
Annual Performance Report

Project/Programme title: Enhancing climate resilience in Thailand through effective water management and sustainable agriculture (FP170)

Accredited Entity: United Nations Development Programme (UNDP)

Date of Report submission: 1 May 2026

Version number V1.0



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RATIONALE

This report layout is designed to support the drafting of a structured report that assesses, evaluates, documents, and communicates the progress on Funding Proposal (FP) implementation and on its associated Funded Activity Agreement (FAA). The layout aims to provide a clear and comprehensive understanding of key objectives, progress, and risks, drawing on project implementation related data provided by Accredited Entities (AEs). Considering the Green Climate Fund's (GCF) evolving strategic direction toward a Risk-Based Approach, the report is intended to:

- Track quantitative and qualitative progress of the project implementation.
- Highlight critical findings and emerging trends.
- Identify risks and propose actionable mitigation strategies.
- Support evidence-based decision-making.
- Promote transparency and accountability.
- Align with strategic and regulatory frameworks.
- Serve as a foundation for AE engagement on project performance

METHODOLOGY

The report's layout mirrors, to the extent possible, the structure of the Funding Proposal (FP) to maintain coherence with the presented information. However, the FP and the Report differ in scope and strategic intent; thus, while the FP serves a functional role in informing the Report, it does not dictate a strictly parallel structure.

A. PROJECT DATA (Prefilled where possible)

Should any information/data prefilled from Section A.1 to Section A.12 be incorrect or require updating, please inform GCF's Project Lead of appropriate corrective action.

A.1. Date of report submission		1 May 2026												
A.2. Project or programme	Project	A.3. Sector	Public											
A.4. Total Financing (GCF + Cofinance)	<table border="1"> <tr> <td>GCF Financing</td> <td>Mill. USD 17.5</td> </tr> <tr> <td>Grants</td> <td>Mill. USD 17.5</td> </tr> <tr> <td>Co-Financing</td> <td>Mill. USD 16.4</td> </tr> <tr> <td>InKind</td> <td>Mill. USD 16.4</td> </tr> <tr> <td>Total Financing</td> <td>Mill. USD 33.9</td> </tr> </table>				GCF Financing	Mill. USD 17.5	Grants	Mill. USD 17.5	Co-Financing	Mill. USD 16.4	InKind	Mill. USD 16.4	Total Financing	Mill. USD 33.9
	GCF Financing	Mill. USD 17.5												
	Grants	Mill. USD 17.5												
	Co-Financing	Mill. USD 16.4												
	InKind	Mill. USD 16.4												
Total Financing	Mill. USD 33.9													
A.5. Total GCF funding disbursed to this date	NA (draft)													
A.6. Implementation period	From 10 January 2022 to 10 January 2028													
A.7. ESS Category (Refers to GCF revised <u>Environmental and Social Policy</u> and GCF ESS Standards to assess your FP category.)			Category B											
A.8. Executing Entity Information														
Full legal name	Country of registration (or, for intl orgs, country of HQ)	Entity type	Role in project	Focal Point(s) and email(s)										
Ministry of Agriculture and Cooperatives	Thailand	Public sector – Government (which may be acting through a ministry or department)	Executing Entity	Chakaphon Singto, chakaphon.singto@gmail.com										

A.9. Co-Financier information

Full legal name	Country of registration (or, for intl orgs, country of HQ)	Focal Point(s) and email(s)	Ownership Type	Beneficial Owner(s)
Royal Irrigation Department, KoT	Thailand	Chakaphon Singto, chakaphon.singto@gmail.com	Government	Government of Thailand
Krungsri Bank	Thailand	Poonsit Wongthawatchai, poonsit.wongthawatchai@krungsri.com	Public Company Limited	MUFG (Mitsubishi UFJ Financial Group)

A.10. Alignment with country NDCs & NAP <i>(NB Only populate if applicable, e.g., if your project/programme specifically contributes to a country's NDC or NAP target/s)</i>				
Country	Date of NDC/ NAP submission	NDC/ NAP objective	Brief description of project's alignment with NDC/ NAP objectives	Percentage of target met with proposed project.Beneficial owner(s)
Thailand	10 April 2026	N/A	N/A	0%

A.11. Estimated duration of impact	
A.12 Report to be shared with NDA	Yes ☐ No ☐

B. EXECUTIVE SUMMARY

Should any information/data prefilled in Section “B” be incorrect or require updating, please inform GCF’s Project Lead for appropriate corrective action.

B.1. Summary

The project seeks to a) support climate-informed water management, planning and investment, and b) support vulnerable farmers in reducing volatility to changing climatic conditions, enhancing climate-informed and integrated planning as well as reduce disruption to smallholder farmers. The objective will be achieved through three complementary outputs:

- Output 1: Enhance climate and risk informed planning in the water and agricultural sectors through improved climate information and cross sectoral coordination
- Output 2: Improve water management through strengthened infrastructure complemented by EbA measures, for greater resilience to climate change impacts
- Output 3: Reduce volatility of agriculture livelihoods in drought and flood prone areas through strengthened extension support and local planning, investment in on-farm adaptation measures and greater access to finance and markets.

C. RESULTS AND IMPACTS

C.1. Overall Summary of the Project Progress

(This section provides a narrative report summarizing the overall progress of the implementation status of the funded activity progress during the reporting period. 1,500 words)

Outcome A7.0 Strengthened adaptive capacity and reduced exposure to climate risks

Progress across all three outputs shows strong contributions to improving adaptive capacity and reducing climate risks in the Yom–Nan Basin. The project has established key foundations, including climate-informed planning tools, priority water management infrastructure, and capacity-building and livelihood support for farmers. These efforts are enhancing water management, expanding access to climate information, and promoting climate-resilient agricultural practices, helping communities better anticipate and manage climate risks. The project also integrates grey infrastructure with ecosystem-based and livelihood interventions, supporting a holistic resilience approach. Continued adaptive management and collaboration will be essential to strengthen community resilience under increasing climate variability. Output 1: Enhance climate and risk-informed planning in the water and agricultural sectors through improved climate information and cross-sectoral coordination (100 words approx.)

The completion of climate monitoring equipment, climate forecast model and GreenWaterUnity application to share climate forecast data and data from climate monitoring equipment has strengthened the project's capacity for hydro-meteorological data collection, analysis, and climate information generation.

Activity 1.1. Strengthening capacity to generate tailored climate information to inform water management and agriculture planning.

In 2025, all planned field monitoring equipment under Output 1 was installed by King Mongkut's University of Technology North Bangkok (KMUTNB), including flow radar systems, automatic ultrasonic water level sensors in crop plots and lakes, meteorological stations, soil moisture sensors, and automatic pressure gauges. Calibration of flow radar systems and crop plot water level sensors has commenced and is now scheduled for completion in Q1/2026.

The climate forecast model for the Yom–Nan River Basin continues to be refined, with validation expected by Q4/2026. Monitoring data are integrated with climate forecast information and shared through the GreenWaterUnity application with the Royal Irrigation Department (RID), relevant government agencies, and farmers.

Activity 1.2. Facilitating inter-ministerial coordination for climate-informed and integrated planning

Standard Operating Procedures (SOPs) for information sharing and coordination among relevant government stakeholders were finalized. In parallel, the Terms of Reference (TOR) defining the mandate and operational roles of the Climate Information Process Unit, which is sponsible for operating the climate forecast model, monitoring data from climate monitoring equipment, and integrating multi-source data, including climate forecasts, to support water management decision-making by the RID and other government agencies, were completed, providing an institutional framework to support the sustained use and dissemination of climate information.

Activity 1.3. Expanding access to climate information for application at the household level

Stakeholder engagement activities were conducted to improve the relevance and usability of the WaterUnity application. Feedback from farmers, RID staff, and other stakeholders was gathered through technical training under Output 1 and support workshops under Output 3. These inputs informed application enhancements to better support climate-informed local decision-making. Tailored climate information products and forecast models have been integrated into the application and website. Flow radars are undergoing calibration, while the climate forecasting model continues validation and refinement before full operational use.

Output 2: Improve water management through strengthened infrastructure complemented by EbA measures, for greater resilience to climate change impacts (100 words approx.)

Output 2 has made substantial progress in 2025, with the majority of climate-resilient infrastructure upgrades completed, thereby strengthening water management capacity under both flood and drought conditions. While these investments have already improved water management performance, the full resilience benefits of this outcome are contingent upon the integration of Ecosystem-based Adaptation (EbA) measures. These measures have completed the design, site selection, and stakeholder consultation phases, with implementation scheduled to commence in 2026.

Activity 2.1. Climate-informed engineering designs for the 13 schemes of the Yom-Nan river basin, and upgrade of two water infrastructure

Construction activities to upgrade two canal head regulators along Khlong Muang Chang were successfully completed. Through RID co-financing, the Royal Thai Government (RTG) also upgraded three water development schemes—Wang Won, Wang Makham, and Khlong Ta Kae floodgates and drainages, strengthening water management capacity and climate resilience. These improvements have expanded the benefited area by approximately 20,000 hectares within the

project site. Monitoring of the Environmental and Social Management Plan (ESMP) for the 13 water development schemes has commenced and is currently under implementation.

Activity 2.2 Complementing of grey infrastructure with EbA measures and Integration of EbA approaches into water management policy and planning

The Climate Risk and Vulnerability Assessment and ecological surveys were completed, identifying 11 potential Ecosystem-based Adaptation (EbA) measures, including wetland restoration to increase water storage for agricultural use and fish refuges and river reach restoration.

Three priority EbA sites were selected by Q1/2025, with conceptual designs finalized in Q2/2025. Detailed design work is underway, with implementation expected in Q4/2026, and the Economic Evaluation drafted.

Environmental and Social (E&S) screening, baseline assessments, and the Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) were completed and approved by the GCF in Q4/2025.

M&E framework to capture and monitor qualitative and quantitative changes of the EbA measures was developed, and a baseline study began in Q4/2025.

In parallel with the detailed design process for the EbA measures, foundational and advanced technical on-the-job training were conducted to facilitate knowledge exchange and strengthen implementation capacity.

Output 3: Reduce volatility of agriculture livelihoods in drought and flood-prone areas through strengthened extension support and local planning, investment in on-farm adaptation measures and greater access to finance and markets (100 words approx.)

In 2025, all Output 3 activities were under implementation except for (i) the provision of small equipment for farmer adaptation actions and (ii) on-farm water resource development. Procurement of the small equipment is under review by RID to ensure full compliance with government rules and regulations for transferring assets to individual farmers. The on-farm water development component requires a GCF change request to adjust the number of ponds and revise unit costs based on current needs. An informal change request was submitted to the GCF in Q1/2026, with the formal request planned for early Q2/2026.

Activity 3.1. Application of climate information in household agriculture planning and strengthening related support through extension services

The installation of IoT sensors and gateways for smart farming applications was completed. A drone kit with a multispectral camera was field-tested, generating and interpreting NDVI data to support crop monitoring and advisory services. Farmers Field Schools were established in each sub-district with support from RID extension officers to demonstrate improved climate-resilient practices and technologies introduced by the project. These farms promote peer learning and encourage wider adoption of climate-smart agriculture, including proper fertilizer use and biological pest control methods.

Activity 3.2. Implementation of on-farm climate resilient measures to improve drought and flood resilience and improved access to finance for sustainable agriculture

The first six community nurseries were established to support the production of planting materials for adaptation measures. Several farmer products were developed under the Lum Yom Nan brand and marketed through existing online platforms and a retail outlet in Phitsanulok Province.

Outreach and communication materials were widely disseminated through multiple channels, including social media, fact sheets, roll-up banners, and mass media, to raise awareness of climate-resilient agricultural practices and project activities.

Activity 3.3. Capacity building for farmers to support market access for climate-resilient agriculture products

Through the partnership with the Bank for Agriculture and Agricultural Cooperatives (BAAC), USD 16 million in credit has been mobilized to support farmers' climate-resilient investments under Thailand's Bio-Circular-Green Economy (BCG) model. With co-financing, Krungsri delivered 15 financial literacy trainings to 472 farmers, strengthening money management skills. An online market platform initiative identified promising farm products and trained farmer groups—especially women producers of processed goods—to upgrade product quality, branding, and packaging for online sales to expand market access and incomes.

Activities related to on-farm water resources development and the provision of small-scale equipment supporting farmers' adaptation actions progressed through community consultation to identify beneficiaries, ensuring transparency and alignment with local needs. However, an assessment conducted in March 2025 found that only 22 farmers were interested in farm pond construction, prompting a proposed revision of the target from 100 to 22 and an increase in unit cost from USD 1,000 to USD 1,500. This adjustment was approved by the Project Board on 25 November 2025 and will be submitted to GCF as part of the project extension package in early 2026.



*Note

The unit for indicator A4.1 should be km²

The unit for indicator 1.1 should be unit. Cumulative values cannot be aggregated.

The unit for indicator 3.1 should be *farm ponds, community nurseries, platform*

The unit for indicator A3.1 (2) should be million

For each of the indicators please report only the 'annual value' for the reporting year; this means reporting solely the values achieved from January 1st, 2025, to December 31st, 2025. The "cumulative value" will automatically be updated by the system by aggregating reported annual values since project FAA effectiveness.

- *Midterm Target: The results to be achieved by the midpoint of implementation.*
- *Final Target: The results to be achieved by the conclusion of project or programme implementation.*
- *Lifetime Target: The total results expected over the entire operational period of the project or programme.*

Note that the baseline, midterm, final and lifetime targets will be prefilled based on your previous Annual Performance Report and/or Funding Proposal. It is imperative that you carefully review, verify and update where relevant.

Should the project be Multicounty, please report the achievement by Country.

Lastly, avoid using commas or periods as thousand separators. Periods should only be used as decimal separators.

