



## ADAPTATION FUND

AFB/PPRC.37/Inf.45  
16 March 2026

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Adaptation Fund Board  
Project and Programme Review Committee  
Thirty-seventh Meeting  
Bonn, Germany, 7-8 April 2026

### **PROPOSAL FOR CAMBODIA, VIET NAM (2)**



ADAPTATION FUND

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

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

**Countries/Region:** Cambodia and Viet Nam

**Project Title:** Regional climate adaptation initiative on sustainable and equitable rice-fish systems in Cambodia and Viet Nam

**Thematic focal area:** Food security

**Implementing Entity:** UNIDO

**Executing Entities:** UNIDO, Ministry of Environment (Cambodia), Ministry of Agriculture, Forestry and Fisheries (Cambodia), and Ministry of Agriculture and Environment (Viet Nam)

**AF Project ID:** AF00000521

**IE Project ID:** xxx

**Reviewer and contact person:** Ahmad Ghosn

**IE Contact Person(s):** xxx

**Requested Financing from Adaptation Fund (US Dollars):** 30,000,000

**Co-reviewer(s):**

<b>Technical Summary</b>	<p>The project “Regional climate adaptation initiative on sustainable and equitable rice-fish systems in Cambodia and Viet Nam” aims to strengthen the climate change adaptive capacity of vulnerable groups involved in integrated rice-fish farming systems. This will be done through the three components below:</p> <p><u>Component 1:</u> Improving smallholder farmers and fisherfolk climate change adaptation production technologies and approaches at landscape level (USD 9,500,000).</p> <p><u>Component 2:</u> Climate resilient technologies, infrastructure, and tools for local SMEs, farmer cooperatives and producer groups_(USD 9,500,000)</p> <p><u>Component 3:</u> Strengthening the knowledge management and implementation of national and local institutions’ adaptation mechanisms to sustainably address climate change impact (USD 6,600,000).</p> <p><u>Requested financing overview:</u> Project/Programme Execution Cost: USD 1,672,727 Total Project/Programme Cost: USD 27,272,727 Implementing Fee: USD 2,727,273 Financing Requested: USD 30,000,000</p>
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	<p>The proposal includes a request for a project formulation grant of USD 30,000.</p> <p>The first technical review raises some issues, such as revising the objectives, components and outcomes statements for more clarity; revising the components financing table; clarifying the concrete actions and cost-effectives; among other Clarification Requests (CRs) and Corrective Action Request (CARs) raised in the review.</p>
Date	<b>3 March 2026</b>

Review Criteria	Questions	First Technical Review Comments 3 March 2026
Country Eligibility	1. Are all of the participating countries party to the Kyoto Protocol and/or the Paris Agreement?	<b>Yes.</b>
	2. Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?	<b>Yes.</b> Both Cambodia and Viet Nam are vulnerable to the adverse effects of climate change particularly drought, floods, and heat stress, among others.
Project Eligibility	1. Have the designated government authorities for the Adaptation Fund from each of the participating countries endorsed the project/programme?	<b>Yes.</b> As per the Endorsement letters indicated below:  Cambodia Endorsement letter dated 23 November 2025 Viet Nam Endorsement letter dated 04 February 2026
	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?	<b>Yes.</b> See Part I, "Project/Programme Background and Context", pp. 3-4.  <b>CR1:</b> Please conduct a round of editing/ proofreading for the PCN document, <u>and if possible</u> , try to shorten its length to fewer pages, <u>without losing the key contexts</u> .

3. Have the project/programme objectives, components and financing been clearly explained?

**To a large extent.** See “Project/Programme Objectives”, pp. 4-5 and “Project/Programme Components and Financing”, pp. 5-7. **However**, some clarifications and revisions are needed.

**CR2:** For more clarity and focus please consider the following:

1. Revise the overall objective statement to read: “to strengthen the climate change adaptive capacity of vulnerable groups involved in integrated rice-fish farming systems”
2. Revise the specific objective statements on p. 5 to read:
  - Strengthen smallholder farmers and fisherfolk climate resilience, food security, and livelihoods
  - Enhance climate resilience and economic empowerment of local SMEs, farmer cooperatives, and producer groups
  - Enhance regional resilience and sustainability of rice-fish systems through innovation, knowledge exchange, and evidence-based decision-making
3. Reflect the revisions of the specific objectives as appropriate in the outcomes statements in the components financing table.
4. Revise the components titles to read as follows:
  - Improving smallholder farmers and fisherfolk climate change adaptation production technologies and approaches at landscape level
  - Climate resilient technologies, infrastructure, and tools for local SMEs, farmer cooperatives and producer groups
  - Strengthening the knowledge management and implementation of national and local institutions’ adaptation mechanisms to sustainably address climate change impact

**CAR1:** Please revise the components financing table to address the following:

1. Include total budget at component level.
2. Revise total project cost at the bottom of the table to be USD 27,272,727 (not 25,600,000). Note: Total Project Cost is = execution Cost + total components cost.

