

Thailand Low-Emission Rice (Thai Rice)

Mid-term Evaluation and Learning Exercise (ELE) Report & Management Response

May 2022

Overview

- **Management Response:** response to the recommendations made by the evaluation team in this Evaluation and Learning Exercise (ELE) report. Jointly written by the NAMA Support Project (NSP) and the Technical Support Unit (TSU) of the NAMA Facility.
- **Evaluation and Learning Exercise Report:** external and independent evaluation conducted by the consortium AMBERO and Oxford Policy Management.

ELE of the NSP Thailand Rice - Management Response

1. Background

In 2021, the NSP Thailand Rice was subject to an independent mid-project Evaluation and Learning Exercise (ELE) conducted by an evaluation team led by AMBERO Consulting. The ELE report is published on the NAMA Facility's [website](#).

The NSP and TSU provided responses to the recommendations made by the evaluation team in their ELE report.

2. Response to Recommendations

Recommendations		Management Response	
Lesson 1: Reaching 100,000 farmers is likely to take more time than foreseen	Activities	Responsible Entity	Timeline
Recommendation 1: Seek discussion with the NAMA Facility regarding (no cost) extension or reduce target values.	Recommendation rejected. An amendment request has been submitted by the NSP in July 2021, in which the NSP has requested the adjustments of the target settings for mandatory core indicator M2 (people benefitting from NSPs) and the mandatory core indicator M5 (mobilised private finance). An adjustment of target values has not been granted, as the overall ambition of the NSP shall not be lowered, as is the general practice at NAMA Facility. While an extension has not been granted as the NSP is currently in mid-implementation, a (no cost) extension could potentially be requested at a later stage of the Implementation of the NSP (tbc).	NSP	The amendment request was granted in November 2021
Recommendation 2: Explore options with the NAMA Facility to re-direct some funds from the Financial to the Technical Component.	Recommendation rejected. Financial components are crucial to spur transformational change and ensure the scalability and replication of the NSPs approaches. Re-directing funds from the Financial Component and the Technical Component would weaken this approach and is generally not practiced by the NAMA Facility.	TSU	
Recommendation 3: Allow more time during potential future project planning processes.	Recommendation rejected. NAMA Facility grants a generous amount of time to NSPs to conduct their Detailed Preparation Phase. Depending on the Call the NSP is part of the time period is between 18 and 10 months. NAMA Facility does not grant longer time periods	TSU	The NAMA Facility working paper "Harnessing the mitigation potential of the Agriculture, Forestry & Other Land Use (AFOLU)

	<p>to NSPs to ensure that the ambitious and competitive nature of the NAMA Facility application process remains. Due to the complexity of NSPs in the AFOLU sector, NAMA Facility has undertaken research on NSPs in this sector and has published a paper on lessons learnt to support NSPs in the AFOLU sector.</p>		<p>sector: Lessons learnt from the NAMA Facility Portfolio (2013-2020) has been published in March 2022</p>
<p>Lesson 2: Even a 0% interest loan is yet another debt for a farmer.</p>			
<p>Recommendation 1: Consider supporting the uptake of land laser levelling via a subsidy, though, whether a subsidy suffices to generate uptake cannot be fully predicted by the analysis. Revise the suitability of repayment periods based on rice production cycles in the target region.</p>	<p>Recommendation accepted. The NSP has submitted an amendment request in July 2021 to request a re-structuring of the financial mechanism, among other requests. The re-structuring of the financial mechanism and hence, an establishment of a subsidy mechanism has been granted by Donors in November 2021 and is implemented by the NSP. The new financial mechanism will entail two subsidies, one for farmers and one for service providers to ensure both supply and demand within the remaining implementation period. This will ensure the highest probability of successfully introducing and demonstrating the business model.</p>	<p>NSP</p>	<p>The amendment request was granted in November 2021</p>
<p>Recommendation 2: Discuss with the NAMA Facility on to what extent supporting collateral for Bank of Agriculture and Agricultural Cooperatives (BAAC) (e.g., through guarantees) for the service providers or even farmers would be an option for the NSP to (a) generate access to finances and (b) reduce investment risk for economically weak entrepreneurs.</p>	<p>Recommendation rejected. While the recommendation is valid and reasonable, recommendation 1 of providing a direct subsidy for farmers and service providers is considered to provide stronger incentives for the uptake of land laser levelling, and a combination of the two recommendations is considered to be inefficient.</p>	<p>NSP</p>	
<p>Lesson 3: Introducing a new technology in agriculture is likely to need more time for uptake than</p>			

anticipated when designing the project			
Recommendation 1: Seek discussion with NAMA Facility regarding (no cost) extension. Allowing for at least one more rice season (2023) to generate uptake should be discussed.	Please see lesson 1, recommendation 1.	NSP	
Recommendation 2: Convince farmers bit by bit, starting with younger farmers.	Recommendation partially accepted. The NSP has followed this approach since inception. The NSP has started with focusing on farmer groups that have a track record of adopting new technologies. Within these farmer groups, all members have been targeted both young and old, female and male farmers. Experience shows that working with farmer groups is more effective than targeting individual farmers.	NSP	Ongoing, until July 2023.
Recommendation 3: Allow more time during any potential future project planning processes. This should help ensure causal pathways are valid and properly articulated.	Please see lesson 1, recommendation 3.	TSU	
Lesson 4: Access to finance for farmers needs to be linked to their financial literacy			
Recommendation 1: Assess options to address aspects of financial literacy and economic farming within the NSP.	Recommendation partially accepted. The NSP is practicing the following approach: When promoting mitigation technologies, the financial aspects/benefits of adopting the technologies have always been emphasized, as this is the main incentive for adoption. However, training farmers in bookkeeping and accounting is beyond the scope of the NSP. The implementing partner of the NSP, the Bank for Agriculture and Agricultural Cooperatives (BAAC) provides service providers with financial advice when taking investment decisions.	NSP	Ongoing, until July 2023.
Recommendation 2: Encourage future/ other NSPs in agricultural smallholder settings to consider the need	Recommendation accepted. The need to improve financial literacy and increase awareness of financial products in smallholder settings is a crucial barrier witnessed in agricultural settings globally and needs to be addressed by NSPs. Due	TSU	The NAMA Facility working paper "Harnessing the mitigation potential of the

<p>for parallel activities on financial literacy</p>	<p>to the complexity of NSPs in the AFOLU sector, the Technical Support Unit undertook research on the NAMA Facility portfolio and current trends and has published a paper to share lessons learnt and recommendations to support NSPs in the AFOLU sector. One recommendation (amongst others) is the need for technical assistance and awareness raising activities to support financial literacy, especially in smallholder settings.</p>	<p>Agriculture, Forestry & Other Land Use (AFOLU) sector: Lessons learnt from the NAMA Facility Portfolio (2013-2020) has been published in March 2022</p>
<p>Lesson 5: Access to finance in the agricultural sector needs to be based on a thorough analysis of credit worthiness and credit willingness of farmers and service providers.</p>		
<p>Recommendation 1: Encourage other NSPs in agricultural smallholder settings to consider the eligibility/willingness of farmers/service providers to access offered financial products.</p>	<p>Recommendation accepted. A thorough assessment of target groups, including the willingness to invest into the offered financial products forms a crucial part of the Detailed Preparation Phase. Therefore, NSPs are requested to conduct a market analysis and a target group analysis. As financial literacy and financial awareness is especially critical in agricultural and smallholder settings, this particular recommendation has been elaborated in the NAMA Facility paper on lessons learnt on the AFOLU sector. It is expected that these lessons learnt and recommendations support NSPs in the AFOLU sector. Further, the lessons learnt are distributed in NAMA Facility to ensure support for other NSPs in the sector at NAMA Facility.</p>	<p>TSU The NAMA Facility working paper "Harnessing the mitigation potential of the Agriculture, Forestry & Other Land Use (AFOLU) sector: Lessons learnt from the NAMA Facility Portfolio (2013-2020) has been published in March 2022</p>
<p>Lesson 6: Working on climate change issues in the agricultural sector needs an adaptation and a livelihood component.</p>		
<p>Recommendation 1: Keep tailoring your messages about the NSP benefits to the audience: focus on mitigation towards the NAMA Facility and adaptation towards farmers.</p>	<p>Recommendation accepted. The NSP is practicing the following approach: When promoting mitigation technologies towards farmers (and service providers) two aspects are emphasised: i) the financial benefits of adopting the technologies; ii) the climate resilience (adaptation) benefits of adopting the technologies.</p>	<p>NSP Ongoing, until July 2023.</p>

<p>Recommendation 2: Explore options for inclusion of adaptation/ livelihood aspects within the NAMA Facility. Pure mitigation projects do not address the immediate needs of (smallholder) farmers regarding climate change.</p>	<p>Recommendation partially accepted. While achieving mitigation is the clear focus and priority for NAMA Facility funding, it is clear that in many cases adaptation and improving livelihoods are crucial stepping stones to achieve behavioural change and hence, mitigation. Therefore, NAMA Facility welcomes NSPs, which propose realistic, yet ambitious set-ups that incorporate the specific challenges at hand. As long as the focus and the final goal of the intervention is to achieve the mitigation of greenhouse gas emissions, activities to strengthen adaptation and improve livelihoods are welcome at NAMA Facility.</p>	<p>TSU</p>
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Mid-term Evaluation and Learning Exercise of the Thai Rice NAMA Support Project

NAMA Support Project Evaluation and Learning Exercises for the NAMA Facility

Transaction number: 81238912; Project processing number: 12.9097.2-108.00

Final Report

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NAMA Facility

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Disclaimer

The results and analysis included in the report are based on an external and independent evaluation conducted by the consortium AMBERO-OPM. The conclusions drawn in the report do not necessarily reflect the official views of the NAMA Facility and/or of the NAMA Support Project under evaluation.

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Preface

The NAMA Facility is a joint initiative of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), UK's Department for Business, Energy and Industrial Strategy (BEIS), the Danish Ministry of Climate, Energy and Utilities (KEFM), the Danish Ministry of Foreign Affairs (MFA), the European Union and the Children's Investment Fund Foundation (CIFF). The NAMA Facility was established in 2013. The NAMA Facility's vision is to 'accelerate carbon-neutral development to keep temperature increases to well below two degrees Celsius by supporting NAMA Support Projects (NSPs) that effect sector-wide shifts toward sustainable, irreversible, carbon-neutral pathways in developing countries and emerging economies'. All NSPs with an overall duration of more than three years are subject to a mid-term and a final evaluation and learning exercise.

The NAMA Facility's Technical Support Unit (TSU) functions as the secretariat of the NAMA Facility. The TSU commissioned AMBERO and Oxford Policy Management to conduct mid-term and final Evaluation and Learning Exercises (ELEs) for NSPs from calls 1, 2, 3 and 4.

Each ELE is conducted using the same Theoretical Framework (FW), which involves the application of a document review, participatory workshops, and stakeholder interviews to collect evidence about NSPs' results and lessons analysed using a Theory-based approach centred on the use of contribution analysis reinforced by elements of process tracing.

This document presents the findings of the **mid-term ELE of the Thai Rice NSP**. The report has been reviewed by Luca Petrarulo (Technical Lead, NSP ELE Team) and Elizabeth Gogoi (International Expert A, NSP ELE Team). For further information, please contact vera@ambero.de.

Executive summary

This document presents the findings of the mid-term Evaluation and Learning Exercise (ELE) of the Thai Rice NSP. The ELE was undertaken during the period June - September 2021. In accordance with the Terms of Reference¹, this ELE sought to address the following questions:

- Is the NSP achieving its planned results?
- Is the NSP starting to trigger transformational change?
- What can be learnt from the NSP so far?

More information about the focus of this ELE and on the methodology followed can be found in Section 1.2 and Section 2, respectively.

The Thai Rice NSP's implementation period is July 2018-July 2023, with a total budget of 14.9 million Euros. The NAMA Support Organisation (NSO) is the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. The main implementing partners are the Thai Ministry of Agriculture and Cooperatives (MoAC), specifically the Rice Department (RD), the Ministry of Natural Resources and Environment (MoNRE), specifically the Office of Natural Resources and Environmental Policy and Planning (ONEP), the Bank of Agriculture and Agricultural Cooperatives (BAAC) and the Sustainable Rice Platform (SRP).

Agriculture is the second-largest greenhouse gas (GHG) emitting sector in Thailand after energy, with rice production responsible for almost 60% of emissions from agricultural activities. A lack of incentives for farmers is preventing their transition to low-emission rice production. This is the rationale of the Thai Rice NSP, which aims to enable a shift towards low-emission rice production in Thailand (the expected impact) through farmers switching from conventional to low-emission rice production. It expects to do this through supporting the Government of Thailand in developing the "Good Agricultural Practices (GAP)++" Standard, an enhanced version of the current standard with strengthened environmental and social aspects², to enable farmers to distinguish their rice from conventional production and thus sell to higher-value markets. Increased market demand for sustainable rice is planned to sustain farmers' interest in switching to low-emission production for a long-term impact on the Thai rice sector.

The NSP works via six main intervention areas (outputs): (1) promoting the adoption of low-emission, irrigated rice production, (2) introducing mitigation services (e.g. laser land levelling (LLL)) on the market, (3) leveraging additional public and private funds for low-emission investments, (4) demonstrating good practice examples of innovative financing and incentive mechanisms, (5) strengthening national capacities and local structures to support NAMAs and (6) demonstrating sustainable co-benefits of the Thai Rice NAMA.