For REDD+ Results-Based Payment (RBP) projects, you are only required to report on the progress of activities.

Should any prefilled information/data in the Logical Framework be incorrect or require updating, please inform GCF's Project Lead for appropriate corrective action.

GCF Outcome Level: Standardized Indicators

No indicators/questions defined.

(PMF) A1 and A2 Total number of direct and indirect beneficiaries (IRMF) Core 2 Direct and indirect beneficiaries reached Provide the total number of direct beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by Gender.

Unit						No. of Beneficiaries
Disaggregation by: Gender	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Male	0	7,750	29,896	2,105	11,120	13,225
Female	0	7,750	32,104	2,261	11,941	14,202

(PMF) A1 and A2 Total number of direct and indirect beneficiaries (IRMF) Core 2 Direct and indirect beneficiaries reached						
Provide the total number of direct beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by Country.						
Unit						No. of Beneficiaries
Disaggregation by: Project Countries	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Thailand	0	15,500	62,000	4,367	23,061	27,428

(PMF) A1 and A2 Total number of direct and indirect beneficiaries (IRMF) Core 2 Direct and indirect beneficiaries reached						
Provide the total number of indirect beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by result area.						
Unit						No. of Beneficiaries
Disaggregation by: Result Areas (Adaptation)	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Livelihoods of people and communities	0	0	471,562	0	47,156	47,156

(PMF) A1 and A2 Total number of direct and indirect beneficiaries (IRMF) Core 2 Direct and indirect beneficiaries reached						
Provide the total number of indirect beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by Gender.						
Unit						No. of Beneficiaries
Disaggregation by: Gender	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Male	0	0	235,781	0	22,739	22,739
Female	0	0	235,781	0	24,417	24,417

(PMF) A1 and A2 Total number of direct and indirect beneficiaries (IRMF) Core 2 Direct and indirect beneficiaries reached						
Provide the total number of indirect beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by Country.						
Unit						No. of Beneficiaries
Disaggregation by: Project Countries	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Thailand	0	0	471,561	0	47,156	47,156

Livelihoods of people and communities

No indicators/questions defined.

(PMF) A1.2 Number of males and females benefiting from the adoption of diversified, climate resilient livelihood options (including fisheries, agriculture, tourism, etc.) (IRMF) Supplementary 2.1 Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options						
Provide the total number of direct beneficiaries (female/male) adopting diversified or strengthened climate-resilient livelihood strategies (including agriculture, fisheries, natural resource-based, and informal livelihoods), disaggregated by gender.						
Unit						No. of Beneficiaries
Disaggregation by: Gender	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Male	0	7,750	29,896	2,105	11,120	13,225
Female	0	7,750	32,104	2,261	11,941	14,202

(PMF) A1.2 Number of males and females benefiting from the adoption of diversified, climate resilient livelihood options (including fisheries, agriculture, tourism, etc.) (IRMF) Supplementary 2.1 Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options						
Provide the total number of direct beneficiaries (female/male) adopting diversified or strengthened climate-resilient livelihood strategies (including agriculture, fisheries, natural resource-based, and informal livelihoods), disaggregated by country.						
Unit						Enter unit
Disaggregation by: Project Countries	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Thailand	0	15,500	62,000	4,367	23,061	27,428

Health and well-being, and food & water security

No indicators/questions defined.

(PMF) A2.3 Number of males and females with year round access to reliable and safe water supply despite climate shocks and stresses (IRMF) Supplementary 2.3 Beneficiaries (female/male) with more climate-resilient water security						
Provide the total number of direct beneficiaries (female/male) with improved access to and adoption of climate-resilient and reliable water supply in climate-stressed areas, disaggregated by gender.						
Unit						No. of Beneficiaries
Disaggregation by: Gender	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Male	0	7,750	29,896	0	22,721	22,721
Female	0	7,750	32,104	0	24,399	24,399

(PMF) A2.3 Number of males and females with year round access to reliable and safe water supply despite climate shocks and stresses (IRMF) Supplementary 2.3 Beneficiaries (female/male) with more climate-resilient water security						
Provide the total number of direct beneficiaries (female/male) with improved access to and adoption of climate-resilient and reliable water supply in climate-stressed areas, disaggregated by country.						
Unit						Enter unit
Disaggregation by: Project Countries	Baseline	Mid-term	Final target	Previous Year Cumulative Value	Annual value	Cumulative Value
Thailand	0	15,500	62,000	0	47,120	47,120

Ecosystems and ecosystem services

No indicators/questions defined.

(PMF) A4.1 Coverage/scale of ecosystems protected and strengthened in response to climate variability and change					
Provide the total hectares of natural ecosystems protected, restored, conserved, or managed to reduce climate risks to ecosystem services and dependent people and communities.					
Unit					Hectares
Baseline	Target		Previous Year Cumulative Value	Annual value	Cumulative Value <i>(automatically calculated)</i>
	Mid-term	Final target			
0	120	200	0	152	152

(PMF) A4.1 Coverage/scale of ecosystems protected and strengthened in response to climate variability and change						
Provide the total hectares of natural ecosystems protected, restored, conserved, or managed to reduce climate risks to ecosystem services and dependent people and communities, disaggregated by country.						
Disaggregation by: Project Countries	Target		Unit		Annual value	Hectares
	Baseline	Final target	Mid-term	Previous Year Cumulative Value		Cumulative Value
Thailand	0	200	120	0	152	152

(PMF) A4.1 Coverage/scale of ecosystems protected and strengthened in response to climate variability and change						
Provide the total hectares of natural ecosystems protected, restored, conserved, or managed to reduce climate risks to ecosystem services and dependent people and communities, disaggregated by ecosystem type.						
Disaggregation by: Ecosystem types	Target		Unit		Annual value	Hectares
	Baseline	Final target	Mid-term	Previous Year Cumulative Value		Cumulative Value
Freshwater	0	200	120	0	152	152

Project Specific Indicators							
Indicator	Unit	Baseline	Target		Previous Year Cumulative Value	Annual value	Cumulative Value (automatically calculated)
			Mid-term	Final target			
1.1. Level of integration of climate related information into water and agriculture planning	Index/Score/Level	1	2	4	1	2	3
1.2. Number of people trained on integrating climate information into planning	No. of Persons	0	15	30	138	0	138
2.1 Climate risk informed upgrades and enhancements to the Yom and Nan river basin area, updating the canal and regulator network to effectively manage water for both flood and drought periods for efficient use.	No. of Items	0	3	5	0	4	4
3.1. Level of action and application of climate information towards climate resilient practices by beneficiary households	No. of Households	0	0	22	0	6	6
3.1. Level of action and application of climate	No. of Households	0	0	100	0	0	0

information towards climate resilient practices by beneficiary households							
3.1. Level of action and application of climate information towards climate resilient practices by beneficiary households	No. of Households	0	0	1	0	1	1
3.2. No. of Households with access to finance for climate resilient farming investment	No. of Households	0	10,000	20,000	0	7,439	7,439
3.3. Number of listed companies contributing to climate resilient agriculture through contracts to purchase sustainably produced products or investment to support climate resilient agriculture (in-kind/cash contributions)	No. of Entities	0	70	210	0	60	60
A3.1 Number and value of physical assets made more resilient to climate variability and change, considering human benefits (reported where applicable)	No. of Items	0	0	2	0	2	2
A3.1 Number and value of physical assets made more resilient to climate variability and change, considering human benefits (reported where applicable)	No. of Items	0	0	5	0	3,832,253	3,832,253

Activities				
Activity Name	Implementation Progress (%)	Utilised GCF Budget	Allocated GCF Budget	% (Automatically calculated)
Activity 1.1: Strengthening capacity to generate tailored climate information to inform water management and agriculture planning	90	865,736.49	1,050,193	82
Activity 1.2: Facilitating inter-ministerial coordination for climate- informed and integrated planning	90	254,021.31	296,163	85

Activities				
Activity Name	Implementation Progress (%)	Utilised GCF Budget	Allocated GCF Budget	% (Automatically calculated)
Activity 1.3: Expanding access to climate information for application at the household level	95	221,743.19	240,163	92
Activity 2.1: Climate-informed engineering designs for the 13 schemes of the Yom-Nan river basin and upgrade of 2 water infrastructure	70	3,965,563.11	5,799,232	68
Activity 2.2 Complementing of grey infrastructure with EbA of EbA approaches into water management policy and planning	40	1,249,012.17	3,163,345	39
Activity 3.1 Application of climate information in household agriculture planning and strengthening of related support through extension services	80	1,466,113.73	1,900,785	77
Activity 3.2 Implementation of on-farm climate resilient measures to improve drought and improved access to finance for sustainable agriculture	40	752,658.84	2,089,412	36
Activity 3.3. Capacity building for farmers to support market access for climate resilient agriculture products	40	344,509.68	960,723	35

C.2.1. Subprojects							
Where applicable, include information on sub-projects. For projects and programmes approved until B.31, the logical framework should focus on the mitigation and adaptation Performance Measurement Frameworks (PMF). For projects and programmes approved from B.32 onwards, the logical framework should reflect the Integrated Results Management Framework (IRMF).							
Title	Currency	GCF Funds	Co-Financing	Country	GHG Emissions Reduced	Direct Beneficiaries	Indirect Beneficiaries
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C.3. Compliance with FAA covenants				Yes ☒ No ☐			

C.4. Funded Activity Implementation Arrangements in the Following Year	Yes ☐ No ☒

D. RISKS ASSESSMENT AND MANAGEMENT

D.1. Risk and mitigation measures

As stated in the Board-approved "Risk Appetite Statement," a cornerstone of the GCF's Risk Framework is proactive risk management. This includes risk identification, assessment, monitoring, reporting and appropriate mitigation to minimize and respond to risks, both directly and through partners implementing GCF's projects and programmes.

Risk Management Matrix

A risk is the probability of an event to adversely affect the achievement of the project Impact (its objectives, outcomes, and results). "Inherent risk" refers to the level of risk present before any of the mitigating measures are applied. "Residual risk" represents the level of risk after mitigating measures have been implemented.

Please update the project risk matrix by reviewing and revising information for all previously identified risks, and adding any new risks identified during implementation by selecting the adequate Risk Area in the drop-down menu. For each risk, ensure you provide a clear risk description, outline the potential negative consequences, specify the mitigating measures in place, and complete the severity scoring as required.

For the Integrity Risk Area, an annual reporting (and more frequent and prompt reporting if stated in the legal agreements with the GCF) is required for each of its 3 Risk Sub-areas, as GCF has zero tolerance for Prohibited Practices, for SEAH in Fund-related Activities, and for working with parties and engaging in activities subject to sanctions imposed by the United Nations Security Council. The AE reporting obligations under GCF's policies and in the legal agreement(s) with the GCF include but are not limited to requiring AEs to take action to identify, mitigate and promptly disclose to the GCF any real or perceived Conflict of Interest, any alleged or suspected Prohibited Practice, promptly notify the Fund of any material risks or other indications of money laundering and/or financing of terrorism in relation to the Project and promptly take remedial steps in consultation with the GCF.

The AE shall also provide updates on the risks and mitigating measures under the other Risk Areas when changes to already identified risks or new risks have been identified.

Risk scoring:

For likelihood, please rate on a scale from 1 to 5: 1. Unlikely, 2. Possible, 3. Likely, 4. Almost certain, 5. Certain

For impact, please rate on a scale from 1 to 5: 1. Close to none, 2. Low, 3. Medium, 4. High, 5. Catastrophic

The severity of each risk is automatically computed based on the likelihood and impact of the risk.

Risk 1	Land Access and Acquisition
Risk Origin	Project Related
Risk Area	Environmental and Social
Risk Sub-area	Environmental and Social Safeguards
Description	There is a risk that temporary restrictions to access land and natural resources may occur during the upgrading and rehabilitation works at irrigation infrastructure sites in Krai Nok Sub-district (Regulating Gate Site 1) and Krai Klang Sub-district (Regulating Gate Site 2) in Kong Krailat District, Sukhothai Province, from 3 January to 15 August 2025. Similar risks may also arise during the implementation of three Ecosystem-based Adaptation (EbA) measures planned between 1 December 2026 and 30 October 2027. Construction activities may require temporary use of nearby private land, for example for the storage of construction materials, equipment, or temporary worker's facilities. If not properly managed, such temporary occupation of land and restricted access to farmland or resources could affect nearby households. In addition, insufficient consultation, oversight, or documentation of agreements with landowners could lead to misunderstandings regarding land use during construction.
Consequences	There is a risk that temporary restrictions to access land and natural resources may occur during the upgrading and rehabilitation works at irrigation infrastructure sites in Krai Nok Sub-district (Regulating Gate Site 1) and Krai Klang Sub-district (Regulating Gate Site 2) in Kong Krailat District, Sukhothai Province, from 3 January to 15 August 2025. Similar risks may also arise during the implementation of three Ecosystem-based Adaptation (EbA) measures planned between 1 December 2026 and 30 October 2027. Construction activities may require temporary use of nearby private land, for example for the storage of construction materials, equipment, or temporary worker's facilities. If not properly managed, such temporary occupation of land and restricted access to farmland or resources could affect nearby households. In addition, insufficient consultation,

	oversight, or documentation of agreements with landowners could lead to misunderstandings regarding land use during construction.		
Inherent Risk	Likelihood	Impact	Severity
	1 - Unlikely	3 - Medium	3 - Low
Mitigation Measure(s)	- Continuous risk screening will be conducted throughout implementation, with affected and potentially affected stakeholders engaged during site assessments and planning processes. Any temporary access to private land will be based on voluntary agreements with landowners and documented prior to project activities. - Ecosystem-based Adaptation (EbA) interventions will only proceed after voluntary agreements are signed and will ensure continued beneficial use of land by existing landholders. - Where access to land is required for construction activities, the land will be restored to its original condition after use. - If voluntary agreements cannot be reached, the land will not be used, and project plans will be revised accordingly. Where temporary land occupation occurs, appropriate compensation (e.g., rental payment) will be provided to affected families.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	The construction of the floodgates has been completed in 2025. For the EbA implementation, consultations have been conducted with relevant landowners, and voluntary agreements for temporary land access have been agreed in principle. Formal agreements, including mutually agreed compensation where applicable, will be finalized prior to the commencement of construction activities.		
Risk 2	Mass Sediment Movement and Improper Management of Excavated Materials		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	During the rehabilitation and construction of water infrastructure, including water storage and flood retention areas (“monkey cheeks”), as well as EbA interventions, excavation and dredging activities may generate significant volumes of sediment. If not properly planned, handled, and monitored, excavated materials including potentially contaminated sediments—may be improperly stored, transported, or disposed of. Uncontrolled sediment movement may occur due to runoff, especially during rainfall events, or due to inadequate erosion and sediment control measures. This may result in sediment dispersion within and beyond the project site, particularly affecting nearby communities and surrounding ecosystems.		
Consequences	Four different impacts could occur: - Environmental and health impacts: Environmental pollution due to direct contamination of the soil or due to overland/downstream flow during a rain event, consequently affecting the villagers living nearby (3,834 villagers in 5 villages living nearby the construction sites) - Potential impact on the receptor environment: sediments (including potentially contaminated sediments) can pollute soil or water bodies. - Reputational risk: Negative perception of UNDP and Implementing Partners due to potential environmental and community impacts. - Implementation delays: Non-compliance with environmental standards or the need for corrective actions may delay construction activities and affect AWP delivery and overall project timelines.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	3 - Medium	9 - Medium High
Mitigation Measure(s)	• Develop and implement an Erosion, Drainage and Sediment Control Management Plan (EDSCP) and Contaminated Soil Disposal Management Plan in line with national regulations and RID guidelines. • Ensure proper classification, handling, storage, and disposal of excavated materials, including contaminated sediments, in designated and approved areas. • Install sediment control measures to prevent off-site sediment movement (when applicable).		