	<p>4. Has the project/programme been justified in terms of how:</p> <ul style="list-style-type: none"> <li>- it supports concrete adaptation actions?</li> <li>- it builds added value through the regional approach?</li> <li>- it promotes new and innovative solutions to climate change adaptation?</li> <li>- it is cost-effective?</li> <li>- it is consistent with applicable strategies and plans?</li> <li>- it incorporates learning and knowledge management?</li> <li>- 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?</li> <li>- it will take into account sustainability?</li> </ul>	<p><b>To a large extent.</b> See PART II, pp. 7-9. However, some clarifications are recommended as indicated below.:</p> <p><b>CAR2:</b> As appropriate in Part II “Project/Programme Justification”, please briefly highlight the following:</p> <ol style="list-style-type: none"> <li>1. The climate change adaptation concrete actions supported by the project.</li> <li>2. The cost-effectiveness of the project and its regional approach.</li> </ol> <p><b>CR3:</b> Under the “Alignment” subheading on p. 8, please briefly indicate whether the project aligns with other national/ regional plans. Also, consider changing the subheading title to “Alignment with relevant national/ regional plans”. Also indicate how the proposal is aligned with the Adaptation Fund’ Strategic Results Framework.</p>
	<p>5. Does the pre-concept briefly explain which organizations would be involved in the proposed regional project/programme at the regional and national/sub-national level, and how coordination would be arranged? Does it explain how national institutions, and when possible, national implementing entities (NIEs) would be involved as partners in the project?</p>	<p><b>Yes.</b> See Part III “Implementation Arrangements”, p. 9. However, a brief clarification of UNIDO’s execution role in component 3 is recommended.</p> <p><b>CAR3:</b> In Part III, p. 9, please briefly justify UNIDO’s role for executing component 3, and note that this justification would need to be substantiated by related written approval from concerned countries designated authorities (DAs).</p>
<p>Resource Availability</p>	<p>6. Is the requested project / programme funding within the funding windows of the programme for regional projects/programmes?</p>	<p><b>Yes.</b></p>

	<p>7. Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 10 per cent of the project/programme for implementing entity (IE) fees and at or below 10 per cent of the project/programme cost for the execution costs?</p>	<p><b>Yes.</b> The IE fee (USD 2,727,273) is 10% of total project cost (USD 27,272,727). The execution costs (USD 1,672,727) are at <u>6.1%</u> of total project cost.</p> <p><b>CR4:</b> Please briefly clarify if the 6.1% of the execution cost reflects UNIDO's involvement as an EE for component 3. <i>(Note: In case IE is serving as EE, which is acceptable only under exceptional circumstances and must be well-justified, the execution cost should be limited to 1.5% of the part of the project/ programme executed by the IE. If the actual execution costs of the IE exceed the 1.5% cap a justification should be provided).</i></p>
<p>Eligibility of IE</p>	<p>8. Is the project/programme submitted through an eligible Implementing Entity that has been accredited by the Board?</p>	<p><b>No.</b> <u>UNIDO's accreditation expired 30 November 2025</u></p>



## ADAPTATION FUND

# PRE-CONCEPT FOR A REGIONAL PROJECT/PROGRAMME

### PART I: PROJECT/PROGRAMME INFORMATION

**Title of Project/Programme:** Regional climate adaptation initiative on sustainable and equitable rice-fish systems in Cambodia and Viet Nam

**Countries:** Cambodia, Viet Nam

**Thematic Focal Area<sup>1</sup>:** Food security

**Type of Implementing Entity:** Multilateral Implementing Entity

**Implementing Entity:** UNIDO

**Executing Entities<sup>2</sup>:** UNIDO, Ministry of Environment (Cambodia), Ministry of Agriculture, Forestry and Fisheries (Cambodia), Ministry of Agriculture and Environment (Viet Nam)

**Amount of Financing Requested:** 30,000,000 (in U.S Dollars Equivalent)

**Project Formulation Grant Request:** Yes  No

**Amount of Requested financing for PFG:** 30,000 (in U.S Dollars Equivalent)

**Letters of Endorsement (LOE) signed for all countries:** Yes  No

*NOTE: LOEs should be signed by the Designated Authority (DA). The signatory DA must be on file with the Adaptation Fund. To find the DA currently on file check this page: <https://www.adaptation-fund.org/apply-funding/designated-authorities>*

#### Stage of Submission:

- This pre-concept has been submitted before
- This is the first submission ever of the pre-concept

<sup>1</sup> Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

<sup>2</sup> Specific entities will be determined at Concept Note stage

In case of a resubmission, please indicate the last submission date: [Click or tap to enter a date.](#)

**Please note that pre-concept should not exceed 5 pages (in addition to this first cover page)**

## Project/Programme Background and Context:

**According to the IPCC WGI (IPCC, 2021), Southeast Asia is characterized by rising temperatures, resulting in an increasing trend of growing-season length, floods, heavy precipitation, and salinity intrusion.** Future projections indicate a similarity between the AS5 and AS6 scenarios: Southeast Asia will experience heavier and more frequent precipitation events. Monsoon land precipitation is also expected to increase due to greater moisture convergence driven by elevated temperatures. Ocean acidification is projected to continue over the 21st century (SROCC). The projected decrease in global surface ocean pH from 1986-2005 to 2081-2100 is about 0.145 under RCP4.5 (Lee et al., 2021a). Literature shows that climate events will have profound impacts on food security. The IPCC (2021) indicates that agricultural production and food security will be substantially affected, particularly in cereal production, by the end of the 21st century. In addition, malnutrition among poor and marginalized populations remains a major concern and will be further aggravated by climate change.

**As Vietnam and Cambodia transition to upper-middle-income status by 2030 and aspire to reach high-income levels by 2045/2050, both countries will face similar structural and policy challenges in the agriculture sectors.** Today, both countries face persistent challenges of food security and nutrition. While graduation to middle-income status may stimulate investments in modernization, it also risks deepening inequality by marginalizing smallholders who lack the resources to adapt. Traditional fishing practices may also decline in this process, eroding community identity. Regional studies indicate that climate change impacts threaten reductions in future national GDP - the basis of a country classification - in both countries, and under a drier scenario could seriously damage Cambodia's prospects sustaining its country classification.