¹ The ELE Terms of Reference is provided in Annex H.

² The existing national GAP standards is enhanced regarding social and environmental aspects in line with the criteria of the standard from the Sustainable Rice Platform (SRP). This enhanced standard is referred to as GAP++ to show it builds on existing approaches.

For the purposes of the mid-term ELE, three intermediate outcomes based on the NSP’s three core components have been agreed with the NSP Team: (1) low-emission rice production is in place, (2) mitigation service provision is in place and (3) supportive policy formulation is in place. These intermediate outcomes feed into the expected outcome: the Thai Rice NAMA demonstrates that climate finance can effectively transform the Thai Rice Sector towards reduced GHG emissions and a low-carbon profile. For the purposes of the ELE, this outcome statement has been broken down into two parts: firstly, reduced GHG emissions in the focus provinces Chainat, Ang-thong, Pathum Thani, Singburi, Ayutthaya, Suphanburi (CAPSAS); and secondly, increased public and private investments in low-emission rice production.

Table ES-1 summarises the key findings of the ELE according to its five evaluation criteria: relevance, effectiveness, efficiency, impact, and sustainability.

Table ES-1. Summary of key ELE findings

Evaluation criterion / ELE Question and RAG rating ³	Summary of key findings
<p>1. Relevance: To what extent does the NSP address an identified need (of the Thai government, mitigation service providers and rice farmers)?</p>	<p>Out of the three target groups, the NSP so far aligns best with governmental needs. Although the Thai Nationally Determined Contributions (NDC⁴) so far include only adaptation actions within the agricultural (including rice) sector, in the future, agriculture should contribute to the NDC’s mitigation targets too. A solid baseline for the sector as well as proven mitigation potential is so far lacking. The NSP, among others, is due to deliver this. The government has demonstrated its willingness to invest in the sector e.g., in the promotion of reduced burning practices, and has included alternate wetting and drying (AWD) as well as site-specific nutrient management in Thailand’s National Communication to the UNFCCC.</p> <p>Rice farmers have little interest in investing in sustainable rice production so far: farmers are already heavily indebted and are unwilling/unable to take on additional debts.</p> <p>Currently, service providers see little value in investing in offering mitigation services due to a lack of demand by farmers. Service providers are not yet convinced there is a business case for them and, at the same time, many of them may not be eligible for financial support to build up their businesses. The NSP’s approach to work via a Revolving Fund for farmers and the existing Green Loan Programme of BAAC for service providers does not overcome existing barriers to enable investments. Contrary to the initial assumptions, service providers are not financially capable small- and medium-sized enterprises, but farmers with limited access to additional credits.</p>
<p>2. Effectiveness: To what extent has the NSP been achieving intended intermediate outcomes (and unintended ones)?</p>	<p>The selected low-emission agricultural practices and technologies promoted by the NSP, namely alternate wetting and drying, LLL, site-specific nutrient management and straw and stubble management, are proven mitigation practices that have additional co-benefits in climate change adaptation, resource efficiencies and air pollution. Uptake, however, is slow so far as per</p>

³ Good / Very good = Green; Problems = Amber; Serious deficiencies = Red; Not enough info to rate = Grey.

⁴ During the 26th UN Climate Conference (COP26), Thailand’s Prime Minister announced the national pledge to achieve carbon neutrality by 2065. As this happened after carrying out the evaluation, this information has not been considered in the scope of the analysis.

Evaluation criterion / ELE Question and RAG rating ³	Summary of key findings
Intermediate Outcome 1: Low-emission rice production is in place	monitoring and evaluation (M&E) data 2020 with 267 farmer groups out of 800 targeted for 2020 (target 2021: 1,800) and 394 trainers out of 400 targeted for 2020 (target 2021: 900) reached.
2. Effectiveness (continues): Intermediate Outcome 2: Mitigation service provision is in place	The NSP has focused on supporting mitigation service providers for LLL, but so far only one pioneer service provider has entered the market, whereas the target for 2020 was 140 (target 2021: 210). Farmer demand for mitigation services is limited so far due to a lack of investment willingness and capacities.
2. Effectiveness (continues): Intermediate Outcome 3: Supportive policy formulation is in place	The NSP actively supports low-emission technology, awareness-raising, and GHG data measurement which has been taken up by the Thai government in policy formulation, budgeting, and activity planning , e.g., the Thai government endorsed the SRP standard in July 2021 as “GAP++”.
3. Efficiency: To what extent is the relationship between inputs and outputs timely and to expected quality standards?	Project implementation of both NSP components is delayed by around one year. Reasons for the delays of the Financial Component include lengthy processes and discussions with BAAC on the formalisation of the grant agreement before its actual implementation started. COVID-19, as well as drought, are responsible for delays under the Technical Component. Project steering is complex, involving many different stakeholders and committees. Some of these stakeholders perceive this as partly inefficient and consider themselves rather disconnected from the project, while others are highly committed to supporting the project.
4. Impact: What evidence is there that the NSP is likely to contribute to the intended impact in the ToC (incl. transformational change)?	The evidence that the NSP is likely to contribute to the intended impact in the ToC has been partially substantiated at midline. In terms of producing a demonstrational effect , the ELE can confirm that there are interim signals of buy-in amongst government and key players and stakeholders. Capacity building initiatives are being made for rice scientists and extension workers and awareness is being increased at the district, sub-district and village level. In terms of the promotion of learning , there are strong signs of self-learning amongst the NSP team, but a lack of evidence of promoting their experience and learning with other projects and NSPs. There are early signs of the NSP enabling systemic change which will catalyse additional GHG savings, including through the introduction of new technologies, market linkages and institutional changes. Effective market linkages are emerging. However, the NSP will need to overcome its serious delivery and design challenges (particularly farmers’ perception of the Revolving Fund and lack of incentives for service providers) to ensure it delivers direct impact at a sufficient scale to lead to any significant demonstration and catalytic effect.
5. Sustainability: What is the likelihood that the outcomes will be sustained after the end of the NSP funding period?	Project implementation has been affected by numerous challenges including COVID-19, drought, lack of readiness on part of the farmers amongst other external factors. Therefore, it is difficult to assess sustainability at mid-term. Successful implementation for the remaining duration of the project will show if the capacities and financial mechanisms developed will be sustained in the future. However, there are early signs of mainstreaming of the NSP’s approach into the Ministry of Agriculture and Cooperatives, particularly the Rice Department, and there is a great degree of alignment between the NSP and Thai initiatives , such as the GAP++ Standard, being developed. This can

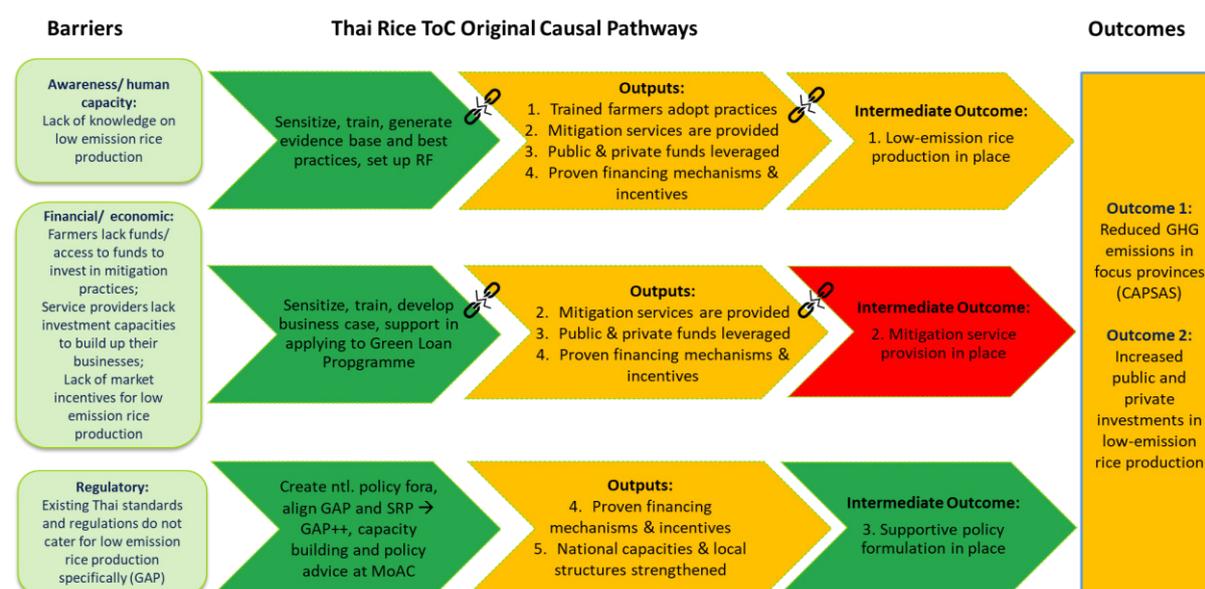
Evaluation criterion / ELE Question and RAG rating ³	Summary of key findings
	also be seen in the Board of Investment of Thailand recently announcing a grassroots economy support scheme, which will support local organisations involved in the development of sustainable agricultural activities, such as low-methane rice farming (officially announced on 6 th September 2021).

Figure ES-1 below presents an overview of the progress of the NSP along its ToC causal pathways towards its intended outcomes. The RAG rating follows the same scale as for Table ES-1. What transpires is that the causal pathway sustaining the introduction of supportive policy formulation (intermediate outcome 3) held well due to TC interventions. SRP/GAP++ has been approved in July 2021 as a national voluntary standard for sustainable rice. Field evidence from the NSP will support policy formulation in setting up mitigation targets for the agricultural sector. The other two causal pathways can only be partially confirmed by the ELE. External factors, namely COVID-19 and drought, as well as delays in the Financial Component and incomplete and partially false underlying assumptions, particularly regarding the Financial Component, have impeded them to unfold.

Although the ELE finds it highly likely that the NSP’s GHG emissions reduction targets will be achieved, it appears that the achievement must be attributed rather to external factors than to the NSP. These external factors include higher reduction potentials in the Thai rice sector than anticipated in the project design as well as reduced agricultural activity due to the dormancy of one rice production season per year because of persistent drought.

Concerning the other sought outcome of the NSP, i.e., increased public and private investment in low-emission rice production, the ELE has found evidence for public investment but cannot confirm such investments by the NSP’s private stakeholders, i.e., farmers and service providers. Therefore, achieving this outcome appears to be at risk.

Figure ES-1. Overview of NSP Causal Pathways Assessment at Mid-Term



Based on the analysis, Table ES-2 provides a **summary of the key lessons and recommendations** for the NSP and the NAMA Facility. Please refer to section 5 for the full list of lessons and recommendations.

Table ES-2. Key lessons and recommendations from the Mid-Term ELE⁵

Lesson	Recommendations
Lessons and recommendations for the NSP Team	
1. Reaching 100,000 farmers is likely to take more time than foreseen.	<ol style="list-style-type: none"> 1. Seek discussion with the NAMA Facility regarding (no cost) extension or reduce target values. 2. Explore options with the NAMA Facility to re-direct some funds from the Financial to the Technical Component. 3. Allow more time during potential future project planning processes.
2. Even a 0% interest loan is yet another debt for a farmer.	<ol style="list-style-type: none"> 1. Consider supporting the uptake of LLL via a subsidy, though, whether a subsidy suffices to generate uptake cannot be fully predicted by the analysis. Revise the suitability of repayment periods based on rice production cycles in the target region. 2. Discuss with the NAMA Facility on to what extent supporting collateral for BAAC (e.g., through guarantees) for the service providers or even farmers would be an option for the NSP to (a) generate access to finances and (b) reduce investment risk for economically weak entrepreneurs.
Lessons and recommendations for the NSP Team and the NAMA Facility	
3. Introducing a new technology in agriculture is likely to need more time for uptake than anticipated when designing the project	<ol style="list-style-type: none"> 1. <u>NSP</u>: Seek discussion with NAMA Facility regarding (no cost) extension. Allowing for at least one more rice season (2023) to generate uptake should be discussed. 2. <u>NSP</u>: Convince farmers bit by bit, starting with younger farmers. 3. <u>NAMA Facility</u>: Allow more time during any potential future project planning processes. This should help ensure causal pathways are valid and properly articulated.
5. Access to finance for farmers needs to be linked to their financial literacy	<ol style="list-style-type: none"> 1. <u>NSP</u>: Assess options to address aspects of financial literacy and economic farming within the NSP. 2. <u>NAMA Facility</u>: Encourage future/ other NSPs in agricultural smallholder settings to consider the need for parallel activities on financial literacy.
6. Access to finance in the agricultural sector needs to be based on a thorough analysis of credit worthiness and credit willingness of farmers and service providers.	<ol style="list-style-type: none"> 1. <u>NSP</u>: See recommendations related to lesson number 2. 2. <u>NAMA Facility</u>: Encourage other NSPs in agricultural smallholder settings to consider the eligibility/willingness of farmers/service providers to access offered financial products.
7. Working on climate change issues in the agricultural sector needs an	<ol style="list-style-type: none"> 1. <u>NSP</u>: Keep tailoring your messages about the NSP benefits to the audience: focus on mitigation towards the NAMA Facility and adaptation towards farmers.

⁵ See section 5.2 for more elaborated and further recommendations.