	Schedule earthworks during the dry season where feasible and ensure proper compaction of soil to reduce erosion risks.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Current Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Comments	N/A		
Risk 3	Water and Groundwater Contamination from Disturbed Sediments during Construction		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	During the rehabilitation and construction of water infrastructure (including regulating gates and flood retention areas) and the implementation of EbA measures, excavation and dredging activities may disturb existing sediments. These sediments may contain accumulated contaminants such as nutrients, heavy metals, or other substances. If not properly managed, the disturbance, handling, or disposal of these sediments may result in the release of contaminants into surface water and groundwater systems. This risk may be exacerbated by inadequate sediment management practices, lack of monitoring, or runoff during rainfall events, potentially affecting nearby water bodies and surrounding communities.		
Consequences	- Environmental and health impacts: Deterioration of surface and groundwater quality, potentially affecting the health and livelihoods of approximately 3,834 villagers in nearby communities who rely on these water sources. - Impacts on receptor environment: Degradation of aquatic ecosystems, including impacts on water quality, biodiversity, and ecological functions. - Reputational risk: Negative perception of UNDP and Implementing Partners due to potential environmental and community impacts. - Implementation delays: Non-compliance with environmental standards or the need for corrective actions may delay construction activities and affect AWP delivery and overall project timelines.		
Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Mitigation Measure(s)	- Develop and implement a Water Quality Monitoring Plan and Management Framework in line with national standards and UNDP SES requirements. - Conduct baseline and periodic water quality monitoring to detect changes in key parameters - Undertake sediment quality testing prior to excavation and at regular intervals during construction to identify potential contamination risks. - Install erosion and sediment control measures to prevent the spread of contaminated sediments into water bodies (where applicable). - Schedule works during dry periods where feasible and minimize disturbance during high-flow conditions.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Current Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Comments	N/A		
Risk 4	Sediment Movement and Water Quality Degradation from EbA Activities		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	Ecosystem-based Adaptation (EbA) interventions may involve site preparation, minor earthworks, reshaping of land, and vegetation management. If these activities are not properly designed, implemented, and monitored, they may lead to sediment mobilization and accumulation in nearby aquatic environments, including surface water and potentially groundwater systems.		

	Improper drainage design, inadequate erosion control, and insufficient site supervision may result in increased sediment runoff, particularly during rainfall events. This may affect water quality within and downstream of the EbA sites, especially where interventions are located near waterways or floodplain systems.		
Consequences	Environmental and health impacts: Degradation of water quality (e.g., increased turbidity and sediment load), potentially affecting the health and livelihoods of communities relying on local water resources.		
	Impacts on receptor environment: Adverse effects on aquatic ecosystems and targeted EbA sites, including impacts on vegetation establishment, soil stability, and ecosystem functions.		
	Reputational risk: Negative perception of UNDP and implementing partners due to environmental impacts associated with EbA implementation.		
	Implementation delays: Poor design or sediment management may require corrective actions, potentially delaying implementation and affecting project delivery.		
Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Mitigation Measure(s)	- Develop and implement an Erosion, Drainage and Sediment Control Plan and, where relevant, a Contaminated Soil Management Plan for EbA ESMP. - Install sediment control measures at the start of construction (where applicable). - Implement basic water quality monitoring (e.g., turbidity, TSS) upstream and downstream of EbA sites during construction. - Schedule earthworks during dry periods where feasible and avoid works during heavy rainfall events. - Where rainfall is anticipated, apply protective lining or impermeable materials beneath excavated or stockpiled sediments to prevent seepage into groundwater.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Current Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Comments	N/A		
Risk 5	Construction Noise Impact on Communities and Local Fauna		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	During the construction of regulating gates and implementation of EbA measures in Kong Krailat District (Sukhothai Province), the use of construction equipment such as excavators, trucks, and other heavy machinery may generate elevated noise levels. These activities, including sediment removal and earthworks, may result in temporary noise disturbances in areas surrounding the construction sites.		
Consequences	- Environmental and health impacts: Temporary noise pollution affecting the wellbeing and daily activities of nearby communities (approximately 40 villagers living or working in proximity to the sites). - Impacts on receptor environment: Disturbance to local fauna, including potential displacement or disruption of habitat and behavior patterns.		
Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Mitigation Measure(s)	- Limit noise-generating activities to essential construction machinery and restrict operations to appropriate working hours - Noise shields should be constructed to reduce the potential for noise to reach these communities (where applicable)		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		

Risk 6	Risk of Damage to Cultural and Archaeological Heritage		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	During the construction and rehabilitation of floodgates in Kong Krailat District (Sukhothai Province), as well as the implementation of EbA measures, excavation and earthworks may pose a risk to nearby minor archaeological or cultural heritage assets. Although no significant sites have been identified based on the ESIA/ESMP finalized in Q4/2024, there remains a low likelihood of encountering previously unidentified cultural materials during construction activities. Note: The construction of the floodgates was completed in 2025, and no cultural heritage assets were identified or affected during the construction period.		
Consequences	- Damage to known or previously unidentified cultural or archaeological heritage assets. - Reputational risk to UNDP and implementing partners due to potential adverse impacts on cultural heritage. - Delays in construction and overall project implementation if chance finds, require construction work's stoppage and further assessment.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	3 - Medium	9 - Medium High
Mitigation Measure(s)	- The project team and construction companies will ensure that the floodgates will be designed and built at safe distance to relevant cultural and archeological assets. - Implement site-specific ESMP measures, including chance find procedures in line with UNDP SES requirements.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		
Risk 7	Risk of Social Tensions due to Perceived Inequitable Distribution of Project Benefits		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	As the project is designed to directly benefit communities located within targeted waterways, particularly those vulnerable to flood and drought risks, there is a potential risk of perceived inequities in the distribution of benefits between beneficiary communities and those living outside the project area. This may create tensions between different community groups within the same geographic area if access to project-supported resources (e.g., water infrastructure and services) is not perceived as fair and inclusive.		
Consequences	• Community resistance from non-beneficiary groups, potentially affecting project implementation and timelines. • Potential escalation of tensions between communities, which may affect social cohesion. • Reputational risk to UNDP and implementing partners due to perceived inequitable distribution of project benefits.		
Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Mitigation Measure(s)	• Support community water user or supply committees to promote transparent and equitable access to water resources among users. • Implement and maintain an accessible Grievance Redress Mechanism (GRM), allowing both beneficiaries and non-beneficiaries to raise concerns and seek resolution in a timely manner.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		

Risk 8	Improper Construction Waste Management		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	During the construction of flood gates in Kong Krailat District (Sukhothai Province) and the implementation of EbA measures, various types of waste—including sediment, concrete debris, and other construction-related materials—will be generated. There is a risk that such waste may not be properly collected, stored, transported, or disposed of if contractors do not fully comply with the Environmental and Social Management Plan (ESMP), or if supervision and monitoring are insufficient. This could result in inappropriate waste handling practices at construction sites.		
Consequences	• Deterioration of cleanliness and environmental quality at and around construction sites. • Potential health and safety risks to nearby communities due to improper waste handling and storage. • Delays in construction timelines due to the need for corrective actions to address improperly managed waste.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	3 - Medium	9 - Medium High
Mitigation Measure(s)	- Develop and implement site-specific waste management measures in accordance with national regulations and environmental standards. - Establish a waste management monitoring programme, with regular reporting (at least every two months) to track compliance and performance.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Current Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Comments	N/A		
Risk 9	Increased Vector Breeding due to Stagnant Water Formation during Construction		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	There is a risk that construction activities for the regulating gates in Krai Nok Sub-district (Site 1) and Krai Klang Sub-district (Site 2) (Kong Krailat District, Sukhothai Province), as well as the implementation of Ecosystem-based Adaptation (EbA) measures (locations to be confirmed), may lead to the formation of stagnant or slow-moving water bodies. This may occur due to: • Temporary obstruction or alteration of natural drainage patterns • Excavation works and incomplete structures retaining water • Poor site drainage management during construction		
Consequences	Two different impacts could occur: (i) Creation of temporary breeding habitat for certain vectors/water-borne diseases, particularly mosquitoes. (ii) Increase of cases of vector-borne diseases e.g. malaria or dengue, potentially affecting population living nearby the construction sites		
Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Mitigation Measure(s)	• Develop and implement a Water Quality and Vector Monitoring Plan as part of the ESMP. • Construction design plans shall consider the potential for creating temporary habitats for waterborne pests and diseases.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		
Risk 10	Gender Inequality in Access to Agricultural Resources and Project Benefits		

Risk Origin	Project Related								
Risk Area	Environmental and Social								
Risk Sub-area	Gender & SEAH								
Description	There is a risk that women in the project area have limited access to resources, knowledge, information, and opportunities to participate in planning, agricultural decision-making, and market engagement, compared to men. This is primarily driven by existing gender roles in agriculture, where men tend to have a dominant role in farming practices and decision-making processes. As a result, women may face barriers in: • Accessing training and climate information services. • Participating in project consultations and planning processes. • Benefiting from agricultural inputs, technologies, and livelihood opportunities.								
Consequences	Women may not equally benefit from improved agricultural practices, inputs, or income-generating opportunities on gender-related livelihoods. This risk affects approximately 32,284 women out of 62,869 people living in the Yom Nam area including Sukhothai, Uttaradit and Phitsanulok provinces in 24 subdistricts.								
Inherent Risk	<table><tr><th>Likelihood</th><th>Impact</th><th>Severity</th></tr><tr><td>1 - Unlikely</td><td>3 - Medium</td><td>3 - Low</td></tr></table>	Likelihood	Impact	Severity	1 - Unlikely	3 - Medium	3 - Low		
Likelihood	Impact	Severity							
1 - Unlikely	3 - Medium	3 - Low							
Mitigation Measure(s)	- Gender Analysis and Data-Driven Planning: Conduct a gender analysis prior to activity planning and implementation, and collect and utilize sex-disaggregated data to assess the roles of women and men in agricultural systems and identify barriers to women's participation and benefit-sharing, with findings applied to inform targeted, gender-responsive interventions. - Ensure women's participation in identifying best practices in agro-productive and ecosystem-based adaptation activities and stimulate non-traditional occupations through the project activities. - Ensure all livelihood interventions align with the Livelihood Restoration Plan (LRP) and that women and vulnerable groups have equitable access to project benefits, compensation (if applicable), and livelihood support.								
Residual Risk	<table><tr><th>Likelihood</th><th>Impact</th><th>Severity</th></tr><tr><td>1 - Unlikely</td><td>2 - Low</td><td>2 - Low</td></tr></table>	Likelihood	Impact	Severity	1 - Unlikely	2 - Low	2 - Low		
Likelihood	Impact	Severity							
1 - Unlikely	2 - Low	2 - Low							
Current Residual Risk	<table><tr><th>Likelihood</th><th>Impact</th><th>Severity</th></tr><tr><td>1 - Unlikely</td><td>2 - Low</td><td>2 - Low</td></tr></table>	Likelihood	Impact	Severity	1 - Unlikely	2 - Low	2 - Low		
Likelihood	Impact	Severity							
1 - Unlikely	2 - Low	2 - Low							
Comments	N/A								
Risk 11	Occupational Health and Safety (OHS) Risks during Construction Activities								
Risk Origin	Project Related								
Risk Area	Environmental and Social								
Risk Sub-area	Environmental and Social Safeguards								
Description	There is a risk of injury, pollution and other health risks during the construction activities. There is a risk of injury and other health related risks for workers involved in construction works for the following: 1) Two floodgates in Mueng Chang Canal (completed in 2025): Floodgate site I at Krai Nok sub district under Kong Krailat District, Sukothai Province Floodgate site II at Krai Klang sub district under Kong Krailat District in Sukothai Province of Thailand 2) Three EbA sites (planned to start on 1 December 2026 to 30 November 2027). EbA2 (Bueng Chon) is located at Ban Wang Nam Bo, Moo 7, Wang Won Sub-district, Phrom Phiram District, Phitsanulok Province. EbA10 (Bueng Kluai) is located at Ban Bang Kaew, Moo 3, Tha Nang Ngam Sub-district, Bang Rakam District, Phitsanulok Province. EbA11 (Khlom Mem) is located at Ban Wang Khilek, Moo 10, Tha Chang Sub-district, Phrom Phiram District, Phitsanulok Province.								
Consequences	The risk may adversely affect the occupational health and safety of construction workers, including potential injuries or fatalities from accidents involving machinery, falls, or unsafe site conditions, as well as health impacts from exposure to dust, noise, and pollutants.								