**Rice and fish are central pillars of food security in both, Vietnam and Cambodia, where rice provides the caloric foundation of diets, while fish is the most critical source of protein and micronutrients.** *Vietnam* is one of the world's leading rice exporters, and rice remains the staple food, providing the bulk of daily caloric intake for its population while also generating foreign exchange that supports rural livelihoods. *Vietnam* is also a global leader in aquaculture, which has become a crucial source of income, employment, and animal protein, helping diversify diets and strengthen nutritional security. *Cambodia* depends even more heavily on rice and inland fisheries for domestic food security. Rice is grown predominantly for household consumption, with limited surplus export, and is the backbone of rural livelihoods.

**Despite slowing rice production and declining inland fisheries in Cambodia and Vietnam, growing demand – particularly for fish driven by rising incomes - underscores the enduring importance of capture fisheries and aquaculture for food security and nutrition.** Local, regional, and international demand for rice and fish are expected to increase for decades to come<sup>3</sup>. Fish demand is tracking faster than population growth, with increases in per capita consumption associated also with rising incomes<sup>4</sup>. Rice demand is expected to continue to grow with the population growth trend, but at a slower rate given that as incomes rise, diets tend to diversify away from staples<sup>5</sup>. Inland fisheries in *Cambodia* are the fifth biggest in the world<sup>6</sup>. Rice production has peaked in *Vietnam* (in 2015) and production growth is slowing in *Cambodia* (since 2010)<sup>7</sup>. Inland capture fisheries production has begun to level off or gradually decline (since 2013 for *Cambodia*, and 2001 for *Vietnam*). As of 2013, capture fisheries still contributed substantially to inland fish production in *Cambodia* (86%). While growth in aquaculture production has continued, the relative contributions of inland capture fisheries remain sizeable in terms of fish production<sup>8</sup>.

**The NAPs and NDCs of Vietnam and Cambodia identify rice and fisheries sectors among the most sensitive sectors. In line with these findings, , the biggest climate hazards in both countries are drought, floods, and heat stress.** *Vietnam's* NDC and NAP state that projections indicate the potential declines in rice yields by 8.8% in 2030 and 15.1% by 2050 due to drought, salinity, and heat stress. *Vietnam's* NDC states that about 1.1 million tons of aquaculture, or USD 935 million, are at risk of loss from flooding every year. Economic projections show significant losses due to climate change: temperature rise alone could cost the aquaculture sector in 10 northern and north-central provinces around VND

<sup>3</sup> Chan, C., Tran, N., Dao, C., Sulser, T., Phillips, M., Batka, M., et al. (2017). *Fish to 2050 in the ASEAN Region*. Washington, DC.

<sup>4</sup> Chan, C., Tran, N., Dao, C., Sulser, T., Phillips, M., Batka, M., et al. (2017). *Fish to 2050 in the ASEAN Region*. Washington, DC.

<sup>5</sup> [https://www.researchgate.net/profile/Ian-Patrick/publication/306399811\\_The\\_Changing\\_Beef\\_Industry\\_in\\_South-Eastern\\_Cambodia/links/57e1d3c608ae427e2957ec5f/The-Changing-Beef-Industry-in-South-Eastern-Cambodia.pdf#page=16](https://www.researchgate.net/profile/Ian-Patrick/publication/306399811_The_Changing_Beef_Industry_in_South-Eastern_Cambodia/links/57e1d3c608ae427e2957ec5f/The-Changing-Beef-Industry-in-South-Eastern-Cambodia.pdf#page=16)

<sup>6</sup> FiA, 2017.

<sup>7</sup> <https://www.fao.org/faostat/en/#data/QCL>. Accessed on September 15, 2025.

<sup>8</sup> Funge-Smith, S., and Bennett, A. (2019). A fresh look at inland fisheries and their role in food security and livelihoods. *Fish Fish* 20, 1–20. doi: 10.1111/faf.12403

445 billion by 2050 (expressed in 2012 prices, discounted at 3% annually)<sup>9</sup>. Fish reproduction, growth, and migration are sensitive to variations in temperature, rainfall, and hydrological conditions<sup>10</sup>. Consequently, shifts in these factors can alter species' abundance and availability. Changes in precipitation patterns also affect seasonal flooding, which underpins inland fish production. Increased flooding during the wet season may enhance yields in certain inland fisheries, whereas drier dry seasons could jeopardize both wild and farmed fish stocks<sup>11</sup>. Extreme weather events may further reduce fish production in by damaging aquaculture stocks and destroying fishing and aquaculture infrastructure<sup>12</sup>. Overall, climate change is expected to impact geographic ranges of fish species, which will probably change species composition and biological ecosystem productivity<sup>13</sup>. The same study states that there is an increased risk of flooding during the wet season, in particular in low-lying areas downstream of Kratie in *Cambodia* and in the Mekong Delta. Cambodia's CCSP highlights that increased temperatures, prolonged droughts, and erratic rainfall patterns will intensify pressure on rice and fisheries productivity. In particular, rice grain yields decline by 10% for each 1C increase in minimum (night) temperatures during the growing period in the dry season. Cambodia's fisheries are highly vulnerable to the effects of climate change (findings were based on assessments of Cambodia's dependence on fisheries, the magnitude of expected climate change in the country, and its adaptive capacity)<sup>14</sup>. Cao et al. (2019) created a vulnerability index (VI) to assess aquaculture across all 698 districts in Vietnam's 63 provinces, with several areas in the Mekong River Delta ranking among the most vulnerable<sup>15</sup>.