Lesson	Recommendations
adaptation and a livelihood component.	2. <u>NAMA Facility</u> : Explore options for inclusion of adaptation/ livelihood aspects within the NAMA Facility. Pure mitigation projects do not address the immediate needs of (smallholder) farmers regarding climate change.

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List of abbreviations

ACFS	National Bureau of Agricultural Commodity and Food Standards
AWD	Alternate wetting and drying
BAAC	Bank of Agriculture and Agricultural Cooperatives
CAPSAS	Chainat, Ang-thong, Pathum Thani, Singburi, Ayutthaya, Suphanburi (<i>focus provinces</i>)
CPD	Cooperative Promotion Department
COVID-19	Corona Virus Disease 2019
DoAE	Department of Agricultural Extension
ELE	Evaluation and Learning Exercise
ELEQ	Evaluation and Learning Exercise Question
EQ	Evaluation Question
FC	Financial Component
FW	Framework
GAP	Good Agricultural Practices
GHG	Greenhouse Gases
GIZ	Gesellschaft für Internationale Zusammenarbeit
IRRI	International Rice Research Institute
LLL	Laser land levelling
Logframe	Logical Framework
MoAC	Ministry of Agriculture and Cooperatives
MoNRE	Ministry of Natural Resources and Environment
M&E	Monitoring and Evaluation
MRL	Maximum Residue Level
MRV	Measurement, Reporting, and Verification
NAMA	Nationally Appropriate Mitigation Action
NDC	Nationally Determined Contributions

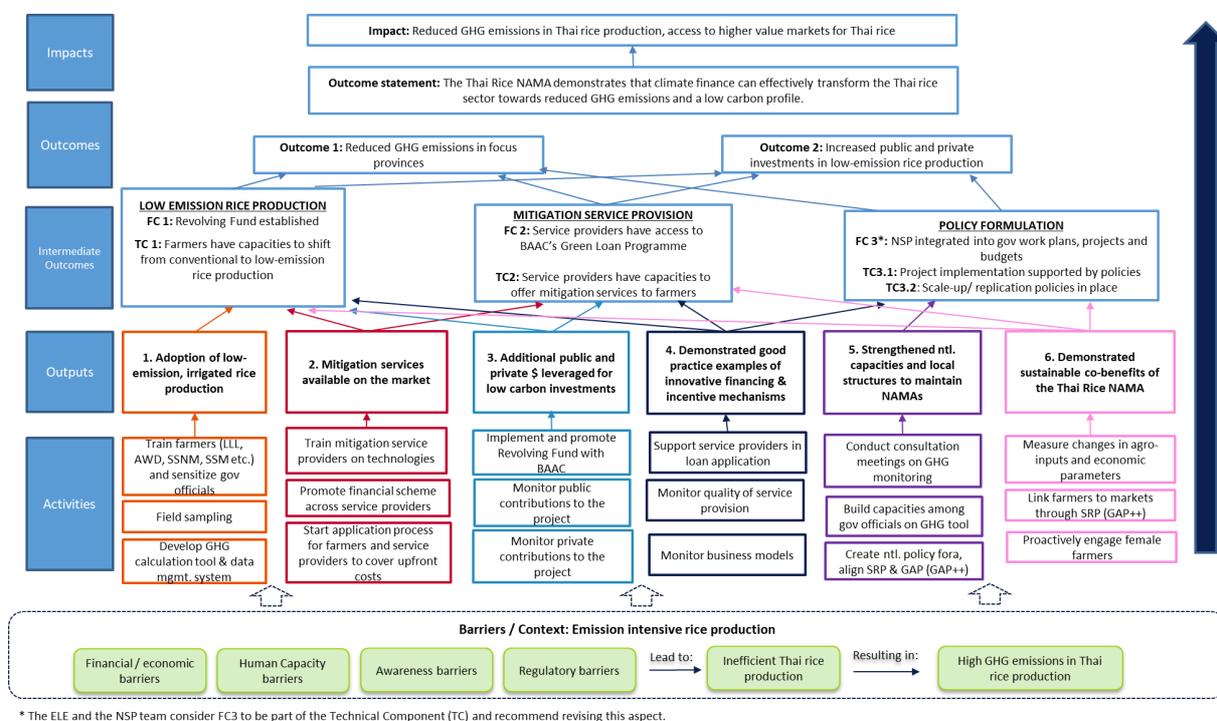
NSP	NAMA Support Project
OAE	Office of Agricultural Economics
OECD DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
ONEP	Office of Natural Resources and Environmental Policy and Planning
OPM	Oxford Policy Management
PP	Project proposal
QA	Quality Assurance
QC	Quality Control
RAG	Red Amber Green
RF	Revolving Fund
RD	Rice Department
RID	Royal Irrigation Department
SMEs	Small- and medium-sized enterprises
SP	Service Provider(s)
SRP	Sustainable Rice Platform
TC	Technical Component
tCO ₂ e	tonnes of carbon dioxide equivalent
ToC	Theory of Change
TSU	Technical Support Unit, NAMA Facility
WGs	Working Groups

1 Introduction

1.1 Overview of the NSP

The Thai Rice NSP is currently being implemented (April 2018 - March 2023) with a total budget of 14.9 million Euros. The NAMA Support Organisation (NSO) is the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. The main implementing partners are the Thai Ministry of Agriculture and Cooperatives (MoAC) – specifically the Rice Department (RD), the Ministry of Natural Resources and Environment (MoNRE) – specifically the Office of Natural Resources and Environmental Policy and Planning (ONEP), the Bank of Agriculture and Agricultural Cooperatives (BAAC) and the Sustainable Rice Platform (SRP). The Thai Rice NSP aims to enable a shift towards low-emission rice production in Thailand.

Figure 1. Theory of Change of the Thai Rice NAMA Support Project



Source: ELE team's interpretation of the NSP original proposal, validated in the ELE Kick-off Workshop

Note: See larger figure in Annex A.

The problem: Thailand ratified the Paris Agreement in September 2016, thereby officially committing to its Nationally Determined Contribution (NDC). Agriculture is the second-largest greenhouse gas (GHG) emitting sector in Thailand after energy, with rice production responsible for almost 60% of emissions from agricultural activities. Thailand is the 4th largest emitter globally of rice-related GHGs – mainly methane. A lack of incentives for farmers is preventing their transition to low-emission rice production. Farmers lack financial resources to take on capital-intensive practices, and there is a lack of mitigation service providers. Systemic barriers include gaps in existing national standards and

regulations regarding mitigation in agriculture and a lack of suitable large-scale incentive mechanisms to target the rice value chain (see also Figure 1; project proposal (PP) 2018).

The impact and outcomes of the NSP: The expected impact of the project is a reduction in methane and nitrous oxide emissions through farmers switching from conventional to low-emission rice production. It expects to achieve this through the development of the Government of Thailand's 'Good Agricultural Practices (GAP)++' Standard⁶, an enhanced version of the standard with strengthened environmental and social aspects, to enable farmers to distinguish their rice from conventional production and thus sell to higher-value markets. Increased market demand for sustainable rice should sustain farmers' interest in switching to low-emission production, leading to long-term impact on the Thai rice sector.

The NSP expects to deliver this impact through six main intervention areas (outputs): (1) promoting the adoption of low-emission, irrigated rice production, (2) introducing mitigation services on the market, (3) leveraging additional public and private funds for low-carbon investments, (4) demonstrating good practice examples of innovative financing and incentive mechanisms, (5) strengthening national capacities and local structures to support NAMAs, and (6) demonstrating sustainable co-benefits of the Thai Rice NAMA.

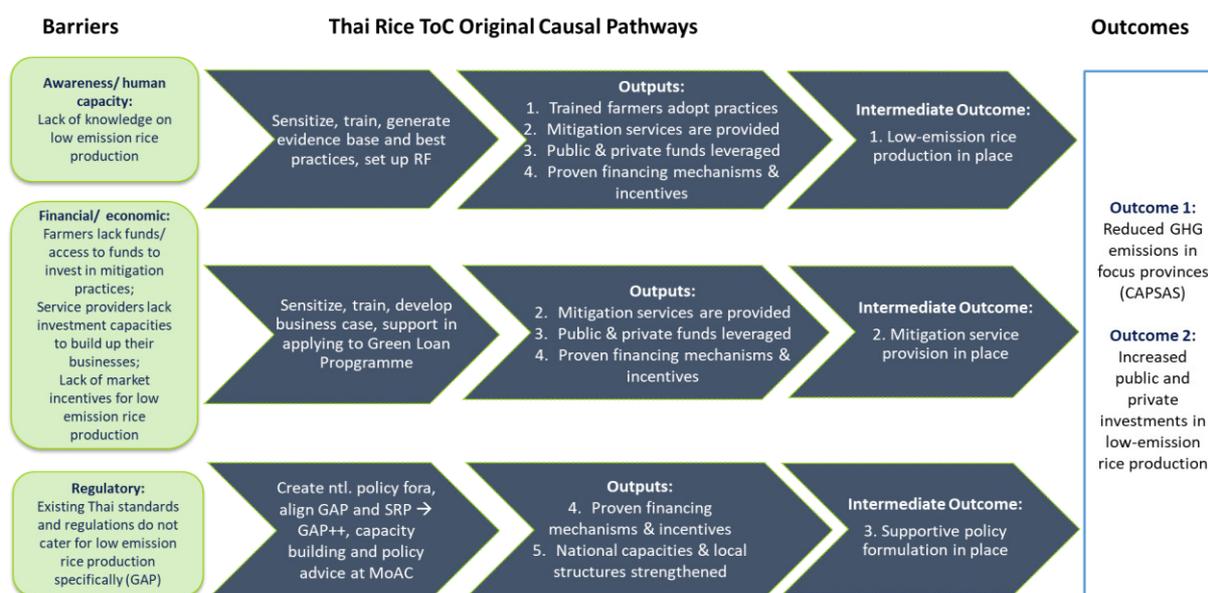
For the purposes of the mid-term ELE, three intermediate outcomes, which represent the immediate results of the delivery of the six outputs, have been agreed with the NSP Team: (1) low-emission rice production is in place, (2) mitigation service provision is in place and (3) supportive policy formulation is in place. The specific contribution of the two NSP components (technical and financial components) to each intermediate outcome have been identified. Ultimately, these intermediate outcomes feed into the expected outcome: the Thai Rice NAMA demonstrates that climate finance can effectively transform the Thai Rice Sector towards reduced GHG emissions and a low-carbon profile. For the purposes of the ELE, this outcome statement has been broken down into two parts: Firstly, reduced GHG emissions in the focus provinces Chainat, Ang-thong, Pathum Thani, Singburi, Ayutthaya, Suphanburi (CAPSAS); and secondly, increased public-and private investments in low-emission rice production.

The original causal pathways: To address the problem and barriers identified for the delivery of the outcomes presented, the NSP Theory of Change (ToC) foresees three main causal pathways (see Figure 2). The NSP aims to enable investments in low-emission rice farming and the adoption of relevant agricultural practices by farmers supported by mitigation service providers, governmental support, and market incentives.⁷ It expects to achieve this by addressing barriers related to awareness, human capacities, existing/ lacking regulations, and access to finance.

⁶ The existing national GAP standard is enhanced regarding social and environmental aspects in line with the criteria of the standard from the Sustainable Rice Platform (SRP). This enhanced standard is referred to as GAP++ to show it builds on existing approaches.

⁷ Mitigation service providers are individuals or enterprises advising farmers on low-emission rice farming practices.

Figure 2. Original Causal Pathways of the Theory of Change of the Thai Rice NSP



1.2 Focus of the Evaluation and Learning Exercise

Following its Terms of Reference⁸, this ELE seeks to address the following General ELE Questions (ELEQs):

- Has the NSP been achieving its results?
- Has the NSP started to trigger transformational change?
- What was learnt from the NSP so far?

The General ELEQs presented above were broken down and operationalised in Specific ELEQs that are answered in this report. In Table 1, the General and Specific ELEQs are mapped against the Organisation for Economic Co-operation and Development’s Development Assistance Committee’s (OECD DAC) evaluation criteria⁹, which are widely used as international standards for evaluations of development interventions. Reference to the relevant report section where each ELEQ/ evaluation criterion is treated is also given. Finally, the specific ELEQs were broken down further into sub-questions, which are included in the official ELE Matrix, approved by the NAMA Facility Technical Support Unit (TSU), and reported in Annex C.

Table 1. General and specific ELE questions and their link to the ELE Report sections

General ELE Question	Specific ELE Question	Evaluation criteria (relevant ELE Report section)
Is the NSP achieving its planned results?	1. To what extent does the NSP address an identified need (of the Thai government, mitigation service providers and rice farmers)?	Relevance (Section 3.1)

⁸ The ELE Terms of Reference is provided in Annex H.

⁹ Relevance, Effectiveness, Efficiency, Impact, Sustainability. ELEs have an additional a 6th criterion, namely Learning.