	These risks may lead to reduced productivity, non-compliance with labour and OHS regulations, reputational risks for implementing agency (RID) and UNDP, and potential project delays due to work stoppages or corrective actions.		
Inherent Risk	Likelihood 2 - Possible	Impact 3 - Medium	Severity 6 - Medium
Mitigation Measure(s)	- Ensure compliance with Thai labour and occupational health and safety laws, with obligations under international law, and consistency with the principles and standards embodied in ILO fundamental conventions. - Selected construction contractor needs to develop and implement, a site specific OHS management plan.		
Residual Risk	Likelihood 2 - Possible	Impact 2 - Low	Severity 4 - Medium
Current Residual Risk	Likelihood 2 - Possible	Impact 2 - Low	Severity 4 - Medium
Comments	The construction of the floodgates was completed in 2025.		
Risk 12	Reduced Effectiveness of Project Interventions under Extreme Climate Events		
Risk Origin	Project Related		
Risk Area	Design and Implementation		
Risk Sub-area	N/A		
Description	There is a risk that project activities may not achieve the expected resilience outcomes, leading to continued or increased crop losses and reduced incomes among target beneficiaries due to extreme climatic events, such as floods and droughts, and potentially limiting the adoption of climate-resilient practices among farmers. The risk may stem from the limitations of climate-resilient agricultural practices or early warning systems introduced by the project, which may not be sufficient to counteract the intensity or frequency of extreme weather events. Additionally, variability in the uptake of project interventions among farmers and gaps in local adaptation capacity may reduce their effectiveness. In addition, the risk may be caused by ineffective or delayed planning, management, and implementation of key project activities (e.g., delays in water gate construction), as well as inaccuracies in climate models and information, which may limit the ability to anticipate and respond to climate risks.		
Consequences	Ineffective and non-timely planning, management and implementation of the project key activities, e.g. delays in the construction of the flood gates; inaccuracy in the climate model and information to prevent crop damage from droughts and floods.		
Inherent Risk	Likelihood 1 - Unlikely	Impact 3 - Medium	Severity 3 - Low
Mitigation Measure(s)	- Analysis of livelihoods and climate vulnerability, and soil quality & cover, and access to and storage of water for ecosystem-based adaptation activities. - Timing of activities during implementation will be scheduled to minimize risk around the rainy season and dry season. - Prepare contingency plan in response to irregular weather conditions.		
Residual Risk	Likelihood 1 - Unlikely	Impact 2 - Low	Severity 2 - Low
Current Residual Risk	Likelihood 1 - Unlikely	Impact 2 - Low	Severity 2 - Low
Comments	N/A		
Risk 13	Construction Delays in Flood Gates and EbA Implementation		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Environmental and Social Safeguards		
Description	There is a risk of delays in the construction of flood gates and implementation of EbA measures due to contractor-related and external factors. These may include: Logistical and operational challenges in relatively remote areas (e.g., inadequate planning, scheduling, and shortages of labour and resources)		

	- Weak project management and communication, as well as contractor financial or cash flow constraints - Delays in the preparation and approval of ESMPs - Adverse climatic conditions, such as flooding during the construction period		
Consequences	The risk may result in delays in project implementation and delivery of up to one year, including delayed completion of infrastructure and EbA activities. This may reduce the effectiveness of the project by postponing the delivery of climate resilience benefits to target communities. In addition, delays may lead to increased costs and operational inefficiencies, as well as contractual and compliance risks, including potential disputes with contractors and failure to meet agreed timelines. Such challenges may also pose reputational risks to UNDP and the Implementing Partners due to perceived delays in project delivery.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	3 - Medium	9 - Medium High
Mitigation Measure(s)	- Select contractor with proven financial stability and capacity to handle the project with payment schedule that incentivizes timely completion of project milestones. - Establish clear lines of communication with the contractor and regular progress meetings to discuss project status, potential risks, and upcoming activities. - Effective and accurate project planning to ensure availability of project cash flow. - Timely preparation of the ESMP with different layers of quality assurance and revision in order to ensure a timely approval of the document from the GCF. - Prepare contingency plan in response to irregular weather conditions.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Current Residual Risk	Likelihood	Impact	Severity
	2 - Possible	2 - Low	4 - Medium
Comments	N/A		
Risk 14	Risk of Corruption and Fraud during Construction Activities		
Risk Origin	Project Related		
Risk Area	Integrity		
Risk Sub-area	Fraud / Bribery & Corruption / Collusion and any other prohibited practice		
Description	There is a risk of corruption and fraud during construction works for the followings: 1) Two floodgates in Mueng Chang Canal (completed in 2025): Floodgate site I at Krai Nok sub district under Kong Krailat District, Sukothai Province Floodgate site II at Krai Klang sub district under Kong Krailat District in Sukothai Province of Thailand 2) Three EbA sites (planned to start on 1 December 2026 to 30 November 2027). : EbA2 (Bueng Chon) is located at Ban Wang Nam Bo, Moo 7, Wang Won Sub-district, Phrom Phiram District, Phitsanulok Province. EbA10 (Bueng Kluai) is located at Ban Bang Kaew, Moo 3, Tha Nang Ngam Sub-district, Bang Rakam District, Phitsanulok Province. EbA11 (Khlomg Mem) is located at Ban Wang Khilek, Moo 10, Tha Chang Sub-district, Phrom Phiram District, Phitsanulok Province.		
Consequences	Three main impacts might occur: (i) Misuse of GCF resources affecting the delivery of the project (ii) Reputational risk for UNDP and RID, due to inadequate use of resources from the project. (iii) Quality of work below the expected standards and consequent inability to reach the project outcomes.		
Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Mitigation Measure(s)	- An additional layer of oversight is ensured by the establishment of a Quality Assurance working group at output level - Periodic oversight is conducted by UNDP on the Implementing Partners and Responsible Parties operations		

	- The project-level GRM enables reporting of misuse of funds, fraud, or corruption, addressed in line with UNDP procedures, including referral where applicable.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		
Risk 15	Risk of Sexual Exploitation and Abuse (SEA) in Project Implementation		
Risk Origin	Project Related		
Risk Area	Environmental and Social		
Risk Sub-area	Gender & SEAH		
Description	Risk of sexual exploitation and abuse (SEA) arise due to power imbalances between project teams, RID officials, representatives from the PMU and responsible parties, contractors, and community members, particularly women involved in project activities. This risk is heightened by close interaction between project teams, RID officials, representatives from the PMU and responsible parties, contractors, and community members without adequate oversight or SEA prevention measures, combined with insufficient awareness among staff and stakeholders about reporting mechanisms.		
Consequences	Four main impacts might occur: (i) Increased vulnerability of women to SEA incidents, particularly in remote or underserved areas. (ii) Undermined trust in UNDP and its partners, jeopardising project outcomes. (iii) Erosion of community cohesion and participation, discouraging community members, especially women, from engaging in project activities. (iv) Delays or disruptions in project implementation, as addressing SEA incidents and rebuilding trust may affect project timelines.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	3 - Medium	9 - Medium High
Mitigation Measure(s)	- Conduct mandatory SEA training for all project-related staff, including UNDP, PMU, responsible parties, and Department of Royal Irrigation partners. - Establish and effectively communicate clear SEA reporting mechanisms to communities. - Perform regular monitoring to identify risks and ensure compliance with UNDP's SEA protocols. - Launch community awareness campaigns to encourage and empower reporting. - Integrate SEA risk assessments into Gender Action Plans and project monitoring systems.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		
Risk 16	Potential misuse of project funds for money laundering		
Risk Origin	Project Related		
Risk Area	Integrity		
Risk Sub-area	Money Laundering (ML) & Terrorist Financing (TF)		
Description	The project is implemented under a national implementation modality (NIM) with the Ministry of Agriculture and Cooperatives (MOAC) as the Executing Entity. UNDP provides oversight and disburses project funds to government entities and service providers through UNDP financial management system in line with its fiduciary standards. There is a low risk for misuse or diversion of funds that may arise due to non-compliance with GCF, UNDP, and national financial integrity requirements.		
Consequences	- Reputational damage to UNDP, the Implementing Partner (RID), and Responsible Parties and associated institutions. - Potential legal and financial consequences, including recovery actions or funding suspension, which could negatively impact the project implementation.		
Inherent Risk	Likelihood	Impact	Severity

	1 - Unlikely	3 - Medium	3 - Low
Mitigation Measure(s)	- Apply UNDP financial management and anti-money laundering (AML) procedures, including segregation of duties, financial controls, and approval processes. - Conduct due diligence and screening of implementing partners, contractors, and relevant financial intermediaries in line with UNDP policies. - Ensure transparent financial tracking and reporting through regular monitoring, spot checks, and audits, with clear documentation and verification requirements for financial transactions, and timely follow-up on audit findings. - Activate and communicate grievance and whistleblowing mechanisms.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		
Risk 17	Engagement with sanctioned entities or individuals		
Risk Origin	Project Related		
Risk Area	Integrity		
Risk Sub-area	Sanctions		
Description	The project engages multiple stakeholders, including contractors, suppliers, and consultants through procurement processes that may be open internationally. While UNDP applies robust screening procedures, there remains a low risk of inadvertent engagement with sanctioned entities or individuals. This risk may arise from updates to sanctions lists during the project lifecycle or through indirect involvement via subcontracting arrangements.		
Consequences	- Breach of UNDP and GCF compliance requirements and international regulations which may result in formal investigations, financial penalties, ineligibility of expenditures, and potential suspension of funding. - Suspension or termination of contracts with affected entities - Delays in project implementation and procurement processes - Reputational risk to GCF, UNDP, and implementing partners		
Inherent Risk	Likelihood	Impact	Severity
	1 - Unlikely	3 - Medium	3 - Low
Mitigation Measure(s)	- All contractors, suppliers, consultants, and partners are screened against UN and applicable international sanctions lists in line with UNDP procedures prior to engagement and periodically, while government-selected contractors, suppliers, and consultants are subject to national procurement regulations. - Ensure procurement and due diligence processes follow UNDP corporate standards, including vendor vetting, eligibility checks, and continuous sanctions screening		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		
Risk 18	Conflict of Interest Risk		
Risk Origin	Project Related		
Risk Area	Integrity		
Risk Sub-area	Conflict of interest		
Description	The project involves multiple stakeholders, including government agencies, consultants, contractors, and local partners. There is a risk that individuals involved in procurement, decision-making, or oversight may have undisclosed personal, financial, or institutional interests that could improperly influence project decisions. This may occur in contractor selection, allocation of resources, or validation of results, particularly where roles and responsibilities are not clearly separated or disclosed.		
Consequences	- Biased decision-making affects procurement, resource allocation, or implementation quality - Reduced transparency and accountability in project processes - Reputational damage to UNDP, RID, Responsible Parties and other partners - Increased risk of audit findings or compliance issues		

Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Mitigation Measure(s)	- Procurement processes involve multiple reviewers and approval levels, while government procurement follows national regulations, ensuring transparency and mitigating conflict of interest risks. - Ensure clear segregation of roles and responsibilities among implementing partners, technical teams, and oversight functions. - Apply transparent and competitive procurement processes, including documented evaluation criteria and committee-based decisions. - Activate and communicate grievance and whistleblowing mechanisms.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Current Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	2 - Low	2 - Low
Comments	N/A		

D.2. Report risk incidents

If any risk (previously identified or not) has materialized, please capture it here as a risk incident.

(this section is confidential)

E. FINANCIAL INFORMATION

E.1. GCF financing

In addition to the financial report in the annex, update the table with relevant GCF financial data for each country and instrument, including amounts and allocation percentages.

Country	Instrument	Currency (as per FAA)	Committed Amount	Disbursed Amount	Expenditure (reporting year)	Cumulative Expenditure	Mitigation	Adaptation
Thailand	Grants	USD	17,533,500	1,326,393	6,190,877.02	9,290,694.26	0%	100%
Total		USD	17,533,500	1,326,393	6,190,877.02	9,290,694.26	N/A	N/A

E.2. Co-financing

Please populate the table with relevant Co-financing data for each Co-financier and instrument, including amounts and allocation percentages.

Co-financier	Instrument	Currency (as per FAA)	Committed Amount	Disbursed Amount	Expenditure (reporting year)	Cumulative Expenditure	Mitigation	Adaptation
RID	Grants	USD	16,263,940	6,557,134.61	6,557,134.61	16,016,364	0%	100%
Krungsri Bank	In-kind	USD	113,883	30,940.34	30,940.34	47,713.55	0%	100%
Total		USD	16,377,823	6,588,074.95	6,588,074.95	16,064,077.55	N/A	N/A

E.3. Additional Finance Mobilised Beyond Approved Co-financing

Report the realised (cumulative value) and/or expected volume (Final Target) of private/public finance leveraged as a result of GCF involvement in the investment, in addition to and beyond any co-financing originally committed at approval. This datapoint shall be reported separately from official co-financing figures and is intended to capture the catalytic effect of GCF investments and support institutional learning.