**Climate impacts in these countries disproportionately affect smallholder farmers and fisherfolk - the primary producers - threatening the stability of national food security and local livelihoods:** the majority of rice is cultivated by smallholders on plots often less than 2 hectares. Similarly, small-scale fisherfolk dominate inland capture fisheries (especially on Tonlé Sap in Cambodia and the Mekong delta in Vietnam). Changes in fishery production are likely to have the greatest impact on people who depend on fishing as their primary livelihood activity. Climate hazards disrupting fish habitats, breeding cycles, and fishing activities create significant challenges for local communities. The vulnerabilities of these communities are heightened by their heavy dependence on fisheries for livelihoods, limited access to timely climate information and adaptive technologies, and inadequate infrastructure, which reduces their adaptive capacity to respond effectively to climate shocks. CCCSP of Cambodia clearly states that "Management of water and fisheries is the lifeline of the Cambodian people". As a result, the impacts are profound: economic losses from declining fish stocks threaten household incomes, food security is compromised due to reduced availability of fish and nutrition, and aquatic ecosystems suffer degradation, leading to biodiversity loss and diminished ecosystem services<sup>16</sup>.

#### **Project/Programme Objectives:**

**The project's main goal is** to strengthen the climate change adaptive capacity of vulnerable groups involved in integrated rice-fish farming systems (smallholder farmers and fisherfolk, local SMEs, farmer cooperatives and producer groups, and women and youth) by leveraging economies of scale and promoting equitable approaches by providing capacity, tools and services to enhance the resilience of vulnerable groups to climate risks.

To achieve this goal, the project will invest in climate-resilient rice-fish circular bioeconomy models, enhance access to finance, markets, and climate information services for smallholders, cooperatives, and SMEs, and strengthen regional innovation, policy coordination, and knowledge sharing between Cambodia and Viet Nam. These targeted investments will address key technical, financial, and institutional barriers that currently constrain adaptive capacity at local, national, and regional levels.

If these interventions are effectively implemented through participatory, inclusive, and equitable approaches that empower smallholder farmers, fisherfolk, women, and youth, and are supported by enabling national and regional institutions, policies, and partnerships that foster collaboration, innovation, and knowledge exchange, then vulnerable groups will be better equipped to anticipate, absorb, and adapt to climate risks. This will lead to more resilient livelihoods, improved food

<sup>9</sup> [https://icsf.net/wp-content/uploads/2025/06/930.ICSF259\\_Vietnam-Climate.pdf](https://icsf.net/wp-content/uploads/2025/06/930.ICSF259_Vietnam-Climate.pdf)

<sup>10</sup> Ficke AD, Myrick CA, Hansen LJ. 2007. Potential impacts of global climate change on freshwater fisheries. *Reviews in Fish Biology and Fisheries*, 17(4):581-613.

<sup>11</sup> [WorldFish fisheries.qxd](#)

<sup>12</sup> Johnston et al., 2009

<sup>13</sup> [Mekong-Basin-wide-Fisheries-Management-and-Development-Strategy.pdf](#)

<sup>14</sup> Allison EH, Perry AL, Badjeck MC, Neil Adger W, Brown K., Conway D, Halls AS, Pilling GM, Reynolds JD, Andrew NL, Dulvy NK. 2009. Vulnerability of national economies to the impacts of climate change on fisheries. *Fish and Fisheries*, 10(2):173-196.

<sup>15</sup> Cao, L. Q., Hoang, V. C., Tran, V. T., Phan, P. T., and Do, T. V. (2019). *Review and updated assessment of climate change vulnerability of aquaculture production in Agro-Ecological zones of Viet Nam*. Final Activity Report 3 of the Project.

<sup>16</sup> <https://cgsp.space.cgiar.org/server/api/core/bitstreams/1b8e87d1-c8c7-409e-a989-ab49728ca03c/content>

and nutrition security, and sustainable rice–fish systems that contribute to regional climate resilience and inclusive development.

Building on this theory of change, the project will deliver three interlinked specific objectives through its three components and twelve concrete outputs:

- Smallholder farmers and fisherfolk strengthen their climate resilience, food security, and livelihoods thanks to climate-resilient fish-rice circular bioeconomy models
- Enhanced climate resilience and economic empowerment of local SMEs, farmer cooperatives, and producer groups - particularly women and youth - through strengthened adaptive capacity, diversified livelihoods, and improved access to finance and markets
- Enhanced regional resilience and sustainability of rice-fish systems through innovation, knowledge exchange, and evidence-based decision-making

In this project, building resilience refers to strengthening the capacity of rice-fish farming communities to withstand, recover from and adapt to climate-related shocks and stresses. All project outputs contribute to climate change adaptation by supporting farming households, cooperatives, SMEs and local institutions to better manage increasing climate variability and climate-induced hazards. This includes the scaling-up of climate-resilient rice-fish bioeconomy models, the introduction of climate-resilient technologies and infrastructure and the commercialization and value-chain support that help stabilize and diversify livelihoods in the face of climate variability. Training programs, access to climate information and finance and support for cooperatives and producer groups further enhance the ability of vulnerable groups to anticipate and respond to climate impacts. At the regional level, knowledge exchange, policy coordination and scenario planning help embed adaptation practices into long-term development processes, ensuring that resilience-building efforts are sustained and scaled over time.

A detailed review of vulnerable areas within the identified provinces through consultations with all stakeholders engaged in climate change adaptation practices will help further elaborate the barriers and avoid duplication (at concept note and full proposal). The targets will be quantified during the CN stage for the following indicators: 1) # of people, disaggregated by direct and indirect beneficiaries, by gender, by vulnerable groups, 2) Physical assets improved or constructed to withstand climate variability and change (disaggregated by km of linear infrastructure and # of point infrastructure), 3) Ecosystems and natural resources brought under protection, restoration, or improved management in response to climate variability and change (# of ha of land), 4) Policies, strategies, and/or plans developed or adjusted to integrate climate risk considerations (# of policies, strategies, and/or plans, disaggregated by scale). The following stages of the project development will develop a dedicated project scalability framework and a dedicated project Theory of Change, following international best practice<sup>17</sup> to incentivize scalability and replicability beyond project scale up grants. Feasibility and suitability analyses - to be done in the next stages of project development - will serve to adapt proven models to the local context rather than test them.