	2. To what extent has the NSP been achieving intended intermediate outcomes (and unintended ones)?	Effectiveness (Section 3.2)
	3. To what extent is the relationship between inputs and outputs timely and to expected quality standards?	Efficiency (Section 3.3)
Is the NSP starting to trigger transformational change?	4. What evidence is there that the NSP is likely to contribute to the intended impact in the ToC (incl. transformational change)?	Impact (Section 0)
	5. What is the likelihood that the outcomes will be sustained after the end of the NSP funding period?	Sustainability (Section 3.5)
What has been learnt from the NSP so far?	6. What key lessons can be learnt to the benefit of this NSP or other projects or NSPs in achieving their results?	Learning (Section 5.1)

1.2.1 The NAMA Facility Transformational Change Framework

Enabling Transformational Change is one of the aims of the NAMA Facility, and therefore of NSPs. The NAMA Facility defines Transformational Change as “*Catalytic change in systems and behaviours resulting from disruptive climate actions that enable actors to shift to carbon-neutral pathways*”¹⁰. The NAMA Facility Theory of Change explains how Transformational Change is expected to be achieved through its outputs and outcomes. The Theory of Change is broad, and there are different ways in which Transformational Change can be achieved through the NSPs. Figure 3 illustrates three dimensions¹¹ that interact and reinforce each other to produce NSP-induced Transformational Change. Each NSP will work on different elements of the three dimensions to define its own pathway to or “recipe” for Transformational Change. A more detailed explanation of the Transformational Change framework summarised in Figure 3 is presented in Annex B.

The ELE used the Transformational Change Framework to assess the NSP’s progress towards its impact in Section 3.4. In the evidence gathered through the ELE, the evaluators looked for “signals” of the materialisation of the three dimensions and classified them as early, interim, and advanced signals according to the definitions in Table 2. The right side of Figure 3 shows the minimum level of signals of each of the three transformational change dimensions that NSPs are expected to have achieved by their mid-line and end-line respectively.

¹⁰ <https://www.nama-facility.org/concept-and-approach/transformational-change>

¹¹ Here, a dimension is intended as the changes brought by the NSP implementation in relation to certain key aspects of transformational change.

Figure 3. NAMA Facility Transformational Change Framework for NSPs

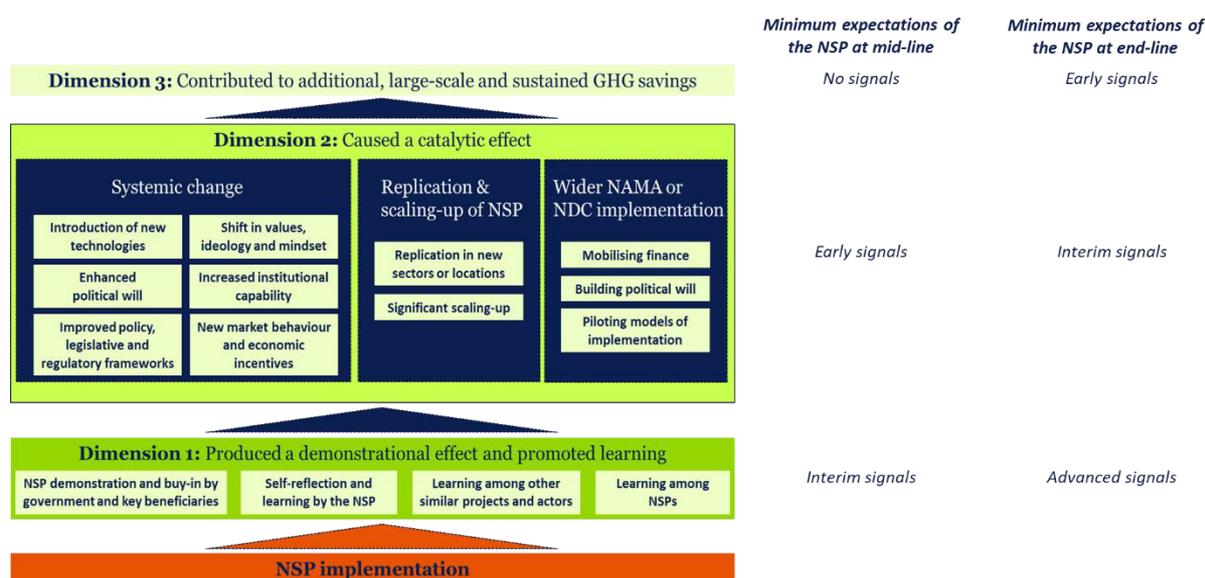


Table 2. Transformational Change “Signals” assessment by ELEs

Signal level	Definitions
No evidence	Evidence suggests little to no progress is being made in line with the ToC causal pathways to Transformational Change.
Early signals	There is emerging evidence of the transformation related to the dimension, or the foundations for the transformation have been laid by the NSP but no signals of the change are present.
Interim signals	Evidence shows some signals that the transformation related to the dimension is underway and it is likely to continue.
Advanced signals	Evidence shows strong signals that the transformation related to the dimension is underway and there is little doubt that it will continue.

2 Methodological approach

The ELE entailed activities under four main phases: Inception, fieldwork, analysis, and reporting.

During the Inception Phase, the ELE Team conducted a review of key NSP documentation including the NSP Proposal, Annual and Semi-Annual Reports, the NSP Monitoring and Evaluation (M&E) Framework, and public documents such as Thailand’s Roadmap to the NDCs and the SRP Standard for Sustainable Rice Cultivation (see the full list of documents reviewed in Annex G). Following that, the team used the information from the document review to **develop a retrospective ToC diagram** (see Figure 1 and 0 for the validated version).

The data from the document review and the ToC served as a reference point to **develop a tailored matrix including the ELEQs** (ELE Matrix – see Annex C), which the ELE Team **integrated with the initial hypotheses** to be tested by the fieldwork. At the same time, the ELE Team worked on the organisation of the fieldwork interviews. For that, **they applied a purposive sampling approach of the key informants according to their level of involvement with the NSP**. In this way, the ELE Team grouped them in **3 general categories: (i) NSP Team**, i.e. members of the NSP Delivery Partners and Implementing Partners, the performance of whom is directly assessed by the ELE; **(ii) NSP Stakeholders**, i.e. individuals who have actively supported one or more NSP activities and beneficiaries (farmers and service providers); and **(iii) Third Parties**, i.e. who were not involved with the NSP, but are working on similar or relevant issues – these interviews served to verify context-specific elements. This helped the ELE Team to test and triangulate the evidence and to assess its strength. Table 3 summarises the number of interviews and people interviewed (some calls had multiple interviewees) by each sampling category. For a detailed list of the institutions and organisations interviewed, refer to Annex G.

Table 3. Overview of the number of interviews and interviewees by sampling category

	NSP Team	NSP Stakeholders	Third Parties	TOTAL
No. interviews	6	16 (incl. 2 with beneficiaries)	2	24
No. interviewees	9	20 (incl. 3 beneficiaries)	2	31

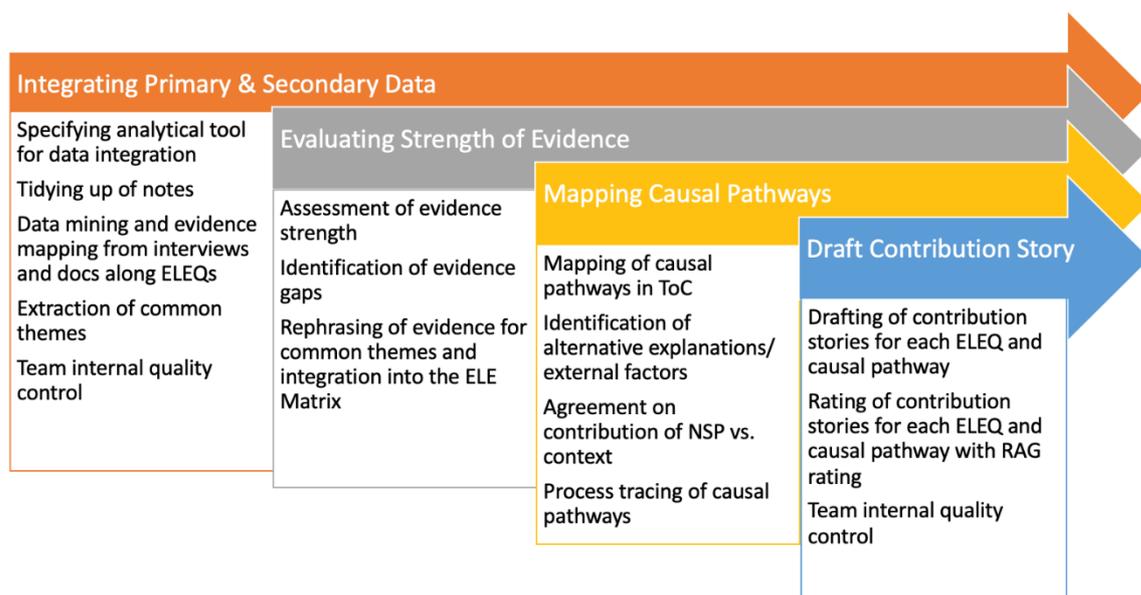
The Fieldwork Phase began with an ELE Kick-Off Workshop on 5 July 2021. The workshop was conducted in a virtual setting and was attended by 11 participants from the NSP Team and ELE Team. The purpose of the workshop was to review, clarify and validate: (i) purpose, scope, and expectations of the ELE and (ii) the NSP’s ToC. During the workshop, after an introduction, a Q&A session on the ELE purpose and scope, and a discussion about the NSP Team’s expectations from it, the NSP Team had the chance to present their understanding of the key elements of the NSP ToC. This was followed by questions from the ELE Team, and the ELE Team then presented their point of view on the NSP ToC. **The key outcome of the Kick-Off Workshop was the finalisation of a validated NSP ToC diagram** (see 0).

The initial workshop was followed by **13 days of primary data collection using in-depth interviews with the NSP Team and Key Informant Interviews (KIIs) with NSP Stakeholders and Third Parties.**

The **general ELE Interview Guides** prepared during the inception phase **were reviewed and tailored to the specific interviews on a daily basis**. The Guides followed the ELEQs and the general structure was kept consistent among interviewees from the same sampling category, but the content and wording of the questions were tailored to capture key knowledge from specific informants, cover knowledge gaps, or simply test hypotheses or triangulate specific information. Where necessary, an interpreter was involved. Further, an evaluation diary was used, where each evaluator noted down main takeaways and questions daily. This allowed for the three evaluators to exchange information on a real-time basis as all three evaluators could not participate in each interview. **Following the intense period of interviews, the ELE Team was able to brainstorm and update the ELE Matrix with more complete and updated versions of preliminary answers**. The updated ELE Matrix was used to develop the slides for the **ELE Validation Workshop on 29 July**, also held in a virtual setting, with the NSP Team. The main objectives of the Validation Workshop were to **review, discuss and validate the preliminary ELE findings, and identify ways to adapt the NSP based on the lessons identified**. The fruitful discussion on preliminary ELE findings allowed the ELE Team to validate them in collaboration with the NSP Team and identify and discuss recommendations as laid out in section 5.

The final part of the fieldwork moved the ELE Team into the **Analysis Phase**. Figure 4 illustrates the different steps taken to analyse the data.

Figure 4. Summary of the ELE Analysis Methodology



For drafting the contribution story, a Red-Amber-Green (RAG) rating was used. Section 3 of this report uses the evidence and emerging themes discussed above to present the ELE Team’s findings in terms of the performance of the NSP against the OECD DAC criteria (relevance, effectiveness, efficiency, impact, and sustainability) and (under the effectiveness criteria) its performance against the ToC intermediate outcomes. Performance is summarised for each DAC criterion and/ or ToC intermediate outcome, in the form of a RAG score, as follows: Green – good/ very good performance; Amber - some progress but problems also identified; Red - serious deficiencies in the performance.

To assess the strength of the evidence behind the emerging themes extracted from the interview notes or documents, the ELE Team cross-referenced each emerging theme with its sources. Then, the

Team went through all the emerging themes again and rated the strength of the evidence behind each of them according to the score card in Table 4.

Table 4. Score card for assessing the strength of evidence

		Variety (number of types of sources (TS) reporting the evidence)		
		1 TS only	2 TSs	3 TSs
Quantity (number of sources reporting the evidence)	1 interview only	Single source		
	2 interviews	Weak evidence	Medium evidence	
	3+ interviews	Medium evidence	Strong evidence	Very strong evidence

The final ELE phase is the Reporting Phase. During this phase, the ELE Team compiled this report which has undergone internal quality assurance and one round of comments from the NSP Team, the NAMA Facility TSU and its Donors.

The COVID-19 pandemic imposed some methodological challenges on the ELE. The main limitation was the need to conduct the fieldwork in a virtual mode. Although the ELE Team was able to arrange interviews with an appropriate number and variety of stakeholders, the virtual nature of the interviews limited it in two ways. Firstly, the ELE Team was not able to be personally immersed in the NSP’s national and local context. To some extent, this fact may have limited their full understanding of the contextual dynamics influencing the NSP, although the participation of an experienced local consultant in the ELE Team has mitigated this issue to a great extent. Secondly, given travel between interviews was not required it was possible to schedule many back-to-back interviews, which meant the team had to concentrate and absorb large amounts of information for a long duration. This challenge was reduced by extending the field work phase from the initially foreseen two weeks to three weeks to allow the interviews to be more spread out, and by the participation of at least two ELE Team members in all interviews.

3 Key Findings

In this section, the ELE Team presents the main findings of the ELE. These are structured according to the ELE Questions in Table 1. At the beginning of each section, a RAG rating of the strength of the NSP's contribution story to the ToC and the OECD DAC criteria is included, following the scale: Good/Very good = Green; Problems = Amber; Serious deficiencies = Red; Not enough info to rate = Grey.

3.1 Relevance of the NSP

Relevance

1. To what extent does the NSP address an identified need (of the Thai government, mitigation service providers and rice farmers)?