GCF Policy: <https://www.greenclimate.fund/sites/default/files/document/policy-cofinancing.pdf>

Institution Type (public/private)	Instrument	Currency	Cumulative Value	Final Target (estimation)
Public	Grants	USD	8,976,443.09	N/A
Total		USD	8,976,443.09	0

File Name: PIMS 5923_APR_2025_Grant-Financial Progress Detail_cleared by QM.xlsx

F. ENVIRONMENTAL & SOCIAL SAFEGUARDS, GENDER, and INDIGENOUS PEOPLES

This section provides an update against the ESS standards agreed as part of the Environmental and Social Action Plan (ESAP) and Environmental and Social Management Framework (ESMF), as well as Environmental and Social Management System (ESMS), Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plan (ESMP), Indigenous Peoples Plan (IPP), Indigenous Peoples Plan Framework (IPPF), Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF) when applicable.

F.1. progress on key challenges and updates regarding Environmental and Social Safeguards

Key Environmental and Social Changes

Have there been any changes in the key environmental and social risks and impacts? If you tick 'Yes,' please provide further information.

Yes ☐ No ☒

Environmental and Social Safeguarding Updates

Have there been any change/update on environmental and social safeguarding? you tick 'Yes,' please provide further information.

Yes ☒ No ☐

FAA Clause 10.02(i):

During 2025, the Project prepared for the implementation of ecosystem-based adaptation (EbA) measures at three sites involving dredging, ecosystem rehabilitation, and riverbank stabilization works. In accordance with Thai environmental regulations, all three EbA sites are located within waterways and land parcels under the management authority of the Royal Irrigation Department (RID). As such, no separate environmental licenses or external land clearances were required beyond the approvals and authorizations issued under RID's statutory mandate.

FAA Clause 10.02(j):

During the reporting period, the Environmental and Social Impact Assessment (ESIA) for Floodgate No. 2 was approved by the GCF on 20 January 2025. In addition, the Project conducted ESIA studies for the three EbA sites and prepared corresponding Environmental and Social Management Plan (ESMP). The ESIA and ESMP for the EbA sites were approved by the GCF on 27 November 2025, in compliance with FAA Clause 10.02(j). The mandatory 30-day public disclosure process will be undertaken in early 2026. Construction works for the EbA measures are planned for mid-to-late 2026, following completion of disclosure and procurement process.

No other changes to the environmental and social safeguarding commitments set out in the Board-approved Funding Proposal were made during the reporting period.

F.2. Compliance with laws and regulations applicable to ESS. Gender and Indigenous Peoples.

Have there been any changes or updates regarding compliance with applicable laws and regulations of the country, as well as the relevant conditions or covenants under the FAA?

Yes ☐ No ☒

F.3. ESS standards implementation progress

Does this reporting period include any ESS standards-related activities or updates?

Yes ☒ No ☐

If you tick 'Yes,' please provide further information to report on the progress made in complying with the requirements of the relevant ESS standards that were triggered during the approval of the funding proposal and during the reporting

period, if any; and the GCF Indigenous Peoples Policy, if relevant, describing achievement and specifying details outlined in the tables below.

Activities implemented during the reporting period, including monitoring

January–August 2025: RID conducted regular monitoring visits to two GCF-funded floodgates to track construction progress and ensure compliance with the ESMP. 10–11 February 2025: UNDP's SES Specialist and the project team conducted site monitoring visits to the construction sites to assess compliance with SES standards and ESMP implementation. A training and briefing session on SES standards, ESIA, and ESMP was also delivered to RID staff, PMU, and contractors. May–November 2025: Baseline studies, ESIA, and ESMP were prepared for three EbA sites in accordance with the SES standards and national regulations. May–November 2025: Updated E&S screening and a Cumulative Impact Assessment (CIA) were undertaken for the 13 schemes, alongside safeguard monitoring visits on 5–8 August, to assess potential risks and identify mitigation measures. 14–15 May 2025: UNDP Resident Representative conducted a site visit to monitor overall project implementation progress, including the construction activities of the two GCF-funded floodgates. 2–4 December 2025: Monitoring visits were carried out to observe community consultation meetings conducted under the ESMF for activities related to the two GCF-funded floodgates and the 13 schemes, including engagement with affected persons. 9 December 2025: An Information Sharing Session on SES Standards, ESIA, and ESMP was organised for RID and PMU staff in relation to the planned construction of the EbA sites and the implementation of the 13 schemes activities. 15 December 2025: A Prevention of Sexual Exploitation, Abuse and Harassment (PSEAH) training was delivered to all relevant personnel, including RID, GIZ, KMUTNB, Naresuan University, and PMU, to strengthen awareness, accountability, and compliance across all parties. 24–25 December: UNDP Deputy Resident Representative and RID conducted a joint technical monitoring mission to the GCF-funded floodgates and the proposed EbA site at Bueng Jon to assess site conditions and implementation readiness, verify hydrological monitoring equipment, and review findings.

Outputs during the reporting period

Safeguard capacity, awareness, and compliance strengthened: Safeguard capacity and awareness were strengthened across implementing and responsible parties through trainings and information-sharing sessions on SES Standards, ESIA, ESMP implementation, and PSEAH. These activities covered the RID, the PMU, contractors, and responsible parties, and improved clarity on safeguard responsibilities and compliance requirements. As part of these engagements, information on the project-level Grievance Redress Mechanism (GRM) was integrated into all sessions to ensure accessibility for affected persons. Environmental and social assessment, planning, and risk management completed: Baseline studies and ESIA were completed for three EbA implementation sites in. The corresponding ESMP was finalised and approved by the GCF. In parallel, updated environmental and social screening and a CIA were completed for the 13 water management schemes to ensure systematic identification and management of risks across multiple subprojects. Safeguard monitoring and oversight enhanced: Safeguard implementation was monitored through site visits and observation of community consultation processes, including engagement with affected persons. In addition, RID onboarded an ESMF Monitoring Consultant to support and monitor safeguard implementation in line with the SES standards and the project's ESMF. Independent oversight was further strengthened through monitoring missions conducted by UNDP senior management.

Key environmental, social and gender issues, risks and impacts addressed during implementation

Stakeholder engagement risk: A social risk related to stakeholder engagement was identified following a petition submitted by a group of non-governmental organisations (NGOs) to the National Human Rights Commission (NHRC) concerning overall water management interventions. While most issues raised were not directly related to the Project, references reflected expectations regarding stakeholder participation and inclusive monitoring. In response, the Project undertook clarification and engagement actions in line with the project ESMF and the UNDP SES Standards. The Project clarified the scope of activities and communicated existing safeguard arrangements to members of affected communities, including community consultation processes, grievance redress mechanisms, and monitoring and reporting procedures. Stakeholder engagement has continued through regular consultations with affected communities and local stakeholders. Environmental and social risks related to infrastructure works: Environmental and social risks associated with the construction and operation of floodgates were managed through the implementation of site-specific ESMP. Mitigation measures included protection of nearby waterways and monitoring of surface and groundwater quality in areas surrounding the infrastructure. Monitoring results indicated that environmental parameters remained within applicable standards. Labour practices and occupational health and safety measures were reviewed, confirming that workers were provided with and using personal protective equipment during construction activities. No land acquisition or resettlement was required, and no complaints related to environmental or social impacts were reported. Sexual exploitation, abuse, and harassment (SEA/SH) risk: In line with the updated risk on SEA/SH, the Project proactively addressed potential SEA/SH risks during implementation. While no SEA/SH incidents were identified during the reporting period, the Project conducted mandatory training to raise awareness among all personnel involved in the Project and continued to monitor risks. These efforts emphasized prevention, expected standards of conduct, and accessible reporting channels, including the project-level GRM, UNDP Stakeholder Response Mechanism (SRM) as a second-tier mechanism, and relevant government reporting channels.

Any pending key environmental, social and gender issues needing accredited entity's actions and GCF attention

There are no outstanding issues requiring the attention of UNDP or GCF.

Remarks/Notes

F.4. Sub-projects information

Have any subprojects been implemented?

Yes ☐ No ☒

N/A

N/A

F.5. Implementation of the stakeholder engagement plan

Were any actions undertaken to increase engagement of relevant stakeholders in the project, particularly regarding environmental, social, and gender elements?

Yes ☒ No ☐

Activities implemented during the reporting period

EbA-related consultations:

Iterative consultations were conducted to support EbA design and implementation. Engagements with Water User Groups focused on presenting and endorsing the EbA site prioritisation methodology and selected sites, followed by site-level consultations to gather community feedback on preliminary and detailed EbA designs. These consultations informed design refinement, validation of ecosystem benefit, and early identification of E&S risks.

Development of ESIA and ESMP for EbA:

As part of the development of the ESIA and ESMP for EbA, focus group discussions (FGDs) were conducted with community members to support baseline data collection through inclusive and meaningful engagement, covering livelihoods, water use, environmental conditions, biodiversity, and gender. In parallel, key informant interviews (KIIs) with relevant government agencies provided technical, environmental, social, and land tenure inputs to inform the ESIA baseline.

Stakeholder engagement under 13 schemes and construction activities:

Community consultation meetings were conducted under the project's ESMF to promote transparency, inclusive participation, and compliance with environmental and social safeguards across the 13 schemes and construction activities.

Updated E&S risk screening and cumulative impact assessment (CIA):

Stakeholder consultations and site visits were undertaken to support the updated E&S Screening and CIA for the 13 schemes, complemented by a sharing session to disseminate ESIA, ESMP, and CIA findings and strengthen shared understanding of safeguard requirements among key implementation partners.

GAP Pause & Reflect and PSEAH Training:

A Gender Action Plan (GAP) Pause & Reflect session was conducted to review progress under the 2025 GAP, identify priority actions for 2026, and strengthen capacity on Gender Equality and Social Inclusion (GESI). Mandatory training on the PSEAH was also delivered, covering reporting channels and survivor-centred response mechanisms.

Dates and venues of engagement activities

(2025)
 15 January – YNOMP, Phitsanulok
 EbA Consultation meeting
 26–28 March, 17–19 June, 25–27 August – Phitsanulok (Bueng Kluay, Khlong Mem, Bueng Jon): EbA Consultation meeting, FGD for ESIA
 20 June – Phitsanulok & Sukhothai (YNOMP, District Land Offices)
 • KII for ESIA
 5–8 August – Phitsanulok & Sukhothai (YNOMP, SAOs, Phitsanulok Inland Fisheries Research and Development Center)
 E&S/CIA 13 Schemes stakeholder consultation
 2–4 December – SAOs in Phitsanulok, Sukhothai and Uttaradit
 13 Schemes community consultation
 9 December – YNOMP, Phitsanulok
 Information session:
 • EbA: ESIA/ESMP
 • 13 Schemes: E&S/CIA
 15 December – RID, Bangkok • GAP Session • PSEAH Training

Sex-disaggregated data on stakeholder engagement participants (male + female = total)

Engagement Activities:

15 January 2025: Consultation meeting on EbA site prioritisation and confirmation

Participants: Male 19, Female 4, Total 23

Key Issues, Risks, and Impacts Identified and Addressed:

Key issues included clarity on site selection methodology, transparency of prioritisation results, and potential environmental and social implications of EbA activities at the selected sites. These issues were addressed through targeted information sharing and technical clarification, resulting in stakeholder endorsement of the prioritisation methodology and proposed sites. The consultation process supported informed decision-making, mitigated stakeholder-related risks, and strengthened local ownership of planned EbA interventions.

26–28 March 2025: Consultation meeting on EbA design sketches and identification of E&S risks

Participants: Male 27, Female 47, Total 74

Key Issues, Risks, and Impacts Identified and Addressed:

A series of community consultations were conducted at each selected EbA site to gather feedback on site-specific values, proposed EbA design sketches, and to identify potential environmental and social risks prior to implementation.

- At Bueng Kluay, consultations identified risks related to recurring seasonal drying, limited irrigation connectivity, groundwater management challenges, and potential environmental risks associated with large-scale excavation in sandy soils, including impacts on existing aquatic vegetation and exposure to polluted inflows. These issues informed the need for careful design, groundwater recharge management, and protection of aquatic ecosystems.

- At Khlong Mem, key risks included riverbank instability, increasing flood frequency and overtopping, damage to nearby assets and livelihoods, and long-term changes to river flow and fish habitats. Community input emphasised the need for riverbank stabilisation and restoration of riparian corridors to reduce flood risks and support ecosystem functions.

- At Bueng Jon, key issues identified included water scarcity during the dry season, proliferation of water hyacinth linked to nutrient runoff, occasional localised flooding, and declining native fish populations. These risks highlighted the need for increased water storage, water quality improvement, and ecological restoration to sustain multiple community uses.

Across all sites, the identified issues were integrated into site-specific EbA design considerations and subsequent environmental and social assessment processes, informing the development of baseline surveys and ESIA.

17–19 June 2025: FGD for baseline survey and ESIA

Participants: Male 32, Female 20, Total 52

Key Issues, Risks, and Impacts Identified and Addressed:

The FGDs conducted as part of the baseline survey and ESIA process confirmed key environmental, social, and livelihood issues across the EbA sites and informed the completed ESIA and ESMP. Communities were found to be highly dependent on local water resources for agriculture and household-level fisheries, while improved water management by RID has already reduced drought risks and strengthened local livelihoods and resilience. Community concerns related to construction impacts, particularly soil disposal and potential disruption to cropping cycles, were identified and addressed through mitigation measures incorporated into the ESMP, including advance notification and planning. The consultations also documented socio-economic vulnerabilities, gender roles, and biodiversity considerations, as well as the positive role of EbA sites in reducing flood risks, all of which have been assessed and

reflected in the final ESIA and ESMP.