#### Project/Programme Components and Financing:

Project/Programme Components	Expected Outcomes	Expected Outputs	Countries	Amount (US\$)
1. Improving the adapting capacity of vulnerable <b>smallholder farmers and fisherfolk</b> through the introduction of	1.1. Smallholder farmers and fisherfolk strengthen their climate resilience, food security, and livelihoods thanks to climate-	1.1.1. Implementation and scaling-up of bioeconomy rice-fish models for improved climate resilience and sustainability with a special focus on traditional knowledge	Cambodia, Vietnam	3,500,000
		1.1.2. Climate-resilient technologies and physical/digital tools linking farmers with supplier, production, harvesting, procurement, processing, market distribution, and planning and decision-making processes	Cambodia, Vietnam	4,000,000

<sup>17</sup> <https://www.stapgef.org/resources/advisory-documents/theory-change-primer>

climate change adaptation <b>production technologies</b> and approaches at a <b>landscape level</b>	resilient fish-rice circular bioeconomy models	1.1.3. Commercialization scheme to support branding of climate-resilient community conservation efforts	Cambodia, Vietnam	2,000,000
2. Climate resilient technologies, infrastructure, and tools for <b>local SMEs, farmer cooperatives and producer groups</b> , with the special focus on women and youth	2.1. Enhanced climate resilience and economic empowerment of local SMEs, farmer cooperatives, and producer groups - particularly women and youth - through strengthened adaptive capacity, diversified livelihoods, and improved access to finance and markets	2.1.1. Climate-resilient infrastructure and technologies introduced to reduce vulnerability of target groups to climate induced hazards: cooperatives and producer groups pool resources, share risks, and invest in (e.g., water retention ponds, resilient fish stocks, storage facilities)	Cambodia, Vietnam	4,000,000
		2.1.2. Targeted training programs on climate-resilient practices and access credit, including financial literacy programs	Cambodia, Vietnam	2,000,000
		2.1.3. Diversification of income, alternative safe areas for processing, and market by linking cooperatives and youth-led groups to value-added processing, climate-resilient supply chains, and regional markets	Cambodia, Vietnam	3,500,000
3. Strengthen the knowledge management and implementation of national and local institutions' <b>adaptation mechanisms</b> to sustainably address climate change impact	3.1. Enhanced regional resilience and sustainability of rice-fish systems through, knowledge exchange, and evidence-based decision-making	3.1.1. A Center of Excellence established to serve as a regional platform for demonstrating best practices, technology transfer, knowledge exchange (with special focus on documentation and exchange of community and traditional knowledge), capacity-building, and access to finance	Cambodia, Vietnam	1,500,000
		3.1.2. Strategic partnerships developed with regional/international entities supporting the rice and fisheries	Cambodia, Vietnam	1,000,000
		3.1.3. A cooperation mechanism between government, private sectors, NGOs and consumers to promote climate-smart technologies to balance sustainable ecosystem protection and economic growth through a joint monitoring and evaluation (M&E) framework coordinated through Output 3.1.1.	Cambodia, Vietnam	1,000,000
		3.1.4. Strategic participatory adaptation scenario planning and Evidence-based policy briefs developed for VC actors to develop long-term adaptive strategies and solutions for risk-informed development planning and investment decisions	Cambodia, Vietnam	1,000,000
		3.1.5. National/sub-national capacity building program for vulnerability assessments, data collection, and long-term climate-informed planning	Cambodia, Vietnam	1,500,000

		3.1.6. Fisheries and aquaculture considerations integrated into national water and agriculture policies and management practices at the landscape level	Cambodia, Vietnam	600,000
6. Project/Programme Execution cost				1,672,727
7. Total Project/Programme Cost				25,600,000
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)				2,727,273
<b>Amount of Financing Requested</b>				<b>30,000,000</b>

**Project Duration:** 60 months

## PART II: PROJECT/PROGRAMME JUSTIFICATION

The proposed project is inspired by the IPCC's Working Group II (WGII) to AR6 which was found with a high degree of confidence that *"integrated, multisectoral solutions that address social inequities, differentiate responses based on climate risk and cut across systems, increase the feasibility and effectiveness of adaptation in multiple sectors"*. Integrated rice-fish systems – simultaneous or rotational integration of wild or stocked fish with flooded rice fields<sup>18</sup> - as circular bioeconomy solutions are particularly well-suited to the regional context. They create natural cycles between crops and fish: fish consume natural food in the rice fields, and their waste fertilizes the rice. This closed loop relationship improves soil and water health, boosts biodiversity, diversifies incomes and reduces dependence on external inputs. Strengthening these systems through coordinated, cross-border action can help protect livelihoods, climate change adaptation and support healthier ecosystems in this shared landscape. FAO's analysis<sup>19</sup> on bioeconomy's contribution as climate change adaptation intervention further strengthens the proposed project's approach: *"A sustainable and circular bioeconomy presents opportunities to build climate change resilience, through promoting ecosystem restoration and nutrient and water retention in soils, supporting indigenous and local livelihoods based on biological products and services, and building the conditions for more sustainably fisheries"*.

Building on existing rice-fish practices in the region, the project will introduce several practical elements that are not always included in traditional systems, such as basic water-control improvements for managing drought and salinity, climate-tolerant rice and fish strains, and circular practices that help maintain productivity under more variable climate conditions. Earlier rice-fish initiatives in the region have built valuable experience in improving production and supporting household livelihoods. In this project, the emphasis is placed more explicitly on climate risks and on linking these practices with services such as climate information, market access or cooperative planning. The project therefore aims to bring these elements together in a more coordinated way, so that existing practices become more resilient and better able to cope with current and emerging climate pressures.