To evaluate the relevance of the NSP, the ELE Team assessed how far the project addresses an identified need of the Thai government, the mitigation service providers and rice farmers (ELEQ 1), the alignment of the NSP with public priorities (ELEQ 1.1) and the appropriateness of the project's financial mechanisms (ELEQ 1.2).

The Thai government signed the Paris agreement in 2016. Agriculture is the second-highest emitting sector, with rice cultivation accounting for 60% of these emissions. Addressing GHG emissions in the rice sector is thus highly relevant for the Thai government. However, Thailand's NDC thus far does not include mitigation targets for the agricultural sector. According to the Annual Report 2018 (AR2018) under the Paris Agreement and as confirmed during several interviews, the Thai government is planning to set mitigation targets for the agriculture sector and is currently studying the mitigation potential of different options. **The NSP's results are foreseen to inform these public processes, and as such, the NSP is addressing the government's need for understanding opportunities and limitations in reducing GHG emissions in the rice sector (ELEQ 1 + ELEQ 1.1).**

The NSP focuses its activities on four agricultural practices: Laser land levelling (LLL), site-specific nutrient management, alternate wetting and drying (AWD) and straw and stubble management. According to the ELE, AWD bears the biggest potential to reduce GHG emissions in rice production. These agricultural practices (mostly LLL and AWD) also provide adaptation benefits, as well as GHG emission reductions. AWD and LLL together are considered to increase water efficiency resulting in 50% less water needed for rice production. Reducing the water needed and improving water management will strongly benefit farmers. **Therefore, it is the adaptation benefits provided by these agricultural practices which will meet the farmers' immediate needs, not the mitigation benefits (ELEQ 1).**

So far, the NSP has managed to build up one service provider for low-emission agricultural practices (see section 3.2). During interviews mainly with NSP Team staff, the needs of service providers were described as access to financial resources for building up their business, and a solid business case including a lucrative return on investment based on farmer demand. Unfortunately, neither the documents reviewed, nor the interviews can confirm the existence of broad farmer demand for mitigation services. **Low demand from farmers affects the investment willingness of potential**

service providers. Moreover, the hardship caused by two extreme drought events in 2019/2020 and 2020/21, and the COVID-19 pandemic is reducing farmers’ willingness and ability to invest (ELEQ 1).

The NSP, as per the original proposal, planned to work via a Revolving Fund (RF), targeting farmers, and BAAC’s Green Loan Programme for service providers. By promoting these two financial instruments and by building up the capacity of farmers to apply for them, the project assumed it would generate access to the necessary funds for investing in low-emission rice production. However, Thai rice farmers are heavily over-indebted already. According to the interviews, **farmers consider any additional cost a debt they are not willing/ able to take on.** The RF as proposed by the NSP would represent yet another debt for the farmers. Many farmers also did not qualify for BAAC’s lending programmes due to existing debts. In addition, **those farmers not owning their land were reported to be hardly prone to invest in improving the land quality** through LLL, as, it may result in the land increasing in value and being taken back by landowners, who will then reap the benefits of their investment. Therefore, **farmers’ investment behaviour is not only driven by access to finances** (which would be covered by the RF), **but also by other factors that heighten their risk-aversion** (ELEQ 1.2 and 1.3).

Furthermore, it was initially assumed that **mitigation service providers would be established agricultural small and medium-sized enterprises (SMEs), such as input providers. However, “advanced farmers” are more interested in becoming mitigation service providers than such existing SMEs.** “Advanced farmers” are farmers managing their fields well, resulting in good financial returns; they are also referred to as “lead farmers”. **However, BAAC has strict criteria not allowing farmers with an overdue debt or farmers who reached their credit ceiling to access the Green Loan Programme.** This limits the possibility of most farmers, including advanced farmers of becoming service providers via the scheme. Consequently, the **NSP’s strategy** of generating interest among potential service providers and enabling them to apply (i.e., creating demand) for BAAC’s Green Loans seems **useful, but not sufficient** to guarantee their actual access to the loans, as they will still need to pass the credit assessment by BAAC, which could represent the real barrier to access (ELEQ 1.2 and 1.3).

The **public sector’s investment willingness is shown, e.g., in the promotion of reduced burning practices.** According to some stakeholders, their rationale behind this may not be based on mitigating GHG emissions but on mitigating air pollution, though.

Based on the evidence presented above, the ELE Team considers the performance of the NSP in terms of relevance (needs of target groups, alignment with policy level, appropriateness of financial instruments) as partially appropriate, and consequently marked this evaluation criterion as “amber”.

3.2 Effectiveness of the NSP

Effectiveness	2. To what extent has the NSP been achieving intended intermediate outcomes (and unintended ones)?
	Intermediate Outcome 1: Low-emission rice production is in place
	Intermediate Outcome 2: Mitigation service provision is in place

3.2.1 Intermediate Outcome 1: Low-emission rice production is in place

The NSP has so far had limited success in promoting its four mitigation practices (AWD, LLL, site-specific nutrient management and straw and stubble management), referred to as mitigation technologies by the NSP.

According to many interviewees, AWD has been promoted by the Thai government for a long time, but adoption among rice farmers remains low. Despite this being a simple practice at low cost, according to the agronomists interviewed, farmers have so far not seen the need to change existing practices because of indicated hidden costs for more visits to the field and fuel costs for water pumping.

Nutrient management, straw and stubble management are also being promoted by the Thai government for years. Farmers have hardly adopted the practice, but knowledge on how to enhance straw and stubble management, particularly reducing burning practices, exists as indicated by many interviewees. The added value of the NSP regarding AWD and straw and stubble management has been reported as bundling the practices and promoting them to farmers as low-emission rice production. Alongside compliance with the SRP standard (nationally promoted as GAP++) the aim is to market the rice differently than conventional rice.

LLL was intended to further enhance the efficiency of AWD. For the Thai rice farmers in CAPSAS, LLL is a new technology and was reported to have brought attention from the farmers to the technology package. Nonetheless, uptake so far is limited due to lacking supply and risk-averse investment behaviour in new farming practices (see also section 3.2.2).¹²

Regarding the on-site implementation of the promoted practices, the NSP has so far focused on LLL and AWD. The development of services for straw management is planned, while site-specific nutrient management is a free public service, and therefore would not benefit from enabling private sector service providers of the type envisioned by the NSP, according to interviewees and the NSP annual reports. **So far 267 farmer groups have been reported to implement the promoted practices. Targeted for 2020 were 800.** To train farmers, the NSP works via “smart farmers”, i.e. advanced farmers acting as trainers of trainers (ToT). **So far 394 smart farmers have been trained, while 900 were targeted for 2021. The main reported reasons for delays in the rollout of the promoted practices are COVID-19 restrictions impeding the training of farmers and the constraints to accessing financing (which remained given the inappropriate design of the financial support envisioned, see section 3.1).**¹³

Stakeholders as well as part of the NSP team consider the **ambition to reach 100,000 farmers in the CAPSAS region too high** even under normal conditions. For instance, the Department of Agricultural Extension (DoAE), which is responsible for delivering public extension services to Thai farmers, is

¹² This also relates to mandatory core indicator M1, see also Annex F.

¹³ This also relates to mandatory core indicator M2, see also Annex F.

working with 5,000 rice farmers in 23 provinces while the NSP aims to reach 100,000 farmers in six provinces.

The four promoted technologies by the NSP are part of Thai GAP++ (see section 1.1) criteria to meet the standard. The international standard of the Sustainable Rice Platform (SRP) is being taken up by the Thai government, which so far worked with their own national standard under the name of GAP. To align with the internationally acknowledged SRP standard, the Thai government amended the national GAP standard and, to show it is nothing completely new, renamed it GAP++. SRP/ GAP++ attracted some rice traders committed to buying sustainable rice from the farmers supported by the NSP. These traders report having invested in a quality control system and a segregated rice supply chain to adhere to the SRP standard (this corresponds to mandatory core indicator M5, see Annex F). To date, 108,472 tons of low-carbon rice have been produced and are verifiable under the SRP standard as indicated in the Annual Report 2020. Interviewed farmers, however, were not part of delivering this rice and therefore could not verify this. Nonetheless, it indicates that the SRP/GAP++ standard has the potential to catalyse a sustainable rice supply chain.

Based on falling short on defined targets of reached farmer groups and smart farmers, whereas over-achieving the targeted volumes of SRP compliant rice and having training structures and approaches in place, this outcome is rated “amber”.

3.2.2 Intermediate Outcome 2: Mitigation service provision is in place

The NSP has focused on supporting mitigation service providers for LLL, as it offers the best business case according to NSP studies and is so far not offered by any other agency in the rice sector. LLL has been used in Thailand by plantation businesses in the sugar cane sector, but rice producers have hardly been exposed to it. To promote LLL, the NSP organised field days where farmers could witness how a field levelled by LLL reduces the water needed in production, which is reported to be a valuable benefit for farmers experiencing drought.

However, uptake of the LLL business model among service providers has been very limited. The NSP initially expected established SMEs with more than 10 staff to enter the market. Those interviewed suggested that actually “advanced farmers” are more likely to be interested in branching out into LLL service provision. However, until there is actual demand from farmers for these services (i.e., when farmers are willing to pay for them (see section 3.1)), it seems unlikely to see an increase in LLL service providers.¹⁴

The NSP has tried to address the issue and build farmer demand, including through seven demonstration plots and conducting field days. However, the interviews showed that this has not yet been successful. The BAAC Green Loan Programme has also proven unsuccessful in providing financial support to potential service providers given it cannot support farmers with overdue credits, over-exhausted credit volumes or lack of collateral. (see section 3.1). Indeed, **so far only one pioneer service provider has entered the LLL market, while the target for 2021 was to have 210 service**

¹⁴ This also relates to mandatory core indicator M5, see also Annex F.

providers. And according to its own indications, this service provider does not make a living out of the LLL service and only offers the service occasionally.

With NSP support, one lead farmer successfully applied for a government subsidy of 50% to buy LLL equipment for their farmer group. This is an indication that subsidies might enhance LLL uptake. At the same time, having just one service provider offering LLL services limits broadening demand. To overcome these challenges the NSP bought six sets of LLL equipment available for rent against a fee per hectare. Several interviewees indicated LLL requests from outside CAPSAS, **suggesting upscaling may be possible**, though COVID-19 travel restriction in Thailand will challenge further promotion.

The RF was intended to be an innovative financial mechanism to enable access to finance by farmers for LLL services. The RF, handled by BAAC, was foreseen to have an 8.4 million Euros budget, with an initial sum of 2 million Euros being currently managed. The RF functioning is the following. The farmers apply through the NSP, which matches applications with a service provider. The service provider delivers the work, the farmer signs off the delivered service and BAAC releases the money. There is no interest charge, and repayment is foreseen in three tranches across three rice seasons. Assuming two seasons per year, repayment is due 1.5 years after service delivery. **However, according to those interviewed, farmers did not understand this approach and considered the RF another loan by BAAC. Also, the repayment period was reported too short by some interviewees.** According to AR2020, BAAC has so far disbursed about 17,625 Euros to service providers, pre-financing LLL services for 33 farmers.¹⁵

Based on the evidence collected during the ELE this outcome is rated “red”. The reasons why the NSP has failed to establish mitigation service providers can be summarised as a lack of demand from farmers for these services (partly because of reduced income from drought) and therefore no business rationale for entering the market, lack of interest by existing agricultural service providers (SMEs) to move into the rice sector, mismatch in the eligibility criteria for BAAC’s Green Loan Programme and those interested in becoming service providers, and apparently a lack of understanding of the functioning of the RF.

3.2.3 Intermediate Outcome 3: Supportive policy formulation is in place

Interviewees confirm that the NSP has offered valuable support in the coordination between the Rice Department and the National Bureau of Agricultural Commodity and Food Standards (ACFS) on the development and the (trial) implementation of GAP++. Its role was reported as supporting the interpretation of the international SRP standard, the provision of field evidence, and the national transposition of the SRP into the GAP++ standard in July 2021 by the Thai government. Without this national endorsement, budgeting to support the activities would be impossible for government agencies. This feeds into core indicators M3 on catalysing impact and M4 on mobilising public finance (see Annex F). However, as the SRP is the standard used internationally, ACFS is also preparing a document benchmarking GAP++ with the SRP to boost the international trade of Thai rice. SRP compliant rice is already available on international markets. In Thailand, SRP-compliant rice production so far focused on the Northeast region in Thailand which grows Jasmin rice.

¹⁵ This also relates to mandatory core indicator M5, see also Annex F.

In summary, the ELE found evidence that the NSP actively supports low emission technology and GHG data measurement by e.g., field trials and awareness-raising by e.g., facilitating dialogue with public actors feeding in field-trial-experiences. These results are taken up by the Thai government in policy formulation, budgeting, and activity planning. Several interviewees confirmed that the NSP enhances GHG measurement in the Thai rice sector to develop NDC's mitigation targets in the agricultural sector.

Based on the above, the ELE team rated the progress towards this intermediate outcome as “green”.

3.2.4 How external factors impacted the NSP's effectiveness

Three main external factors have been impacting the NSP's effectiveness. Firstly, COVID-19 impeded grouping farmers for training and other activities, which in turn delayed the capacity building activities of the NSP. Secondly, drought has reduced farmers' investment capacities but has also increased their interest in the water-saving practices advocated by the NSP, i.e., AWD and, to some extent, LLL. And thirdly, the eligibility criteria for BAAC's Green Loan Programme have impeded building up a market for mitigation service providers.