20 June 2025: KII for ESIA

Participants: Male 9, Female 1, Total 10

Key Issues, Risks, and Impacts Identified and Addressed:

KIIs with relevant government agencies identified technical, environmental, and social considerations that informed the completed ESIA and ESMP. Key issues included soil and logistical constraints in flood-prone areas, limitations on the use of dredged materials, and potential temporary impacts during construction. Potential risks related to uncoordinated water discharge were identified and considered in the mitigation measures under the ESMP. Land tenure verification and land plot information provided by district land offices were incorporated into the ESIA baseline, with no outstanding land-use concerns identified at this stage.

5–8 August 2025: Stakeholder consultation for updated E&S screening and CIA for 13 schemes

Participants: Male 16, Female 4, Total 20

Key Issues, Risks, and Impacts Identified and Addressed:

The consultations identified key environmental and social considerations related to hydrology, water quality, construction-related impacts, occupational health and safety, land use, and community health and safety. Temporary construction impacts, such as turbidity, dust, traffic disruption, and access constraints, were noted, while no significant accidents or unresolved grievances were reported. Gender observations indicated non-discriminatory recruitment practices and women's active participation. These risks and impacts were being managed by RID in accordance with applicable national regulations and were reflected and further addressed through mitigation measures incorporated into the updated E&S Screening and CIA.

25–27 August 2025: Consultation meeting on EbA detailed design and construction-phase risk identification

Participants: Male 39, Female 37, Total 76

Key Issues, Risks, and Impacts Identified and Addressed:

At Bueng Kluay, key issues focused on design suitability and long-term functionality, including soil characteristics, clay lining, and maintenance of existing groundwater recharge structures. Communities emphasised the importance of selecting edible, non-invasive aquatic plants, enhancing riparian areas with fruit trees, and creating fish refuges to provide ecological benefits and drought resilience. These inputs were incorporated into design considerations and construction-phase planning.

At Bueng Jon, discussions highlighted construction-related challenges, particularly the management and transport of excavated soil and removal of water hyacinth, as well as the selection of appropriate plant species for different ecological zones. Inputs from fisheries experts supported the integration of fish refuge pools into the design. Identified risks were addressed through design refinement and construction management measures.

At Klong Mem, consultations centered on bank stability and water level fluctuations affecting downstream water distribution. The proposed stabilisation approach and its limitations were discussed, with agreement that no encroachment on private land and no bank raising would occur. Communities also agreed on suitable plant species to be established above critical water levels to enhance ecological benefits, which were reflected in the design and risk mitigation planning.

2–4 December 2025: Community consultation for the 13 Schemes activities, as part of ESMF stakeholder engagement

Participants: Male 78, Female 81, Total 159

Key Issues, Risks, and Impacts Identified and Addressed:

The consultations focused on project information disclosure, anticipated construction and operational impacts, and stakeholder concerns related to water management infrastructure upgrades. Key issues raised by communities included soil disposal arrangements, construction timelines, potential impacts on households located along canals, downstream water management, embankment levels, drainage pipes without control gates, road and bridge conditions, and the need for inclusive and continuous engagement prior to construction. Clarifications were provided by RID regarding project scope, design status, and planned consultation processes. Information on the GRM was shared and reinforced during the consultations.

Concerns raised by a complainant, as recorded in the GRM, related to project scope, and stakeholder engagement were addressed through direct clarification by RID and UNDP, resulting in resolution of the issues with no outstanding concerns.

9 December 2025: Information session on ESIA, ESMP, E&S screening, and CIA

Participants: Male 6, Female 5, Total 11

Key Issues, Risks, and Impacts Identified and Addressed:

The session clarified key environmental and social risks and impacts identified through the ESIA, ESMP, E&S Screening,

and CIA processes, including construction-phase impacts, occupational health and safety, biodiversity considerations, waste and soil management, and cumulative effects on water resources and ecosystems. Discussions highlighted the importance of consistent application of mitigation measures, contractor compliance, and ongoing monitoring, particularly for schemes classified as moderate risk. The CIA underscored the need to consider cumulative effects across schemes and sectors, even where individual schemes pose low to moderate risks. The session enhanced institutional understanding of UNDP SES requirements and reinforced agreed approaches for managing identified risks in line with safeguard instruments and national regulations.

15 December 2025: GAP Pause & Reflect and PSEAH Training

Participants: Male 9, Female 12, Total 21

Key Issues, Risks, and Impacts Identified and Addressed:

The session confirmed key milestones in GAP implementation, notably the rollout of HHM training for farmers and practitioners, which strengthened practitioners' confidence in applying HHM tools and demonstrated strong mobilisation of women's active and meaningful participation in project activities. Participants also agreed to enhance the documentation of gender-responsive results through increased collection of success stories in 2026. Potential risks related to limited awareness of SEA/SH were addressed through targeted PSEAH training, including clarification of SEA/SH definitions and GRM and SRM reporting channels.

list of CSOs, NGOs, or other platforms, initiatives, and organizations: Community Organisation Council, Bang Rakam Muangmai

Information shared with stakeholders

Information on project objectives and scope:

Stakeholders were informed about the project objectives, goals, scope, and implementation areas, including linkages between EbA measures and water management infrastructure upgrades under the 13 schemes.

Information on EbA site and design:

Consultations shared the EbA site prioritisation methodology and results, selected priority sites, and preliminary to detailed EbA designs, including site-specific options and design rationale.

Information on ecosystem services and economic benefits:

Information was provided on expected ecosystem and livelihood benefits of EbA interventions, such as water storage, irrigation, fisheries, recreation, and the economic valuation of ecosystem services based on local data.

Information on construction activities and timelines:

Stakeholders received updates on planned and ongoing construction activities under the 13 schemes, indicative timelines and sequencing, anticipated construction-phase impacts, mitigation approaches, land status, land tenure considerations, and coordination arrangements to avoid encroachment on private land.

Information on environmental and social safeguards:

Consultations covered the ESMF, ESIA and ESMP for EbA sites, and the updated E&S Screening and CIA for the 13 schemes, including key risks and mitigation measures.

Information on gender and GRM:

Stakeholders were informed about GAP implementation, women's active and meaningful participation, PSEAH standards, and available GRM channels and reporting procedures.

Outputs including issues raised and addressed during the reporting period

Stakeholder engagement activities during the reporting period generated key outputs that informed EbA design refinement, safeguard planning, and implementation under the 13 schemes. Inputs from communities, water user groups, and relevant government agencies were reflected in the ESIA and ESMP for EbA sites, as well as the updated E&S Screening and CIA.

Water management and environmental issues:

Stakeholders raised concerns related to water availability during dry periods, flood risks, embankment stability, drainage capacity, downstream impacts, and changes in aquatic resources. These issues were addressed through clarification and refinement of EbA and infrastructure designs, and through mitigation measures incorporated into the ESIA, ESMP, E&S Screening, and CIA.

Construction-related impacts, land use, and coordination: Key issues included soil disposal, turbidity, dust, traffic disruption, road and bridge conditions, access to farmland, occupational health and safety, and potential encroachment on land along canals. These were addressed through identification of disposal sites, traffic and dust management measures, commitments to road restoration, verification of land status, prior consultation and consent where required, and coordination with local authorities. Relevant mitigation measures were incorporated into ESIA and ESMP. Gender, inclusion, and PSEAH: Consultations reflected strong participation of women, with active and meaningful engagement in discussions and decision-making processes. Issues related to awareness of SEA/SH and appropriate response mechanisms were addressed through PSEAH training, clarification of acceptable conduct, and communication of reporting and survivor-centred response mechanisms. Grievances and transparency: GRM channels were communicated during consultations. A complaint raised during the reporting period was addressed through clarification and follow-up by RID and UNDP, resulting in resolution with no outstanding issues.
Remarks/Notes
N/A

F.6. ESS forward planning and lessons learned	
Are there any planned ESS activities for the next reporting period or lessons learned to share from this period?	Yes ☒ No ☐
Provide planned activities on environmental and social safeguards for the next reporting period	
Continue community consultation meetings, including raising awareness of the project's GRM Conduct periodic monitoring in accordance with ESMP parameters, including air quality, noise and vibration, surface water, groundwater, sediment, terrestrial and aquatic ecology, and transportation Provide onboarding and training for the ESMF Monitoring Consultant and construction contractors responsible for implementing ESMP measures for EbA construction activities	
Provide any success stories, good practices, or challenges, including those related to the engagement of Indigenous peoples and local communities, promoting Indigenous knowledge and benefits to Indigenous peoples and local communities	
Iterative Stakeholder Consultations Informing EbA Design and Safeguards Stakeholder consultations were conducted as an iterative process aligned with key stages of EbA design and safeguard preparation, including site prioritisation, preliminary design, detailed design, and construction-phase risk identification. Rather than one-off engagements, consultations were sequenced to allow issues and feedback identified at earlier stages to be revisited and addressed as designs evolved. Through focus group discussions (FGDs), site visits, and discussions with RID, water user groups, and community members, local knowledge on water use patterns, fisheries, seasonal risks, soil conditions, and ecosystem services was systematically captured. These inputs informed baseline data and were used to refine EbA design options and mitigation measures, including adjustments to plant species selection, fish refuge design, soil management approaches, and construction-phase arrangements. This approach demonstrates how iterative and inclusive stakeholder engagement can support early identification of environmental and social risks, strengthen the relevance and feasibility of EbA interventions, and enhance implementation readiness by aligning proposed measures with local practices and operational capacities. Follow-up discussions on design adjustments and implementation arrangements further supported shared responsibility among stakeholders.	
F.7. Grievance Redress Mechanism - confirmation & grievances	
<i>Please indicate whether the project can confirm the following statement:</i>	
Fully functional and operational Grievance Redress Mechanisms are in place, have been communicated to and are accessible by all stakeholders applicable to this project	
☒ The accredited entity confirms the statement above at project-level, AE-level, and GCF-level grievance mechanisms.	

☐ The accredited entity does not confirm the statement above	
Have there been any grievances received during the reporting period?	Yes ☒ No ☐
<i>A fully functional project-level GRM is in place. Information on the GRM has been communicated through community consultations and project activities to ensure that it is widely known and accessible to stakeholders and affected communities. On 23 May 2025, the project became aware of a concern raised through a public social media post, which mainly contained recommendations regarding project implementation. Although the concern was not formally submitted through the project's GRM channels, UNDP and RID recorded the issue under the GRM and gathered relevant information from project partners while coordinating with relevant RID units to prepare clarifications should the complainant wish to contact the project. The parties later met on 2 December 2025, during which the issues raised were clarified.</i>	
F.8. Implementation of activities and actions agreed in the Gender Action Plan	
During the reporting period, the project continued implementing activities under the GAP, with most activities progressing broadly in line with planned targets and timelines. Gender-responsive approaches were integrated across climate information services, agricultural extension, community engagement, and market access initiatives. Institutional coordination on gender was strengthened through the establishment of a gender working group within RID and coordination meetings among relevant agencies to support climate-informed planning. Technical workshops also contributed to improving the GreenWaterUnity platform, incorporating feedback from women participants to enhance accessibility and usability. Capacity-building activities promoted gender-responsive agricultural extension and inclusive household decision-making. Training on HHM strengthened the capacity of extension officers and farmers to apply gender-responsive approaches in agricultural planning, while PICSA workshops and digital climate tools supported climate-informed decision-making among farmers. Women's economic participation was strengthened through financial literacy training and farmer-to-farmer knowledge exchange, with women representing the majority of participants. EbA consultations also ensured inclusive participation and informed gender considerations in ESIA and ESMP processes. While youth participation and cross-agency gender engagement remain evolving, emerging good practices include women-led market activities and the sequencing of gender awareness and HHM introduction.	
Are there GAP implementation activities or progress to report for this period?	Yes ☒ No ☐
<i>Summary on Activities and Actions agreed in the Gender Action Plan (max. 200 words)</i> <i>Provide a progress report on the gender action plan developed during project preparation stage for the reporting period. This will primarily be a report on activities undertaken and results achieved because of completion of an activity. Further, it should also indicate if the project is on track to achieving the intended outcome(s). The reporting should be done for activities, targets and indicators already set in the action plan including on vulnerable groups (youth, poor, female heads of households, etc.) as would have been identified in the gender analysis and action plan. If activities or targets are not achieved as per plan, reasons should be provided, and recourse action should be proposed. Please include reporting on any changes or deviations. Include a Report on implementation challenges and lessons learnt and how these will inform on-going actions and what action will be taken by when to address the challenges faced. Incorporate both quantitative data and qualitative reports on the performance of such actions, and on progress on actions identified.</i>	
GAP Activity	
During this reporting period, the project organized technical workshops titled "Committee meeting for information sharing across government stakeholders established under the Thai Meteorological Department (TMD) mechanism", held on 20–21 February 2025. The workshops brought together staff from TMD, RID, and relevant agencies to test the GreenWaterUnity climate information platform and exchange technical inputs to improve climate information products for agricultural planning. The activity promoted the participation of both women and men and supported awareness of user needs, including those of women involved in water management and agriculture.	