**The regional approach** is key to addressing similar climate change challenges across borders. Coordinated adaptation measures reduce maladaptation risk in either country. Farmers and fishers can share lessons, resilient techniques, and bioeconomy practices across borders, amplifying impact. Thanks to the economies of scale approach, the regional initiative will allow both countries to share strengths and knowledge and harmonize their strategies and resources to generate high impact solutions for communities in both countries. It will reduce duplication, generate cost savings, allow to reach more communities in a more effective and regional coordinated approach. Leveraging targeted interventions in three diverse agro-ecological zones will tailor interventions to site-specific conditions while promoting cross-border learning and peer-to-peer exchange and a scaled impact through replication in other areas of the country thanks to the similarity analysis (component 1).

The project will strengthen knowledge transfer and collective learnings to ensure long-term sustainability of adaptation building activities. Through binational network and community level engagement the project will promote participatory and peer-to-peer learning. Given the converging structural, nutritional, and climate-related challenges, a regional approach becomes essential, as it allows Cambodia and Vietnam to share adaptation strategies, harmonize policies, and jointly strengthen the resilience of smallholder farmers and fishers across similar agro-ecological zones, ensuring that

<sup>18</sup> <https://www.frontiersin.org/journals/sustainable-food-systems/articles/10.3389/fsufs.2020.576179/full>

<sup>19</sup> Gomez San Juan, M., Harnett, S. and Albinelli, I. 2022. Sustainable and circular bioeconomy in the climate agenda: Opportunities to transform agrifood systems. Rome, FAO. <https://doi.org/10.4060/cc2668en>

modernization and income growth do not exacerbate inequality or erode traditional livelihoods. Active community participation and ownership will also be promoted through activities to ensure sustainability and transformation beyond project duration.

The project will build on UNIDO’s consolidated experience supporting the transition towards a regenerative bioeconomy. With the UNIDO’s focus on the promotion of inclusive and sustainable agro-industrial development strategies among Member States, it plays a unique role in ensuring that the resources needed, and pathways taken, to support sustainable agro-industrialization at the micro, medium and large scale are durable and promote resilience – economically, socially, and environmentally, in line with UNIDO’s Climate Change Strategy, which emphasizes strengthening resilience through policy advice, technology transfer and capacity-building.

**Target geographies:** The project will limit its interventions to the targeted regions in each country that have been selected due to their climate vulnerability and exposure, livelihood dependence on rice and fish and poverty, adaptive capacity constraints, Institutional alignment and engagement, and potential for replication (nationally and regionally). Components 1 and 2 will target the following three zones: Mekong Delta, coastal zone, and the mountainous regions.

#### Mekong Delta:

In *Vietnam*, **An Giang Province** is located on the border with Cambodia. It is heavily affected by drought, recurrent flooding and storm surges, which disrupt farming operations, damage infrastructure, and reduce market access. Smallholder farmers and fishing communities are heavily reliant on rice and integrated aquaculture for their livelihoods. Women playing key roles in farming, fish processing, and post-harvest management. Feasibility of delivering specific project objectives in **Can Tho City** will also be considered during CN formulation.

In *Cambodia*, **Takeo, Kandal, Prey Veng** provinces are three adjacent provides on the border with Vietnam. They are highly climate-exposed provinces within Mekong floodplain. Takeo faces recurrent droughts and erratic rainfall that undermine rice yields, alongside flood-related post-harvest losses. Kandal, situated along the Mekong and Bassac rivers, is especially flood-prone, with inundation and erosion disrupting both farming and market access. Prey Veng is among the most vulnerable provinces in Cambodia, also among the poorest, with severe and frequent floods as well as droughts causing major rice and fish losses, compounded by weak post-harvest infrastructure. Local communities in these provinces remain highly dependent on rice and fisheries for livelihoods, with women central to farming and post-harvest activities.

#### Coastal zone

In *Vietnam*, **Quang Tri** province is situated in central part of the country spanning coastal plains, river valleys, and low hills. Frequent storms, floods, and prolonged droughts, causing severe damage to rice fields and fish ponds. Many smallholder poor households depend on rice and aquaculture. Quang Tri is suitable for piloting integrated rice–fish/freshwater prawn models linked to post-disaster recovery and climate adaptation in the Central Region.

#### Northern uplands

In *Vietnam*, **Ha Giang province** is located in the far north of Vietnam along the border with China, is a mountainous province characterized by highlands and narrow valleys. The province is highly exposed to climate-related hazards: flash floods, landslides, droughts, and extreme temperature fluctuations. Rice cultivation, often on terraced fields, is the primary livelihood for the indigenous communities, many of whom are smallholders, with upland a fisheries playing a supplementary role.

**Alignment:** The proposed project aligns with key governments’ policies and strategies in the area of agriculture (including fisheries), rural development and climate change adaptation. *Cambodia*: NDC 3.0 (Priority 6, 9, 10); Circular Strategy on Environment 2023-2028 (Angle 3: Enhancing Local Communities’ Livelihood; Priority 1: Promoting food security, nutrition and community cleanness through climate change adaptation measures and clean energy use); Cambodia Climate Change Strategic Plan 2024–2033 (Strategic Outcome 2.0). *Vietnam*: NDC 3.0 (Adaptation Target 1 – Enhancing resilience and adaptive capacity in agriculture and rural livelihoods); National Adaptation Plan for the period 2021-2030, with a vision to 2050; Green Agriculture Strategy.