3.3 Efficiency of the NSP

Efficiency

3. To what extent is the relationship between inputs and outputs timely and to expected quality standards?

The NSP progress reports, as well as almost all interviewees, clearly confirm a **delay in project implementation**. One reason for this is that the grant agreement between GIZ and BAAC for working on the Financial Component took around one year to be signed. Reasons for this delay were indicated as lengthy discussions and procedures and a lack of a common language. Many procedures and relevant documents were only available in Thai, which led to extra time spent on translation. Developing the necessary cooperation and legal structure thus delayed actual project implementation. Furthermore, establishing the price for LLL service delivery took longer than planned. It was originally planned that BAAC would establish this price based on inputs from existing mitigation service providers (SMEs). As SMEs as mitigation service providers were not encountered, this had to be done via field trials instead. Finally, several interviewees indicated BAAC's approval procedures for loans to be complex, lengthy, and off-putting for applicants, leading to further delays. **Regarding the Financial Component, procedural and institutional bottlenecks with BAAC (see above) right from the project's start have thus led to major delays. These delays have also spilt over to the Technical Component that had to wait for the Financial Component to develop.**

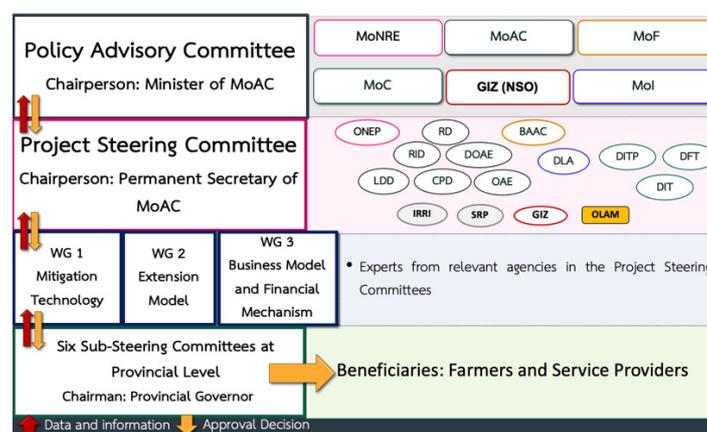
In addition, according to many interviewees, **the implementation of the Technical Component has been also challenged by drought in 2019/2020 and 2020/21, and the COVID-19 pandemic** (see also section 3.2), factors that hampered the NSP's effectiveness as well as its efficiency. For example, the drought delayed the potential deployment of the LLL equipment made available for rent by the NSP (see section 3.2). This equipment arrived in April 2021, which coincided with the Thai New Year, when farmers are hardly willing to engage in field activities according to several interviewees. Based on the following drought, the soil was then too dry for land preparation, which requires rain. After the

drought, the monsoon was reported to have started earlier, with heavy rainfall impeding the sowing season and therefore a full crop cycle. The next production cycle starting in November 2021 thus presents the first opportunity to offer the bought LLL equipment to farmers for field implementation. At the same time, the COVID-19 pandemic has been prohibiting in-person training and demonstrations by the NSP. In total, the project **implementation is delayed by around one year, i.e., two planting seasons.**

In terms of the **appropriateness of the NSP’s monitoring function**, the analysis of the progress reports as well as monitoring data confirmed that it is **up to standards**. Reports are consistent and monitoring is done continuously as per interview indications and available data. However, inconsistencies in project design led to some outputs being formulated on outcome level, e.g., output 3, which, in turn, implies using the same indicators for public and private finance leveraged on outcome (M4 and M5) and output level. **Collaboration among stakeholders could be improved** according to several interviewees. This relates to BAAC as well as to farmers and service providers. The NSP covers a broad range of farmers regarding plot sizes, financial capacities, and their role in potentially being service providers and/ or beneficiaries of mitigation services. Therefore, according to some interviewees, establishing **differentiated communication approaches and material targeted to different audiences could improve the effectiveness of NSP’s communication**. For example, promoting LLL to advanced farmers may be done differently than promoting LLL to non-advanced farmers (see section 3.2).

Figure 5 lays out the NSP’s management structure and steering. The Policy Advisory Committee aims to ensure alignment and connectedness to the Thai government and the Project Steering Committee is the main decision-making entity of the NSP. 16 organisations are involved in the Project Steering Committee, though not all of them feel well informed and consider themselves as active project participants, as indicated by some stakeholders. Three working groups (WGs) lead technical project implementation and six sub-steering committees at the provincial level lead on-site implementation with farmers and service providers. Unfortunately, COVID-19 has been impeding in-person meetings, particularly of the Project Steering Committee, which may be one reason for some stakeholders to feel disconnected from the project, as indicated by a few interviewees. **Overall, the number of stakeholders involved is perceived by most interviewees to be quite high, thus slowing down processes. At the same time, analysis results highlight the need to involve all these stakeholders to ensure alignment with and uptake by the Thai government.** Suggestions on how to overcome this trade-off have not come up during the interviews.

Figure 5. Thai Rice NSP steering and cooperation structure



Source: Kick-off workshop

The interviews revealed as well that **different divisions and departments of the MoAC were not always aligned with NSP's objectives and processes**. The Rice Department is responsible for all issues regarding Thai rice production but has limited resources and extension staff for on-site activities. The Extension Department, in turn, has the mandate for all agricultural crops regarding extension services down to the sub-district level. Thus, extension activities at the sub-national level of the NSP require cross coordination outside the Rice Department, which is the implementation partner. Many decisions of the NSP must thus go up the hierarchy of the department level for approval. This **institutional challenge limits the efficiency of project implementation according to some interviewees**.

Based on the evidence presented above, the ELE Team considers the performance of the NSP in terms of efficiency as partly appropriate leading to an “amber” rating.

3.4 Impact of the NSP

Impact

4. What evidence is there that the NSP is likely to contribute to the intended impact in the ToC (incl. transformational change)?

The evidence that the NSP is likely to contribute to the intended impact in the ToC has been partially substantiated at midline. To understand if NSP implementation is in line with the expectations of the NAMA Facility's transformational change framework for NSPs' mid-line (see Figure 3 in section 1.2.1), the following three dimensions were examined: 1) Has the project produced a demonstrational effect and promoted learning (at mid-line interim signals expected); 2) Has it caused a catalytic effect (early signals expected); 3) Has it contributed to additional large-scale and sustained GHG savings (no-signals expected). See Annex B for more details on capturing NSP-induced transformational change and a description of the dimensions and Annex F regarding achievements towards core indicator M3 to catalyse impact.

Dimension 1: Demonstrational effect and promoted learning

There are critical challenges in the design and delivery of the project owing to which limited success has been seen in the uptake of its four technologies (AWD, LLL, site-specific nutrient management and straw and stubble management). **This has affected the NSP's ability to effectively gauge 'demonstrational effect' and scaling-up learnings to other partners and projects and the sector at large** (see section 3.1).

However, **the ELE can confirm that there are early signals of buy-in amongst government and key players and stakeholders**. Both the progress reports of the NSP and KIIs substantiated the fact that **MoAC is trying to reduce GHG emissions in rice farming through the Thai Rice NAMA project**. As part of the ongoing efforts to mainstream the agenda of this programme and embed its approach into governmental priorities, **the Rice Department has earmarked an in-cash contribution** of about 130,000 Euro for implementing the project, and a proposed budget request to the cabinet for purchasing LLL equipment (Annual Report 2020). Capacity building and training activities on sustainable and low-carbon rice practices for government officers, private companies, “smart farmers” (i.e. farmers that have been trained to train other farmers) As a result, trained officers and

smart farmers now have the capacity to provide training to rice farmers (**ToT model**). In addition, Rice Department officers now have the capacity to conduct **on-ground GHG measurements** including lab analysis and GHG calculation from the NSP demonstration plots. In addition to this, the Thailand Board of Investment (BOI) announced a grassroots economy support scheme that will support local organisations involved in the development of sustainable agricultural activities such as low-methane rice farming. This new addition is expected to encourage competent companies in taking part in the movement towards sustainable agriculture and reduce GHG emissions in the agricultural sector. This can be considered a direct positive contribution of the NSP to the long-term functioning of the Measurement, Reporting and Verification (MRV) systems. As per Annual Report 2020, 67,904 metric tons of CO₂e have been reduced since the project started. According to interviewee indications, by the time of the ELE, the accumulated achieved mitigation is 304,598t CO₂e equalling 46% of the targeted reduction until 2021.

In terms of the promotion of learning, there are strong signs of self-learning amongst the NSP team, and adapting the delivery based on the lessons learned. Some relevant examples are: adapting the target number of service providers, buying 6 LLL machines and renting them out to serve as a catalyst, working on different approaches and strategies to reach key stakeholders and thinking of new virtual formats to reach farmers despite COVID-19 restrictions. This will become even more important given the NSP will need to adapt its approach to reach the number of farmers needed, particularly in terms of enabling financial access. In the words of a respondent: *“For successful implementation, the project has to provide alternatives for farmers who don’t have the same readiness for this technology, to see a lasting impact.”*

Evidence of actively sharing and promoting NSP experience and learning amongst other NSPs has not been found. Participation in a NAMA Monitoring workshop organised by TSU did include a project overview and how the NSP links up with Thailand’s MRV system, though. This indicates that the NSP is willing and happy to share lessons learnt and results but might not yet be in the stage of actively disseminating these unless particularly invited. At mid-term, project implementation is likely more important than dissemination activities. **However, learning generated by the NSP is being fed into other projects.** For instance, a new project proposal to the Green Climate Fund is being developed by GIZ and the concept note for the project has already been submitted for Thailand. Furthermore, a proposal targeting mitigation activities in the rice sector of India, Indonesia, Thailand, Cambodia, Vietnam, the Philippines, and China, and including approaches and lessons learnt from the Thai Rice NSP, has been submitted to the Global Environmental Fund (GEF). In addition, some interviewees referred to the SRP as a platform for sharing information and findings.

Based on the evidence above, **the mid-term ELE can say that interim signals of producing a demonstrational effect and promoting learning can be confirmed.**

Dimension 2: Catalytic effect

There are early signs of the NSP enabling systemic change which will catalyse additional GHG savings, including through the introduction of new technologies, market linkages and institutional changes.

Most stakeholders interviewed agreed that the technology the NSP aims to introduce has the potential to significantly improve the livelihoods and resilience of the immediate beneficiary farmers, as well as be adopted by a much greater number. Although the numbers who have so far adopted the technologies remain small, they have demonstrated their potential regarding e.g., GHG and water use reductions. When asked to rate the NSP's potential of having a long-term impact from 0 to 4, on average, ELE respondents rated it at 3.5 out of 4. The sustainable production practices and technologies promoted by the NSP can reduce farmers' input costs and thereby increase profits, as well as bring about a much-needed change in farmers' traditional practices and mindsets pertaining to water conservation and land management. For example, the technology introduced to measure water level for AWD is relatively simple, allowing farmers to irrigate the land according to irrigation colour codes and with a simple water tube which can significantly reduce costs. Once a significant number of farmers have adopted these technologies, the benefits are expected to be recognised by others and scaling-up of adoption is expected at a significant scale.

It is too early to show any significant impact on influencing market trends, but some signs that this might be likely can be seen. So far, the NSP has supported private rice sourcing companies (Olam International, Mars Food, CP Intertrade etc.) to bring about 108,000 tons of sustainable and low-emission rice to the market (Annual Report 2020). As per a respondent: *"LLL has been around for 20 years already, but they are all pilot programmes and we need to have the financial programmes to accelerate uptake. This project has added market mechanisms to enable these technologies in Thailand. No one knew how viable it is as a business model. So, the project must prove this, which is a big responsibility for the project."*

In summary, there is no evidence that the NSP has yet catalysed change beyond its immediate beneficiaries, and nor has it yet been replicated, scaled-up or kick-started wider NAMA implementation. However, **it has started showing early signals of changing market behaviour and dynamics, changing mindsets and practices, and building capacity and buy-in with the right stakeholders.**

Dimension 3: additional large-scale and sustained GHG savings

On the last dimension about additional, large-scale, and sustained GHG savings, no signals are expected at mid-line and will be revisited at end-line. However, AWD, LLL and rice stubble/ straw management are important linkages for future sustainability and will ultimately bring down the GHG emissions in the long term.

In conclusion, the NSP Team rates impact made to date as 'amber' as, despite challenges and delays in the implementation, some important building blocks are being put in place, which have good potential to lead to additional impact. The NSP is showing early signs of transformative change, although it will need to overcome its serious delivery and design challenges (particularly the difficulty in accessing funds and lack of incentives for service providers) to ensure it delivers direct impact at a sufficient scale to lead to any significant demonstration and catalytic effect.

3.5 Sustainability of the NSP

Sustainability

5. What is the likelihood that the outcomes will be sustained after the end of the NSP funding period?

The NSP's implementation challenges, and the limited scale of the impact to date, means it is difficult to predict the likelihood of whether the outcomes of the project are sustainable in the long term. It is difficult to ascertain if built capacities will be sustained over time as the capacity building efforts are still at early stages. Sustaining the financial offers (RF and Green Loan Programme) as they are, seems unlikely due to their limited uptake and remaining barriers to access.