Indicator	
Indicator: • Climate products include information highlighted as needed by women • Number of trainees, disaggregated by gender, age, health/disability, income, type of household	
Rating of Indicator	GREEN (on track to be met)
Baseline	0
Target, including sex-disaggregation where applicable	30
Annual progress update (Reporting Period)	
During the workshop, 44 women and 62 men from TMD, RID, and other relevant agencies reviewed and tested the GreenWaterUnity climate information platform developed by KMUTNB and provided technical recommendations to improve usability and accessibility. Key recommendations included simplifying the login process, introducing a Thai-language interface, increasing font size for mobile users, optimizing map file sizes, and expanding water-use data for additional crops. These recommendations were incorporated into the current version of the platform. The consultations also generated insights into farmers' preferences and information needs for agricultural decision-making. This feedback contributes to improving the relevance of climate information services and supports the development of gender-informed climate information products.	
Cumulative progress update (Entire period)	
Since the start of implementation of this activity in 2023, the activity has progressively strengthened inclusive participation in climate information-related technical processes. Women's participation increased from 10% at community level and an average of 25% in technical trainings in 2024, reflecting initial gaps linked to the male-dominated composition of technical staff. In 2025, targeted efforts to enhance women's inclusion resulted in women's participation reaching 41.5% (44 out of 106 participants) in technical workshops under the TMD mechanism, exceeding the target of at least 30%. This demonstrates measurable progress in advancing gender-responsive participation in institutional and technical engagement. In parallel, the workshops contributed to improving the usability and accessibility of the GreenWaterUnity platform, with user-driven enhancements including a Thai-language interface, simplified login, improved mobile accessibility, and expanded agricultural water-use data. These improvements, informed through more inclusive participation, strengthen the relevance and application of climate information services for agricultural decision-making.	
Budget	100,000
Currency	USD
Timeline (Planned completion of activity)	31 December 2026
Responsibility	
Royal Irrigation Department (RID)	
Remarks/Notes	
*Baseline: N/A *Target • Gender-informed climate information • At least 30% women *Remarks GREEN. The indicator is on track to be met. During this reporting period, the project organised technical workshops	

achieved improved participation of women, reaching 41.5%, which meets the target of at least 30% women participants.

The activity also contributed to strengthening technical capacity and stakeholder input in improving climate information services. Feedback collected during the workshops was incorporated into the current version of the platform, supporting the development of more user-responsive and gender-informed climate information products.

GAP Activity

During this reporting period, the project facilitated inter-ministerial coordination for climate-informed and integrated planning, including technical workshops and coordination meetings among relevant national agencies to support the development of a Standard Operating Procedure (SOP) for the Decision Support System for water operations in the Yom–Nan irrigation network.

A gender working group for the project was established within the RID to support the consideration of gender perspectives in project coordination processes and to serve as a focal mechanism for engagement with gender focal points of other ministries and relevant agencies.

Indicator

- Active participation of gender focal point/expertise in inter-ministerial stakeholder committees, meetings, conferences, NAP process, etc.
- Number of inter-agency reports, briefs, submissions including integration of gender issues

Rating of Indicator

AMBER (needs attention to be met)

Baseline

0

Target, including sex-disaggregation where applicable

50

Annual progress update (Reporting Period)

During this reporting period, the project facilitated inter-ministerial coordination for climate-informed water management and agricultural planning, including a technical workshop held on 27 March 2025 in Bangkok. The workshop brought together representatives from key national agencies to discuss the use of climate and water forecasting information in operational water management and agricultural planning.

In addition, coordination meetings were organised to support the development of a SOP for the Decision Support System for water operations in the Yom–Nan irrigation network. Between 26 May and 9 September 2025, nine agencies participated in discussions on integrating local climate monitoring and water forecasting data into operational planning. In total, 42 participants, including 18 women, attended the meetings.

A gender working group for the project was established within RID on 14 January 2025, using the existing institutional structure. While gender focal points from other ministries were not formally engaged in these coordination meetings, a representative from the RID gender working group provided input during the internal review process to reflect perspectives from practitioners, including women involved in water management operations.

Cumulative progress update (Entire period)

Building on the progress reported in the previous period, the project identified the existing gender focal point structure within the RID as the institutional foundation for establishing a project gender working group.

The gender working group was formally established within RID (14 January 2025) using this existing structure. The working group has since contributed to project coordination processes and provided input during the internal review of project-related operational procedures.

During the reporting period of 2025, the project also facilitated inter-ministerial coordination for climate-informed water

management and agricultural planning, including a technical workshop and a series of coordination meetings for the development of a SOP for the Decision Support System for water operations in the Yom–Nan irrigation network, involving nine relevant government agencies.

These cumulative efforts contributed to strengthening cross-agency coordination on climate-informed planning, while providing an entry point for gender perspectives to be considered in coordination and documentation processes.

Budget	50,000
Currency	USD
Timeline (Planned completion of activity)	31 December 2026

Responsibility

Royal Irrigation Department (RID)
King Mongkut's University of Technology North Bangkok (KMUTNB)

Remarks/Notes

*Target:

- Key line ministries/government bodies working on gender equality/women's empowerment.
- 100% of relevant documentation produced by stakeholder committees, etc..

*Remarks

AMBER. Initial progress has been made with the establishment of a gender working group within the RID and the initiation of inter-agency coordination for climate-informed planning. However, engagement with gender focal points from other ministries and the integration of gender considerations into inter-agency documentation will be further strengthened in the next reporting period.

GAP Activity

During the reporting period, the project implemented activities to pilot gender-responsive approaches related to Participatory Integrated Climate Services for Agriculture (PICSA). Workshops were conducted with farmers in the Yom–Nan irrigation areas to introduce Internet of Things (IoT) applications for accessing climate and crop-related information to support climate-informed agricultural decision-making.

Additional farmer workshops also introduced the GreenWaterUnity application to support crop planning and water management decisions using climate and rainfall information.

For agricultural extension officers, the project organised trainings (see GAP Activities 5 and 6) to strengthen capacity in climate risk assessment, the use of climate information, and participatory facilitation approaches aligned with PICSA principles. The trainings also incorporated HHM to promote gender-responsive dialogue and joint decision-making within farming households.

Indicator

- Number of farmers participating in PICSA pilot areas disaggregated by gender (and age if possible) •
- Number of agricultural extension workers (disaggregated by sex) in pilot sites who can apply PICSA approach with farmers

Rating of Indicator	AMBER (needs attention to be met)
Baseline	0
Target, including sex-disaggregation where applicable	50

Annual progress update (Reporting Period)

In September–October 2025, the project initiated activities to pilot gender-responsive approaches related to Participatory Integrated Climate Services for Agriculture (PICSA). A total of 22 workshops introduced IoT applications to support climate-informed agricultural decision-making among farmers in the Yom–Nan irrigation areas. The workshops reached 432 farmers, including 312 women (72.2%) and 120 men. Youth participation was limited, reflecting broader trends of youth disengagement from farming; however, two young women farmers (aged 28 and 30) reported that the tools supported farm-level decision-making.

The project also began introducing the GreenWaterUnity application through additional farmer workshops to support crop planning and water management decisions. Between October and December 2025, a total of 17 sessions were conducted, reaching 344 participants, including 269 women (78.2%). These activities will continue in the next reporting period.

For agricultural extension officers, current activities build on earlier capacity-building efforts introducing climate risk assessment, climate information use, and participatory facilitation aligned with PICSA principles. Trainings conducted during this reporting period (see GAP Activities 5 and 6) incorporated HHM to promote gender-responsive dialogue and joint decision-making within farming households. Follow-up on the practical application of these approaches will be undertaken in the next reporting period.

Cumulative progress update (Entire period)

Initial implementation of this activity has commenced. The project has initiated PICSA-related activities through farmer workshops introducing climate-informed decision-support tools. A total of 432 farmers were reached through IoT-related workshops, with women representing 72.2% of participants. Additional workshops introducing the GreenWaterUnity application reached 344 farmers, including 78.2% women.

Capacity-building for agricultural extension officers incorporating PICSA-related approaches and HHM has also been conducted. Follow-up on the practical application of these approaches is planned for the next reporting period.

Budget	100,000
Currency	USD
Timeline (Planned completion of activity)	31 December 2026

Responsibility

Royal Irrigation Department (RID)

Remarks/Notes

*Baseline: N/A

*Target:

- 50% females (25-30% youth aged 18-25)
- 50% of agricultural extension workers in pilot sites

*Remarks

AMBER. Implementation of this activity has commenced and progress toward the indicator has been partially achieved. Youth participation remained limited, reflecting broader trends of youth disengagement from farming in the project areas. Capacity-building for extension officers has also been conducted under the project, incorporating PICSA-related approaches and HHM. Follow-up on their practical application will be undertaken in the next reporting period.

GAP Activity

During this reporting period, the project conducted community consultations as part of the Ecosystem-based Adaptation (EbA) implementation process, including consultations to support the finalisation of site design and the

Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP). These consultations provided a platform for community members, including representatives from water user groups, to review, validate, and provide feedback on the proposed interventions. In addition, the project initiated participatory monitoring and evaluation (M&E) activities for the EbA interventions, introducing participatory approaches to engage community members in basic data collection, assessment, and monitoring processes, with youth engagement planned. Household surveys were also launched with consideration of gender aspects and the localisation of M&E methodologies to enable longer-term application by RID and local authorities. Data collection began in November–December 2025, with findings to be presented and discussed with communities in the next reporting period.	
Indicator	
Vulnerability and risk assessment reports capture and analyse (where relevant), data disaggregated by sex (and age if possible). Need to disaggregate by gender, age, health/disability, income, type of household from the start.	
Rating of Indicator	GREEN (on track to be met)
Baseline	0
Target, including sex-disaggregation where applicable	40
Annual progress update (Reporting Period)	
Between January and August 2025, the project conducted several consultations on EbA to ensure inclusive participation of community members, including water user groups and women. A total of 173 participants attended the consultations, including 88 women (50.87%). Feedback collected during these consultations informed the design of the EbA interventions, helping ensure that proposed measures address community needs, minimise potential risks, and promote equitable access and benefits for all community members. As part of the ESIA and ESMP preparation, focus group discussions were conducted with community members and water user group representatives, reaching 52 participants, including 20 women (38.46%). Women actively participated in these discussions and shared perspectives on access to and use of EbA interventions. Gender considerations were also integrated into assessment tools. As a result, the ESIA and ESMP incorporate provisions related to gender equality in employment opportunities and PSEAH. For the participatory M&E component, activities were initiated with community members, with plans to engage youth in the process. While results are not yet available, the approach emphasises participation of women, youth and water user group members, with findings to be reported in the next reporting period.	
Cumulative progress update (Entire period)	
Building on the progress made in 2023, the project completed the Training Needs Analysis (TNA) with active participation of women and initiated key analytical processes for EbA planning, including the Climate Risk and Vulnerability Assessment (CRVA) and the Ecological Survey. In 2024, the CRVA, Ecological Survey, and Ecosystem Services Assessment were completed to inform the prioritisation of EbA interventions. Consultations with water user group representatives ensured community perspectives were reflected, including 11 women (46%) out of 24 participants. The Ecological Survey engaged 400 participants, including 205 women (51%), generating insights into gender dynamics in access to ecological resources. In 2025, community consultations supported the validation of EbA design and safeguards processes, mobilising 173 participants, including 88 women (50.87%). Additional consultations for ESIA and ESMP preparation involved 52 participants, including 20 women (38.46%), and informed safeguards provisions including gender equality in employment and PSEAH prevention. Participatory M&E activities were also initiated with community members, with youth engagement planned. Results will be reported in the next reporting period.	
Budget	100,000

Currency	USD
Timeline (Planned completion of activity)	30 September 2027
Responsibility	
Royal Irrigation Department (RID) Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	
Remarks/Notes	
Consultations continued in 2025 to support the design and safeguards processes for EbA interventions. Additional consultations conducted during the ESIA and ESMP preparation engaged water user group members and incorporated gender considerations, including provisions on gender equality in employment and PSEAH prevention. Participatory M&E activities have also been initiated with community members, with youth engagement planned. Results will be reported in the next reporting period. However, youth engagement remains challenging in the local context, as many young people pursue education or employment in urban areas. The project will continue exploring appropriate approaches to encourage their participation in monitoring activities.	
GAP Activity	
During this reporting period, on 26-27 June 2025, the project conducted training on Gender Transformative Household Methodologies (HHM) for agricultural extension officers and relevant officials to strengthen their capacity to integrate gender considerations into agricultural extension and farmer engagement. The training content covered foundational concepts on gender and gender equality, followed by practical sessions on integrating gender considerations into agricultural extension and household-level decision-making through the HHM approach. The training also introduced tools that help facilitate discussions among farming households on roles, responsibilities, resource allocation, and joint decision-making.	
Indicator	
ToT extension workers supported by project trained on methodology	
Rating of Indicator	GREEN (on track to be met)
Baseline	0
Target, including sex-disaggregation where applicable	100
Annual progress update (Reporting Period)	
During this reporting period, the project conducted two training sessions on HHM on 26–27 June 2025. The first session was delivered as a training-of-trainers (ToT) targeting management-level agricultural extension officers and officials from relevant departments under the Ministry of Agriculture and Cooperatives (MOAC) and the Department of Community Development, with the objective of enabling them to cascade the HHM approach within their respective agencies. The second session focused on practitioner-level extension officers who work directly with farmers, supporting the practical application of HHM tools in farmer engagement. A total of 100 participants attended the trainings, including 35 men and 65 women (65%), demonstrating strong participation of women.	
Cumulative progress update (Entire period)	
The implementation of this activity has been ongoing since 2023.	

In 2023, the project trained 116 extension workers, representing the full extension workforce supported by the project, including 60 women (52%). Gender-related issues were discussed during the training, highlighting existing limitations in household decision-making dynamics and the need to strengthen gender-responsive approaches in agricultural extension work.

In 2024, capacity-building activities continued through a second training-of-trainers (ToT) for management-level extension officers and a workshop for practitioner-level staff. These activities reached 140 participants, including 86 women (61%), and focused primarily on integrating climate information and adaptation strategies into extension work. While no training specifically focused on gender-transformative household methodologies was conducted during this period, the training curriculum emphasized ensuring strong participation of women.

In 2025, the project conducted dedicated HHM trainings, further strengthening the capacity of extension workers and relevant officials to apply household-level methodologies in their engagement with farmers.

Budget	100,000
Currency	USD
Timeline (Planned completion of activity)	31 December 2026
Responsibility	
Royal Irrigation Department (RID)	
Remarks/Notes	
*Baseline: N/A *Remarks GREEN. The activity remains on track. The project successfully delivered ToT training for extension workers and relevant officials, with strong participation including 65% women.	