**Gender:** <sup>20</sup>[\[00\]](#) highlights that in Vietnam’s inland fisheries and aquaculture, women play a significant but often under-recognized role, typically contributing 15-45% of the workforce. They are most visible in family-based pond and cage aquaculture, where they assist with household tasks, logistics, and sometimes feeding fish, while men usually handle more physically demanding activities such as maintaining cages, cleaning nets, and supervising production. Climate change pressures, combined with the migration of men from rural areas to urban centers in search of work, increasingly leave women managing aquaculture operations with fewer resources and greater responsibilities. These shifts exacerbate gender disparities, as traditional norms restrict women to specific tasks and limit their ability to adapt effectively, reducing their resilience to changing environmental and economic conditions. In Cambodia, similar gender dynamics are observed in rice and fisheries value chains where women play key roles in post-harvest processing, marketing and small-scale aquaculture but face limited access to land, finance, and extension services. Strengthening women’s participation in producer groups and adaptation planning will be essential to building equitable and climate-resilient livelihoods.

**Consultative process** was followed for the development of the pre-concept, in particular consultations AF focal points and relevant ministries involved in climate change adaptation and agriculture and fisheries. Target areas were identified by the respective government entities based on transparent climate change criteria. For concept development, local consultations will be conducted, including an initial review of environmental and social impacts, which will be further developed during full proposal formulation into an Environmental and Social Management Framework and Gender Action Plan, in line with the Environmental and Social policy of the Adaptation Fund, respecting Free, Prior, and Informed Consent (FPIC) at all levels.

### **PART III: IMPLEMENTATION ARRANGEMENTS**

UNIDO will serve as the Multilateral Implementing Entity (MIE), responsible for overall management, oversight, reporting, and achievement of project objectives. Given the regional scope, UNIDO will execute Component 3. Components 1 and 2 will be executed by national entities in the respective countries. In Viet Nam, the Department of Cooperative Economics and Rural Development (DCERD) under the Ministry of Agriculture and Environment is currently the only executing entity anticipated. In Cambodia, the Ministry of Environment and the Ministry of Agriculture, Forestry and Fisheries will both act as executing entities. During the concept stage, the roles and responsibility of the executing entities and other institutions with relevant technical expertise will be further described and validated in consultation with the respective governments to ensure alignment with the project objectives.

The project will also engage national research institutions, local authorities, farmer organizations, and private-sector actors involved in agro-processing and bio-based value chains.

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<sup>20</sup> [https://icsf.net/wp-content/uploads/2025/06/930.ICSF259\\_Vietnam-Climate.pdf](https://icsf.net/wp-content/uploads/2025/06/930.ICSF259_Vietnam-Climate.pdf)

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

**A. Record of endorsement on behalf of the government<sup>21</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. Paris Chuop, Secretary of State, Ministry of Environment	Date: November 13, 2025
Dr. Nguyen Tuan Quang, Deputy Director General, Department of Climate Change, Ministry of Agriculture and Environment of Viet Nam	Date: February 4, 2025

**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 of the Kingdom of Cambodia and the Socialist Republic of Vietnam, 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</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
 Ms. Ganna Onysko Senior GEF, GCF, AF Coordinator Division of Funding Partner Relations Directorate of Global Partnerships and External Relations United Nations Industrial Development Organization - UNIDO Implementing Entity Coordinator	
Date: February 6, 2026	Tel. and email: +43 1 26026 3647; G.ONYSKO@unido.org
Project Contact Person: Ms. Meryem Sghir	
Tel. And Email: +43 1 26026 3743; M.SGHIR@unido.org	

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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.



KINGDOM OF CAMBODIA  
Nation Religion King

Ministry of Environment

N° : 9052 / 1125 MoE

Phnom Penh, 13 November 2025

The Adaptation Fund Board  
c/o Adaptation Fund Board Secretariat  
Email : Secretariat@Adaptation-Fund.org  
Fax : 202 522 3240/5

**Title of Project/Programme: Regional Initiative on Sustainable and Equitable Rice-Fish Systems in Cambodia and Vietnam**

In my capacity as designated authority for the Adaptation Fund in Cambodia, I confirm that the above regional project proposal is in accordance with the Government of Cambodia's national priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Cambodia. The proposal directly supports the objectives outlined in Circular Strategy on Environment (2023-2028), Cambodia's Climate Change Strategic Plan (2024-2033), and NDC 3.0, particularly by enhancing the climate resilience and adaptive capacity of vulnerable groups involved in integrated rice-fish farming systems in Cambodia by promoting sustainable rice-fish systems through the introduction of climate change adaptation production technologies and approaches.

Accordingly, I am pleased to endorse the above regional project proposal for submission to the Adaptation Fund. If approved, the project will be implemented by the United Nations Industrial Development Organization (UNIDO) and co-executed by UNIDO in collaboration with the Ministry of Agriculture, Forestry and Fisheries (MAFF), Ministry of Environment (MoE), and relevant line Ministries of Cambodia, which will be identified during the next stage of project development.



Sincerely yours,  
For Minister

CHUOP Paris  
Secretary of State

Ha Noi, 04 February 2026

**The Adaptation Fund Board**

c/o Adaptation Fund Board Secretariat  
Email: Secretariat@Adaptation-Fund.org  
Fax: 202 522 3240/5

***Endorsement for the project pre-concept proposal titled “Regional climate adaptation initiative on sustainable and equitable rice- fish systems in Cambodia and Viet Nam”***

The project titled “Regional climate adaptation initiative on sustainable and equitable rice- fish systems in Cambodia and Viet Nam” has been developed by the Department of Cooperatives and Rural Development, Ministry of Agriculture and Environment (MAE) of Viet Nam in collaboration with the United Nations Industrial Development Organization (UNIDO). The objective of the project is to strengthen the climate change adaptive capacity of vulnerable groups involved in integrated rice-fish farming systems by leveraging economies of scale and promoting equitable approaches by providing capacity, tools and services to enhance the resilience of vulnerable groups to climate risks.

