meteorology and Hydrology (MDMH), the Thai Meteorological Department (TMD) and the Viet Nam Meteorological and Hydrological Administration (VMHA) in their roles of government agencies supported by public funding with officially mandated duties. In the Mekong River Commission Member States, policies for adaptation to climate change in agriculture are spearheaded by the relevant Ministries at a national level. The NMHSs of five partner countries and WMO GPC LRFs provide climate data and model outputs 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 Mekong River 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 (De-Risk South East Asia, CREWS South East Asia, and the AF projects in Lao PDR and Myanmar) 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 Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam 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 support the NMHSs in the project implementation given its experience in project implementation with Climate Risk and EWS (CREWS), Green Climate Fund (GCF), World Bank etc. WMO GPC LRFs and other programmes hosted by the Secretariat such as the Associated Programme on Flood Management and the Integrated Drought Management Programme, 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, as part of the ongoing climate adaptation and sustainable development efforts. RMIT University SPACE Centre, drawing on its expertise in space-based observations and application of geographic information systems (GIS) to climate monitoring, will produce web-based information tools for multi-layered GIS mapping of drought risk combined with relevant environmental, geographic and demographic information at regional, national, sub-national and community level, to be used in partner countries for drought risk assessment.

The countries in South East Asia are working closely under the ASEAN Sub-Committee on Meteorology and Geophysics (SCMG) Strategic and Operating Plan. The outcomes are reported to the Ministerial Meeting on Science, Technology and Innovation (AMMSTI). The NMHSs of the ASEAN countries in RA II, Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam, receive high attention and multiple national project funding from multiple donors without effective sub-regional coordination. Mekong River Commission is one of the key players in the sub-region. The PR of Cambodia is the Minister of Water and Meteorology and a member of Mekong River Council.

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. There are also other regional partners such as RIMES, UNDP, ADPC, WFP, and the Mekong River Commission that are active in the region. These activities will also need to be reviewed to see how they fit into this project at the concept level stage and if additional partners will be added to the project. 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 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 government²** *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 Union Minister Ministry of Natural Resources and Environmental Conservation Myanmar | Date: 28 October 2020 |
| Tin Ponlok Secretary of State Ministry of Environment Cambodia | Date: 13 April 2021 |
| 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 |

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.

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 (Cambodia: National Climate Change Adaptation Plan; 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; Thailand: Thailand Climate Change Master Plan 2015-2050; Viet Nam: 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, 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.



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

Ministry of Environment
N° : 557 MoE

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 favorably by the Adaption Fund.

Sincerely yours,



Fin Ponlok
Secretary of State



Lao People's Democratic Republic
Peace Independence Democracy Unity Prosperity

Ministry of Natural Resources and Environment
Department of Climate Change

Vientiane Capital, Date: 12 July 2021

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,

A handwritten signature in blue ink, appearing to read 'Syamphone Sengchandala'.

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

Ref No 6(2)/04(A)/Mekong(2399/2020)

Date28..October, 2020

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

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,

(s. Atuporn Buruspat)

Permanent Secretary

Ministry of Natural Resources and Environment

Adaptation Fund Board Secretariat
c/o Global Environment Facility
1818 H Street NW, Washington DC 20433, USA
Email: secretariat@adaptation-fund.org



SOCIALIST REPUBLIC OF VIET NAM
MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT

Ha Noi, February, 2021
Ref. No: /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.

Yours sincerely,

Dr. Tran Hong Ha
Minister of Natural Resources and Environment
Socialist Republic of Viet Nam



Project Formulation Grant (PFG)

Submission Date: 2 August 2021

Adaptation Fund Grant ID:

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

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

Implementing Entity: World Meteorological Organization (WMO)

Type of IE : MIE

Executing Entities: National Meteorological and Hydrological Services (NMHSs) of Cambodia, Lao PDR, Myanmar, Thailand and Viet Nam, Bureau of Meteorology, RMIT University, United Nations Food and Agriculture Organization (FAO) and Global Water Partnership (GWP)

A. Project Preparation Timeframe

| | |
|------------------------|----------------------|
| Start date of PFG | November 2021 |
| Completion date of PFG | January 2022 |

B. Proposed Project Preparation Activities (USD)


Describe the PFG activities and justifications:

| List of Proposed Project Preparation Activities | Output of the PFG Activities | USD Amount |
|---|---|----------------|
| Hire a consultant to contribute to the development of the concept note by <ul style="list-style-type: none"> • Verification and assessment of the needs • Development of the Concept Note • Preliminary ESIA | Stakeholders map at each country and across the Mekong region. Description of needs and barriers as well as definition of interventions. Compilation of previous work relevant to the proposed project objectives List of priorities and propose operational solutions per country and region in a harmonized way to support project formulation | 10,000 |
| Consultations with stakeholders, regional entities, partners and beneficiaries | Definition of workplans for each country. Definition of roles and responsibilities with EEs. Definition of log frame including M&E | 6,000 |
| Formalizing the mechanism for sustainability with national and regional entities | Definition of regional activities and alignment with on-going projects and activities | 2,500 |
| Project Support Cost (8%) | | 1,480 |
| Total Project Formulation Grant | | 19,980* |

* Distributed into 10 000 USD for consultant fee and 10.000 for consultant travel support and documents.

C. Implementing Entity

This request has been prepared in accordance with the Adaptation Fund Board's procedures and meets the Adaptation Fund's criteria for project identification and formulation

| Implementing Entity Coordinator, IE Name | Signature | Date (Month, day, year) | Project Contact Person | Telephone | Email Address |
|--|---|-------------------------|------------------------|--|--|
| Jean-Paul Gaudechoux Head, Regional Strategic Division, RSO, MS |  | 2 August 2021 | Robert Stefanski | +41 79 514 4261 +41 22 730 8305 | jpgaudechoux@wmo.int rstefanski@wmo.int |