However, it appears likely that once farmers have been convinced and are able to adopt the new practices – particularly LLL and AWD – they will sustain them, mostly due to climate change adaptation co-benefits they provide, which have a clear link to farmers' livelihoods. The NSP also offers four different practices and technologies which can fit different farming contexts and therefore represent key entry points for the NSP's sustainability into the Thai rice farming community.

The NSP's goals are aligned to the Thai government's long-term climate and sustainable development goals and policies and meet a persistent need of the agriculture and specifically rice sector for improved performance. This, therefore, increases the likelihood of the government sustaining the objectives and impact of the NSP. There are regulations and policies which should sustain the overall objective of reducing GHG emissions in Thai rice farming. The (GAP)++ standard for low-emission rice farming practice has become a national voluntary standard, which should build momentum.

Interviewees reported interest in the NSP's technologies from other regions of Thailand and the Rice Department (RD) is supporting these, which is a good sign for the project. The MRV system which has been built, where farmers' field books are being maintained, provides a strong foundation to continue and scale up the promotion of sustainable practices. The RD has set up six research stations on low-emission rice farming to facilitate further training, and more RD 'smart officers' are being trained. Mega-farms and community rice centres (CRC) were reported to further be included by MoAC in the rolling out of GAP++/SRP.

In conclusion, considering the available evidence, the ELE Team has rated the sustainability of the NSP's outcomes at mid-term as "amber". Indeed, successful implementation will show how sustainable built capacities and financial mechanisms will be in the future, and the evidence on this at mid-term remains unconfirmed. However, there are early signs of mainstreaming of the NSP's approach into the Ministry of Agriculture and Cooperatives and Rice Department of Thailand, and there is a great degree of alignment between the project scope and the Thai Rice Standards being developed.

4 Conclusions

Now that the evidence collected and analysed by the ELE has been explored, this section goes back to the NSP's Theory of Change to test to what extent the original causal pathways and assumptions behind them have held.

Figure 6. Overview of NSP Causal Pathways Assessment at Mid-Term

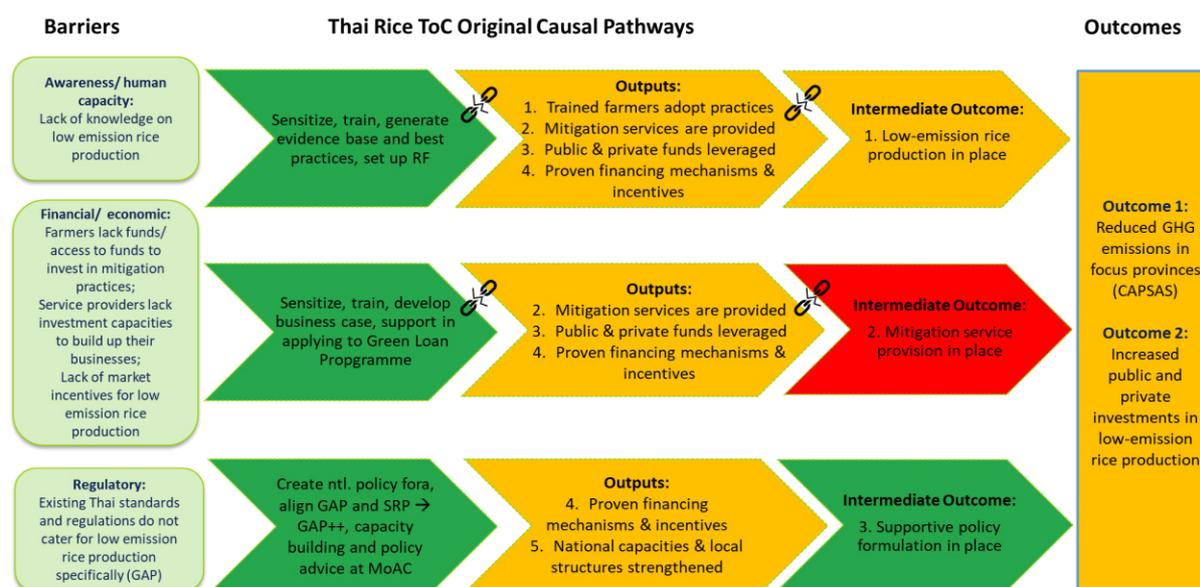


Figure 6 presents an overview of the progress of the NSP along its ToC causal pathways towards its intended outcomes. The RAG rating uses the same scale as the previous section (i.e. Good / Very Good = Green; Problems = Amber; Serious deficiencies = Red; Not enough info to rate = Grey) and the colours of the Intermediate Outcomes' shapes are the same colours used in Section 3.13.2 to rate the NSP's achievements for each Intermediate Outcome. This is to be read as an assessment of the NSP's situation at mid-term.

The ELE has identified the following causal pathways sustaining the three Intermediate Outcomes and final Outcomes of the NSP (see also Figure 1):

- Causal pathway supporting Intermediate Outcome 1:** If mitigation services are provided (output 2), if farmers are trained (output 1), if public and private funds are leveraged (output 3), and if innovative financing mechanisms and incentives are proven (output 4) low-emission rice production will be in place (intermediate 1). This will enable reduced GHG emissions in the CAPSAS region (outcome 1) and motivate further public and private investments (outcome 2).
- Causal pathway supporting Intermediate Outcome 2:** If mitigation services are provided (output 2), if public and private funds are leveraged (output 3), and if innovative financing mechanisms and incentives are proven (output 4), mitigation service provision will be in place (intermediate outcome 2). This will enable reduced GHG emissions in the CAPSAS region (outcome 1) and motivate further public and private investments (outcome 2).

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- **Causal pathway supporting Intermediate Outcome 3:** If good practice examples of innovative financing & incentive mechanisms are demonstrated (output 4), if national capacities and local structures are strengthened to maintain NAMAs (output 5), and if sustainable co-benefits (such as adaptation) of the Thai Rice NSP are demonstrated (output 6) supportive policy formulation will be in place (intermediate outcome 3). This will enable reduced GHG emissions in the CAPSAS region (outcome 1) and motivate further public and private investments (outcome 2).

What transpires from Figure 6 is that, regarding policy formulation (intermediate outcome 3), the causal pathway has held to a great extent. This is based **solely on the Technical Component, so some limitations exist.** SRP/GAP++ has been approved in July 2021 as a national voluntary standard for sustainable rice. Field evidence of the NSP will support policy formulation on setting up mitigation targets for the agricultural sector. **The other two causal pathways can only partially be confirmed by the ELE.** External factors, namely COVID-19 and drought, as well as delays in the Financial Component and incomplete and partially false underlying assumptions¹⁶, particularly regarding the Financial Component, have impeded them to unfold.

Despite these challenges, **reaching outcome 1** (which is also mandatory core indicator M1), **reduced GHG emissions in the CAPSAS region still seems highly likely** (see also sections 3.2 and 3.4). **Nevertheless, it appears that the achievement must be attributed rather to external factors than to the NSP.** These external factors include higher reduction potentials in the Thai rice sector than anticipated in the project design as well as reduced agricultural activity due to the dormancy of one rice production season per year because of persistent drought. At the same time, the NSP's calculations and reporting do not include GHG reductions from the two seasons without production. Thus, it can be expected, that calculated and reported GHG reductions would have been higher if farmers had been able to apply mitigation practices during those two additional seasons.

Concerning outcome 2, i.e., increased public and private investment in low-emission rice production, while it is being achieved in terms of public investment, the ELE cannot confirm such investments by the NSP's private stakeholders, i.e. farmers and service providers. Therefore, **achieving this outcome appears to be at risk.**

Finally, process tracing was applied as an additional test to check the validity of the NSP ToC and assess the strength of the evidence collected by the ELE. The results of the process tracing test did not contradict the findings presented in the body of the report (see Annex E). In summary, process tracing confirmed that, at mid-term, causal pathways for **intermediate outcomes 1 and 2 are likely correct although incomplete.** Farmers' risk aversion, their eligibility for respective financing mechanisms and farmers' demand for mitigation service provision were not considered in the causal pathways used to design the NSP but do play important roles. Furthermore, due to just one service provider being operational (part-time) so far and due to the delays and thus under-performance of the Financial Component, there is not enough evidence to confirm some of the original hypotheses supporting intermediate outcomes 1 and 2. **In terms of intermediate outcome 3, process tracing confirmed the hypotheses holding it were strong and can be observed.**

¹⁶ E.g., that established agricultural SMEs would be the service providers.

5 Lessons and recommendations

5.1 Key lessons

The evidence gathered during the ELE, along with the key findings presented in Section 0 and the conclusions in Section 4, have been used by the ELE Team to draw the following lessons:

Lessons for the NSP Team

- **Reaching 100,000 farmers is likely to take more time than foreseen.** Aspiration was set too high at the project design stage, which the NSP is now struggling with.
- **Even a 0% interest loan is yet another debt for a farmer.** Many Thai rice producers face financial challenges and have standing debts with BAAC. This translates into not qualifying for a loan by BAAC, nor being necessarily willing to take on additional debts. Particularly declining incomes due to less production based on changing climatic conditions are increasing farmers' risk aversion regarding additional debts. Thai rice farmers are broadly accustomed to public subsidies. The analysis brought about sufficient evidence to state that uptake of LLL will not work without a subsidy. Whether a subsidy suffices to generate uptake cannot fully be answered by the analysis. Some interviewees indicated that the LLL service's uptake would need to be delivered entirely free of charge. Farmers in the CAPSAS region of Thailand have attitudinal and financial barriers in both accessing and deploying new technology, and 'technology' so far is perceived as yet another cost or burden by farmers. In the past, farmers have received numerous agricultural inputs for free, and for this intervention to successfully change generational agricultural practices, just a subsidy might not be sufficient.
- **Capturing lessons learnt systematically is important.** While monitoring is done continuously and numerous lessons have emerged from the field, the team needs to capture it effectively to put in place a more flexible and adaptive approach to learning, rather than responding to unexpected challenges on an ad-hoc basis. These lessons learnt from the implementation team has a great deal of significance for other NSPs relating to agriculture and the broader agricultural sector.

Lessons for the NSP Team and the NAMA Facility

- **Introducing a new technology in agriculture is likely needing more time for uptake than anticipated in project design.** In smallholder settings, reaching many individual farmers takes time and so does motivating them towards the uptake of a new technology. The latter entails facilitating access to finance and demonstrating the business case. Creating demand for and supply of the technology (market creation) is likely a dynamic process that may not correspond to a planned 5-year-project schedule. This would hold true even in a non-COVID-19 situation, although the current pandemic has been slowing down the market creation process greatly.

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- **Access to finance in agriculture needs to be linked to financial literacy.** Thai rice farmers are used to public subsidies and can perceive the Revolving Fund as yet another debt, even if it does not require any money upfront by them. Enhancing their financial literacy and entrepreneurial skills seem necessary to generate uptake.
 - **Access to finance in agriculture needs to be based on a thorough analysis of the creditworthiness and credit willingness of farmers.** Many farmers (including potential mitigation service providers) turned out to be not eligible for BAAC's financial offers due to existing debt and lack of collateral. These pre-conditions were not known during project design, which led to incomplete underlying hypotheses for generating uptake of new technologies.
 - **A thorough project baseline is important.** A thorough understanding of all relevant project actors (target groups as well as further stakeholders) helps in project design to develop solid hypotheses and causal pathways. In the case of the NSP, some hypotheses were incorrect, e.g., regarding creditworthiness and willingness of farmers. In addition, the correctness of emission factors to calculate emissions of the Thai rice sector has been questioned during the analysis. These shortcomings are challenging and delaying project implementation.
 - **A consistent ToC is important.** The NSP's ToC (see Figure 1 or Annex A) shows some inconsistencies:
 - Some outputs are rather formulated as outcomes, such as output 1, "adoption of low-emission, irrigated rice production" and output 3 "leveraged public and private funds".
 - The outcome statement can be misleading as attributes the transformation of the Thai rice sector to "climate finance". This would seem to construct the Financial Component as the key enabler of transformational change. However, evidence from the ELE shows that the transformation of the Thai rice sector is rather enabled by the Technical Component, whereas the Financial Component plays a supporting role.
 - The NSP proposal describes the impact as reduced GHG emissions and the connection of Thai rice farmers to "higher value markets", which are easily perceived as markets that are paying higher prices, e.g., due to increased quality. Following the pesticide management requirements under the SRP standard could allow Thai rice farmers to comply with the quality standards for high-income countries' markets, such as the European Union. However, the main business case for Thai rice farmers to adhere to the SRP is rather based on efficiencies, leading to reduced production costs, and thus increasing farmer margins.
 - **Working on climate change issues in agriculture needs an adaptation and a livelihood component.** In the case of the Thai Rice NSP, less farming due to drought automatically translated into fewer emissions. However, what could look like a success in terms of climate change mitigation, does hide tragic consequences for the farmers' livelihoods, with loss of income and food.

Lessons regarding MoAC

- **On-site support by MoAC to the Thai rice sector appears complex.** Limited extension staff under the Rice Department and overlapping mandates with the Department of Agricultural Extension to work in the rice sector result in having to involve several levels of the MoAC to provide extension support at the sub-district level. This appears to be inefficient and has been causing delays.