On behalf of Department of Climate Change, Ministry of Agriculture and Environment, as Viet Nam's designated authority for the Adaptation Fund, I hereby confirm that the project pre-concept proposal titled “Regional climate adaptation initiative on sustainable and equitable rice- fish systems in Cambodia and Viet Nam” aligns fully with the priorities of the Government of Viet Nam in strengthening the climate change adaptive capacity of vulnerable groups in Viet Nam.

Therefore, I am pleased to endorse the above project pre-concept proposal and support its submission to the Adaptation Fund. If approved, the project will be implemented by the United Nations Industrial Development Organization and executed by the Department of Cooperatives and Rural Development, Ministry of Agriculture and Environment of Viet Nam.

Sincerely,



**Nguyen Tuan Quang**

Deputy Director General  
Department of Climate Change  
Ministry of Agriculture and Environment of Viet Nam

Cc:

- Department of Cooperatives and Rural Development, MAE;
- UNIDO.



**Revised PFG Submission Form<sup>1</sup> (additions in red)**

**Project Formulation Grant (PFG)**

**Submission Date:**

**Adaptation Fund Project ID:** XXX

**Country/ies:** Cambodia and Viet Nam

**Title of Project/Programme:** Regional initiative on sustainable and equitable rice-fish systems in Cambodia and Viet Nam

**Type of IE (NIE/RIE/MIE):** MIE

**Implementing Entity:** UNIDO

**Executing Entity/ies:** UNIDO

**A. Project Preparation Timeframe**

<b>Start date of PFG</b>	June 2026
<b>Completion date of PFG</b>	January 2027

**B. Proposed Project Preparation Activities (\$)**

<b>List of Proposed Project Preparation Activities</b>	<b>Output of the PFG Activities</b>	<b>US\$ Amount</b>	<b>Budget note<sup>2</sup></b>
<p><b>Preparation of a concept note:</b></p> <ul style="list-style-type: none"> <li>- To conduct a baseline assessment to verify the proposed interventions, indicators, targets and to identify the target project sites.</li> <li>- To carry out stakeholders' consultations at local and national level, specifically on selected project sites, with local</li> </ul>	<ul style="list-style-type: none"> <li>- Baseline assessment report</li> <li>- Stakeholders' consultation report</li> <li>- Concept note</li> <li>- Validation workshop report</li> </ul>	<b>27,450</b>	<p>Technical expertise: US 10,000</p> <p>Local travel: US\$ 5,000</p> <p>Stakeholders' workshops: US\$ 5,000</p> <p>Workshop expenses: US\$ 2,450</p> <p>Travel expenses: US\$ 5,000</p>

<sup>1</sup> As presented in AFB/PPRC.33/40 Annex 1.

<sup>2</sup> The proposal should include a detailed budget with budget notes indicating the break-down of costs at the activity level. It should also include a budget on the Implementing Entity management fee use.

<p>communities and indigenous populations.</p> <ul style="list-style-type: none"> <li>- To prepare the Concept note as per the requirements of the Adaptation Fund.</li> <li>- To organize validation workshops at the national level, specifically on selected project sites, with local communities and indigenous populations. There will be at least two workshops: one in Cambodia and one in Viet Nam.</li> </ul>			
<b>IE fee (support costs)</b>	IE admin and technical support for project development, monitoring and supervision  Compliance assurance	<b>2,550</b>	
<b>Total Project Formulation Grant</b>		<b>30,000</b>	

<b>Description of the required activity</b>	<b>Justification for the need and for the amount</b>
To conduct a baseline assessment	The preliminary baseline assessment will be conducted so that the data and information is provided to support the interventions proposed and indicators/targets aimed at. The methodology will be based on a participatory approach, collecting primary data at the local, community level and secondary data.
To carry out initial stakeholders' consultations at local and national level:	Stakeholder consultation serves as a fundamental mechanism for collecting information, perspectives, and feedback from individuals involved in a project. This activity will serve to ensure further alignment of an engagement plan with the needs, expectations, and concerns of all relevant stakeholders. The stakeholders' consultations will target specifically selected project sites, involving local communities and indigenous populations;
To organize a validation workshop	This activity will involve in person pre-validation workshops at the level of the target communities and indigenous populations in order to ensure their buy in of the proposed project interventions. This will be conducted as pre-validation workshops. Also, validation workshops will be conducted virtually separately in Cambodia and Viet Nam so that each country has an opportunity to focus on the proposed project intervention and provide validation.

### 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

<b>Implementing Entity Coordinator, IE Name</b>	Ms. Ganna Onysko Senior GEF, GCF, AF Coordinator Division of Funding Partner Relations Directorate of Global Partnerships and External Relations United Nations Industrial Development Organization - UNIDO Implementing Entity Coordinator	
<b>Signature</b>	<i>Ganna Onysko</i>	<b>Date: February 6, 2026</b>
<b>Project Contact Person</b>	Meryem SGHIR +43 1 26026 364743 <a href="mailto:M.SGHIR@unido.org">M.SGHIR@unido.org</a>	
<b>Telephone</b>	+43 1 26026 3708	
<b>E-mail</b>	TO: <a href="mailto:g.onysko@unido.org">g.onysko@unido.org</a> CC: <a href="mailto:gef@unido.org">gef@unido.org</a> / <a href="mailto:glo@unido.org">glo@unido.org</a> / <a href="mailto:f.haidara@unido.org">f.haidara@unido.org</a>	