GAP Activity	
During this reporting period, the project introduced the gender-responsive HHM approach to support climate-resilient farm planning and strengthen gender-responsive agricultural extension. Capacity-building activities were conducted for agricultural extension officers and farmers in the project areas to promote the application of HHM tools in agricultural planning and household-level decision-making.	
Indicator	
Extension workers applying methodology in project areas incorporating HHM approach in agricultural extension for strengthening agricultural livelihoods	
Rating of Indicator	GREEN (on track to be met)
Baseline	0
Target, including sex-disaggregation where applicable	100
Annual progress update (Reporting Period)	
During this reporting period, the project conducted training on "Integrating Gender into Agricultural Practices through Gender-Responsive Household Methodology (HHM)" for practitioner-level agricultural extension officers who work closely with farmers on 27 June 2025, as indicated above in GAP Activity 5. Participants reported moderate to high confidence in applying HHM tools in their work, particularly in facilitating discussions on household roles, resource allocation, and joint decision-making within farming households.	

In addition, the project conducted training sessions for 697 farmers across 24 sub-districts in the project area during January–February 2025, including 492 women (70.6%), on integrating gender considerations into agricultural practices. The training introduced gender-responsive HHM concepts and practical tools for improving household-level planning and agricultural livelihoods. This activity complemented the capacity-building of extension officers by promoting awareness of HHM approaches among farming households. Post-training feedback indicated that 82.7% of participants reported being able to share the knowledge with others in their communities.

Cumulative progress update (Entire period)

This activity was initiated during the 2025 reporting period through the introduction of HHM in the project areas.

Capacity-building activities for practitioner-level extension officers strengthened their readiness to apply HHM tools in farmer engagement, while training for farmers promoted awareness and understanding of gender-responsive household decision-making in agricultural planning. These efforts represent the initial implementation phase of the HHM approach, supporting its integration into agricultural extension practices in the project areas.

Budget	50,000
Currency	USD
Timeline (Planned completion of activity)	31 December 2026

Responsibility

Royal Irrigation Department (RID)

Remarks/Notes

*Baseline: N/A

*Remarks

GREEN. This activity has been initiated during the reporting period through HHM training for practitioner-level extension officers and farmers in the project areas. Participants, extension officers in particular, reported moderate to high confidence in applying HHM tools in their work, and the training reached 697 farmers, including 492 women (70.6%). These efforts represent an initial step toward integrating HHM into agricultural extension practices and strengthening gender-responsive farm planning.

GAP Activity

During this reporting period, the project promoted women's participation in capacity-building and market access activities to strengthen climate-resilient agricultural livelihoods. Activities included financial literacy training supported by Bank of Ayudhya, capacity development for product development and entrepreneurship, farmer-to-farmer knowledge sharing, and the establishment of an online market platform in collaboration with community enterprises in the project areas.

Indicator

Women participating in training activities; use of mobile application for climate change information for crop planning; adoption of climate resilient practices; access to finance for investment in climate resilient agriculture resilience

Rating of Indicator	GREEN (on track to be met)
Baseline	0
Target, including sex-disaggregation where applicable	50

Annual progress update (Reporting Period)

During this reporting period, with co-financial support from Krungsri Bank, the project organised 16 financial literacy training sessions to strengthen farmers' capacity in financial management and investment planning for climate-resilient agriculture. The training reached 472 participants, including 339 women (71.8%).

To enhance market access and promote women's economic participation, the project supported the establishment of an online market platform to increase the visibility and marketability of farmers' products. MOUs were signed with 6 community enterprises in the project areas, 5 of which are led by women, strengthening women's roles in entrepreneurship and business management.

In addition, capacity-building training on product development and marketing reached 61 participants, including 57 women (93.4%). A management team for the product distribution centre and handicraft and food product warehouse, consisting of 16 women, was also established, promoting women's leadership in local marketing activities. These activities represent an initial phase of ongoing capacity-building efforts that will continue in the next reporting period.

A farmer-to-farmer knowledge sharing programme engaged 674 farmers (129 men and 545 women, representing 81%) to exchange experiences on climate-resilient agricultural practices, including water and soil management, integrated farming systems, crop rotation, and the use of digital technologies to strengthen long-term resilience.

Cumulative progress update (Entire period)

The implementation of this activity began in the 2024 reporting period with efforts to promote women's participation in training and market-oriented activities. Financial literacy training supported by Krungsri Bank was organised for farmers, reaching 318 participants, including 187 women (59%), exceeding the project target of ensuring at least 50% female participation.

Building on this foundation, the project expanded capacity-building activities during the 2025 reporting period, reaching all project areas. Financial literacy training sessions reached 472 farmers, including 339 women (71.8%). In addition, a farmer-to-farmer knowledge sharing programme engaged 674 participants, with 545 women (81%), promoting peer learning on climate-resilient agricultural practices.

To strengthen women's economic participation, the project supported the establishment of an online market platform, piloted through six community enterprises, five of which are led by women. Capacity-building on product development and marketing, with the majority of participants being women, further supported women's participation in local value chains. A women-led management team was also established to oversee the product distribution centre and warehouse, promoting women's leadership in local marketing and product distribution.

Budget

50,000

Currency

USD

Timeline (Planned completion of activity)

31 December 2026

Responsibility

Royal Irrigation Department (RID)
Bank of Ayudhya

Remarks/Notes

GREEN. The activity is on track and has exceeded the target of ensuring at least 50% women participation. Financial literacy training reached 472 farmers, including 339 women (71.8%), while farmer-to-farmer knowledge exchange involved 674 participants, with women accounting for 81%. The project also supported the establishment of an online market platform with six community enterprises, five of which are led by women. Training on digital platforms for market management and climate information will be conducted in the next reporting period to complement ongoing efforts to strengthen farmers' access to climate and agricultural information.

F.9. Gender Action Plan implementation review

Is the gender expert for the project/programme engaged to support the implementation of the gender action plan? If engaged previously, please advise if the gender expert has been retained by the project/programme, including plans to engage another expert if a previously engaged expert has left the project/programme.	Yes ☒ No ☐
<i>The project's Gender Responsive Data Officer has served as the gender expert for the project since late 2023 and continues to support the implementation and monitoring of the Gender Action Plan. The position has been retained throughout the reporting period, ensuring continuity of gender expertise within the project. In addition, UNDP's Gender Equality and Social Inclusion Adviser has been engaged on a periodic basis to provide technical backstopping and strengthen gender-related implementation as needed.</i>	
Has the implementation of gender action plan/s being implemented according to Funding Activity Agreements and GCF's Updated Gender Policy? Please ensure that the budget is included in the reporting above if it was indicated in the approved or updated gender action plan.	Yes ☒ No ☐
<i>Gender Action Plan (GAP) is being implemented in accordance with the commitments outlined in the Funding Activity Agreement and aligned with the GCF Updated Gender Policy. Gender considerations have been integrated across project activities, including capacity-building for agricultural extension officers and farmers, promotion of women's participation in training, and support for women's economic empowerment through market access and entrepreneurship initiatives. No specific budget has been allocated solely for implementing GAP. Instead, gender-responsive actions are integrated across relevant project activities, with resources streamlined within activity budgets to support the achievement of the gender outcomes outlined in the GAP.</i>	
Are the planned activities, targets, indicators, timelines, etc. on track during the reporting period?	Yes ☒ No ☐
<i>During the reporting period, the implementation of GAP activities generally remained on track, with most activities progressing in line with planned targets, indicators, and timelines. Several activities have already met or exceeded participation targets, particularly with regard to women's participation. Under activities related to climate information services and institutional coordination, technical workshops and coordination meetings were conducted with relevant government agencies to improve climate information products and support climate-informed water management planning. Participation included both women and men, and feedback from stakeholders contributed to improving the usability and accessibility of the GreenWaterUnity platform. In addition, a gender working group was established within the RID to support the integration of gender perspectives in project coordination processes. Implementation of gender-responsive approaches in climate services and agricultural extension also commenced during the reporting period. PICSA-related workshops introduced climate-informed decision-support tools to farmers, reaching 432 farmers, including 312 women (72.2%). Capacity-building activities for agricultural extension officers were also conducted, including training on Gender Transformative HHM, strengthening their capacity to integrate gender considerations into agricultural extension and farmer engagement. Community consultations for EbA interventions were conducted to ensure inclusive participation in the design and safeguards processes. These consultations mobilised 173 participants, including 88 women (50.87%), and gender considerations were integrated into the ESIA and ESMP. Activities promoting women's economic participation also progressed well, with financial literacy training reaching 472 farmers, including 339 women (71.8%), exceeding the target of ensuring at least 50% women participants. Overall, while some activities remain in early stages of implementation, particularly those related to strengthening inter-agency gender engagement and the practical application of PICSA and HHM approaches, the GAP implementation remains broadly on track within the planned timeline.</i>	
Were there any revisions of the approved GAP during the reporting period? Please submit the updated GAP in Annex section of this APR and ensure that the updated GAP has details on each change.	Yes ☐ No ☒
N/A	
Are the reported results on track to contribute to meeting the sex-disaggregated targets for the direct beneficiaries in the funding proposal, if applicable?	Yes ☒ No ☐

Progress toward the sex-disaggregated beneficiary targets outlined in the funding proposal is being advanced through several project activities that promote climate-resilient livelihoods and inclusive participation. Capacity-building activities on HHM, PICSA, and climate information tools reached a substantial number of farmers during the reporting period, with women consistently representing over 70% of participants. These activities contribute to Impact Indicator A1.2 (number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options) by strengthening farmers' knowledge and capacity to adopt climate-informed agricultural practices. Training and technical workshops conducted with government stakeholders, extension officers, and project partners also contribute to Output Indicator 1.2 (number of people trained on integrating climate information into planning). In addition, PICSA-related workshops, digital climate information tools, and extension support contribute to Output Indicator 3.1, which tracks the application of climate information and climate-resilient practices by beneficiary households.

Has the project/programme experienced any implementation challenges that affect gender-related activities? If yes, please include lessons learnt and how they are informing ongoing actions.

Yes ☒ No ☐

One key challenge relates to the limited participation of youth, which also affects the achievement of targets related to youth engagement. This reflects broader national trends in Thailand's agricultural sector. According to the 2023 Report from Office of Agricultural Economics, the agricultural workforce has shown a continuing decline as workers shifted to other sectors, while the average age of farmers increases. This trend is also reflected in project areas, where youth often pursue education or employment outside agriculture, as noted during trainings and by a local university supporting the Project. Another challenge relates to institutional coordination of gender focal points across ministries. While a gender working group has been established within the RID, engagement with gender focal points from other ministries has been more limited than initially anticipated. Lessons learned from these experiences highlight the importance of adapting engagement approaches to the local context. For youth participation, the project is exploring more flexible entry points for engagement, including participatory monitoring and digital tools related to climate and agricultural information. For institutional coordination, the project will continue engaging gender focal points from relevant departments through existing coordination platforms and technical discussions, including participation in workshops and consultations where relevant.

Were there any best practices identified, or case studies prepared on benefits/activities undertaken as agents of action by women and the female heads of households during the reporting period? Please share any case studies in the text boxes or in the Annex section of the APR.

Yes ☒ No ☐

Some good practices related to women's participation and leadership were identified. One example is the strengthening of women's economic participation through the establishment of an online market platform in collaboration with six community enterprises in the project areas, five of which are led by women. This initiative has increased market opportunities for local agricultural products while strengthening women's roles in entrepreneurship and community-based business management, demonstrating their contribution to advancing local agricultural value chains and climate-resilient livelihoods. Another good practice relates to the sequencing of gender-related capacity-building activities. While the project initially planned to introduce gender-transformative HHM primarily through agricultural extension officers, gender awareness and HHM orientation sessions were also conducted directly with farmers. This helped strengthen understanding of gender roles and household decision-making. As a result, extension officers reported greater confidence in facilitating HHM discussions, while farmers gained a clearer understanding of HHM as a facilitation approach that encourages engagement of all household members in agricultural and livelihood decision-making. In addition, a case story (<https://asean-agrifood.org/the-resilient-women-of-bueng-jon-preserving-water-resources-for-the-community-and-the-future/>) highlighting women's leadership was published, showcasing their role in preserving and managing local water resources, promoting sustainable water use, and strengthening community resilience.

Provide planned activities on gender elements for the next reporting period

Application of gender-transformative HHM: Monitoring the application of HHM tools by agricultural extension officers in their engagement with farmers, and documenting lessons learned and success stories through interviews. Follow-up implementation of PICSA-related activities: Providing continued support to farmers and extension officers to strengthen the practical application of climate-informed agricultural decision-making tools. Participatory monitoring and evaluation for EbA interventions: Continuing community-based monitoring activities, with particular attention to the participation of women, youth, and water user group members in data collection and community monitoring processes. Strengthening women's economic participation and market access: Continuing capacity-building on product development and facilitating dialogue to expand market access through engagement with private and public sectors partners, including the organisation of a business matching and partnership forum. Training will also be provided on the use of digital platforms associated with the online marketplace system.

G. ANNEXES (UPLOADED)
Annex 1: GHG emission reduction calculation methodology (for projects reporting GHG emission reductions) and details on the calculations of the annual and cumulative value.
No annexes provided.
Annex 2: Communication and visibility material
File Name: APR 2025 Annex 2 Communication and visibility material.docx
Annex 3: List of grievances received
File Name: APR 2025 Annex 3 List of grievances received.xlsx
Annex 4: Procurement information
No annexes provided.
Annex 5: Updated implementation timetable for the Funded Activity for the following year
File Name: APR 2025 Annex 5 Updated implementation timetable.xlsx
Annex 6: Updated Gender Assessment and/or Action Plan
No annexes provided.
Additional Annexes (if applicable)
No annexes provided.