5.2 Recommendations

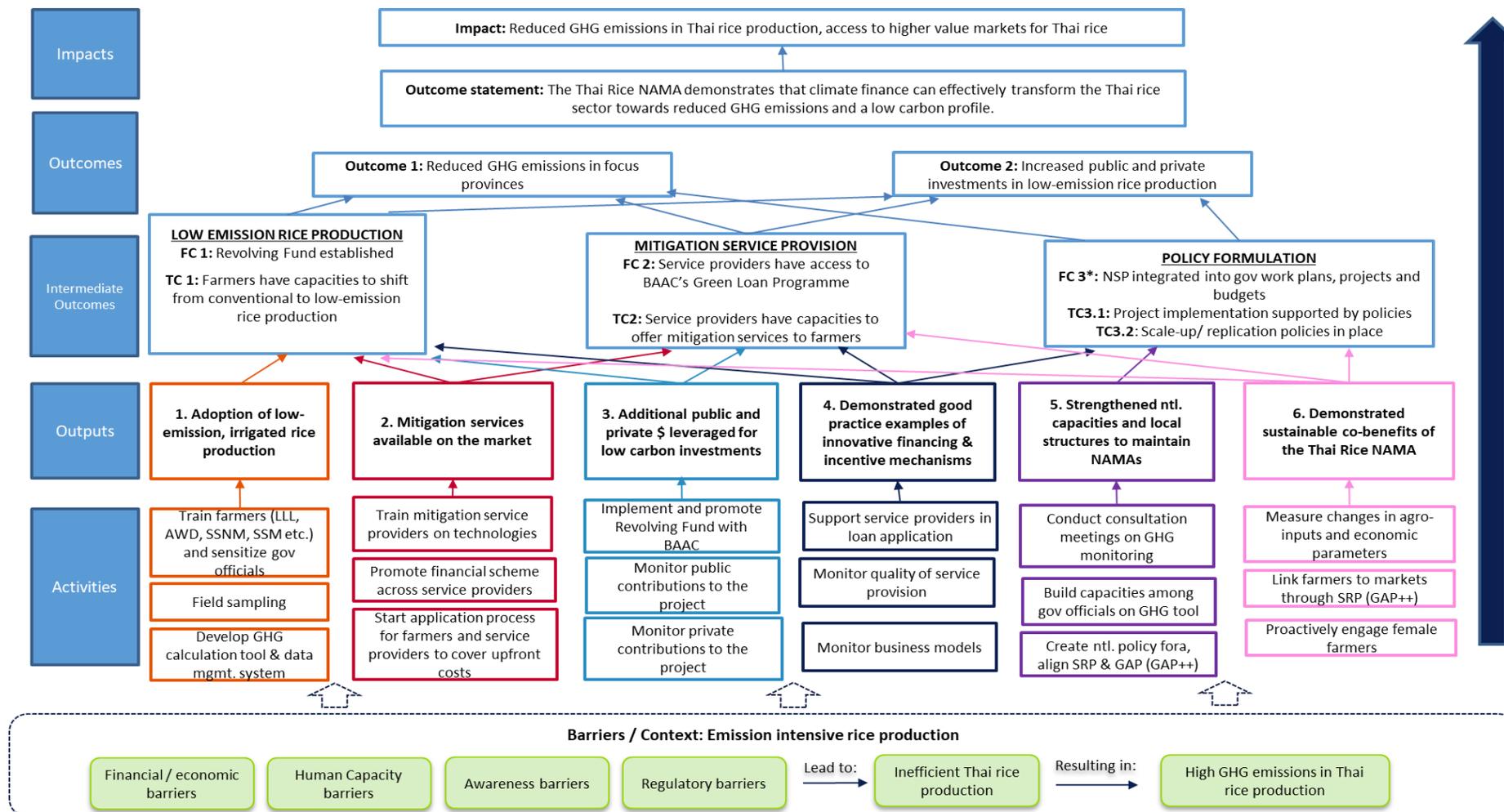
Table 5. Key lessons and recommendations from the Mid-Term ELE

Lesson	Recommendations
Lessons for the NSP Team	
1. Reaching 100,000 farmers is likely to take more time than foreseen	<ol style="list-style-type: none"> 1. Seek discussion with the NAMA Facility regarding (no cost) extension or reduce target values. NSP implementation is around one year behind schedule due to external factors. Reaching defined target values seems highly unlikely. Extending the project or reducing target values seems applicable. 2. Explore options with the NAMA Facility to re-direct some funds from the Financial Component to the Technical Component. The Financial Component's implementation as well as uptake lag behind. The offered financial instruments (Revolving Fund and Green Loan Programme) do not seem to meet the target group's needs/ fit their situation. Explore possibilities to shift funds from the Financial Component to the Technical Component, for example, to be used as grants to (potential) implementation partners such as SRP or IRRI. This may also entail discussing to what extent funds from the Financial Component could be redirected to general operational costs.
2. Even a 0% interest loan is yet another debt for a farmer	<ol style="list-style-type: none"> 1. Explore opportunities to subsidise LLL in conjunction with capacity building and demonstrations efforts to popularise the benefits of this technology and bring about a clearer understanding of how this reduces costs to the farmer. Revise the suitability of repayment periods based on rice production cycles in the target region. 2. Discuss with the NAMA Facility on to what extent supporting collateral for BAAC (e.g., through guarantees) for the service providers or even farmers would be an option for the NSP to (a) generate access to finances and (b) reduce investment risk for economically weak entrepreneurs.
3. Capturing lessons learnt systematically is important	<ol style="list-style-type: none"> 1. Ensure continuous monitoring (activities, budget, partner contributions) includes lessons learnt. For example, after an activity (e.g., training etc.) the respective field staff could hand in a short report and the M&E staff could conduct a short interview to capture aspects outside the report format. This would also allow capturing unexpected results.
Lessons for the NSP Team and the NAMA Facility	
4. Introducing a new technology in agriculture is likely to need more time	<ol style="list-style-type: none"> 1. <u>NSP:</u> Seek discussion with NAMA Facility regarding a (no cost) extension. The NSP implementation at the farmer level is linked to the rice cultivation cycle, with the next one starting in November 2021. Until the project end, two rice seasons (2021 and 2022) remain. Reaching all target farmers with the proposed

Lesson	Recommendations
<p>for uptake than anticipated in project design</p>	<p>technologies in these two seasons seems ambitious looking at the current project progress (see also lesson 1). Allowing for at least one more rice season (2023) to generate uptake should be discussed.</p> <ol style="list-style-type: none"> 2. NSP: Convince farmers bit by bit. Particularly older farmers might be hesitant to change. Starting with young(er) farmers might be an opportunity to demonstrate how the technologies work and which benefits the different practices may offer. 3. NAMA Facility: Allow more time during any potential future project planning processes. This should help ensure causal pathways are valid and properly articulated.
<p>5. Access to finance in agriculture needs to be linked to financial literacy</p>	<ol style="list-style-type: none"> 1. NSP: Assess options to address aspects of financial literacy and economic farming within the NSP. Identify suitable partners to take on financial literacy aspects outside the NSP. Strategic partnerships, for example with BAAC which is active in financial literacy, may help to address/ integrate actions outside the NSP's direct approach or mandate. GIZ could also consider integrating their well-proven Farmer Business School as part of the NSP activities. This could help empower farmers to get more independent from input providers. 2. NAMA Facility: Encourage future/ other NSPs in agricultural smallholder settings to consider the need for parallel activities on financial literacy.
<p>6. Access to finance in agriculture needs to be based on a thorough analysis of creditworthiness and credit willingness of farmers and service providers</p>	<ol style="list-style-type: none"> 1. NSP: See recommendations related to lesson number 2. 2. NAMA Facility: Encourage other NSPs in agricultural smallholder settings to consider the eligibility/ willingness of farmers/ service providers to access offered financial products. In agricultural smallholder settings, change is based mainly on economically weak entrepreneurs. NSPs should thus demonstrate the eligibility of farmers/ service providers to access offered financial products and include an assessment of risk aversion regarding investments in the baseline.
<p>7. A thorough project baseline is important</p>	<p><u>NSP and NAMA Facility:</u></p> <ol style="list-style-type: none"> 1. For future planning consider availability/ correctness of data (e.g. emission factors, creditworthiness etc.) 2. Factor in sufficient time at the beginning for baseline establishment and plan flexibly enough to react to resulting change requirements. 3. Conduct baseline and market studies during the project design phase.
<p>8. A consistent ToC is important</p>	<ol style="list-style-type: none"> 1. NSP: Consider revising the impact in the ToC to refer to new market behaviour/ economic incentives as per the NAMA Facility's transformational framework, rather than access to "higher value markets". 2. NSP: Revise the accuracy of the outcome statement and consider specifying adaptation and mitigation finance. 3. NSP: Revise whether Intermediate Outcome FC3 should refer to the Financial Component or the Technical Component. 4. NSP: Revise whether outputs, outcome and impact are at the correct levels (are outputs really outputs or are they outcomes?). 5. NAMA Facility: Check the consistency of ToCs for future NSPs during the proposal process.

Lesson	Recommendations
	6. <u>NAMA Facility</u> : Assess whether the conclusion that transformational change in smallholder farming is driven by the Technical Component rather than the Financial Component is also valid for other NSPs in agriculture.
9. Working on climate change issues in agriculture needs an adaptation and a livelihood component	<ol style="list-style-type: none"> 1. <u>NSP</u>: Keep tailoring your messages about the NSP benefits to the audience: focus on mitigation towards the NAMA Facility and adaptation towards farmers. Addressing climate change in agriculture is linked to mitigation as well as adaptation. Many practices offer effects towards both. 2. <u>NAMA Facility</u>: Explore options for inclusion of adaptation/ livelihood aspects within the NAMA Facility. Pure mitigation projects hardly address the needs of (smallholder) farmers regarding climate change.
Lessons regarding MoAC	
10. On-site support by MoAC to the Thai rice sector appears complex	1. Work with the NSP Team to find how best the MoAC can support NSP implementation at the sub-district level

Annex A Theory of Change of the Thai Rice NSP



* The ELE and the NSP team consider FC3 to be part of the Technical Component (TC) and recommend revising this aspect.

Key assumptions underpinning the NSP Theory of Change

ToC element	Underpinning assumptions
Impact	<ul style="list-style-type: none"> • Low-emission rice production offers benefits to farmers. • SRP compliant/ GAP++ compliant rice qualifies for higher-value markets.
Outcome	<ul style="list-style-type: none"> • Suitable financial offers are the reason for farmers not implementing low-emission rice production, yet. • Farmers qualify for climate finance. • Farmers are willing to enter and qualify for climate finance mechanisms.
Intermediate outcomes	<ul style="list-style-type: none"> • Farmers are willing to change their production systems towards low-emission cultivation. • There is farmer demand for mitigation service practices. • There are suitable service providers who are willing to enter offering mitigation services. • Farmers and service providers qualify for BAAC's financial offers. • The Thai government aims to reduce emissions in the rice sector. • The Thai government broadens/ builds own programmes and initiatives to facilitate low-emission rice production.
Outputs	<ul style="list-style-type: none"> • Trained farmers apply proposed technologies/ practices. • Trained service providers offer mitigation services to farmers. • The Thai government and private actors (farmers and service providers) are willing to invest in low-emission rice production. • A solid business case exists for mitigation service providers. • National and sub-national public capacities can be strengthened. • Low-emissions rice production offers co-benefits to farmers such as decreased production costs due to increased production efficiency and adaptational benefits in view of changing climatic conditions.

Annex B Capturing NSP-induced Transformational Change

Introduction

This is a brief guidance developed by AMBERO/OPM outlining a framework to consistently evaluate the NAMA Support Projects’ (NSPs) progress towards bringing about Transformational Change (TC).

Transformational change is embedded in the NAMA Facility’s goals and Theory of Change (ToC) and NSPs are the main way through which the NAMA Facility will achieve this TC. Therefore, NSPs need to be aiming to achieve this level of change, and the Evaluation and Learning Exercises (ELEs) of NSPs should evaluate their progress.

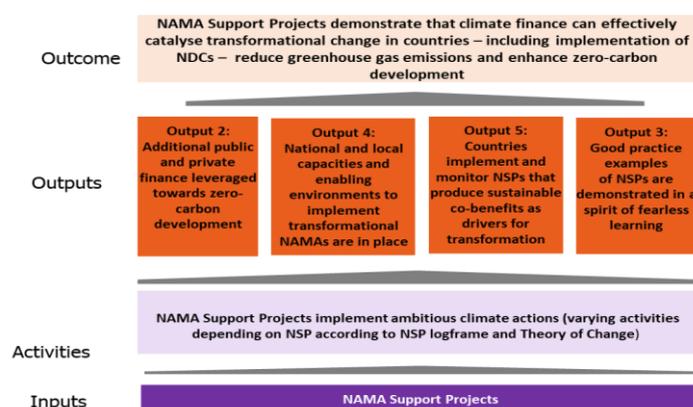
In a way, the key elements of transformational change are already monitored through the NSP Mandatory Core Indicators M1-M5, part of the NAMA Facility M&E Framework¹⁷. At the same time, ELEs already assess transformational change by NSPs through ELE Questions. However, currently, clearer guidance to identifying the signals or evidence of NSP-induced transformational change is needed.

The purpose of this brief document is to clarify whether and how transformational change is expected in NSPs, and provide guidance to both NSP and ELE teams on how to characterise the elements and evidence of NSP-induced transformational change.

Breaking down NSP-induced transformational change

The NAMA Facility defines TC as “Catalytic change in systems and behaviours resulting from disruptive climate actions that enable actors to shift to carbon-neutral pathways”¹⁸. TC lays at the centre of the NAMA Facility’s ToC as shown in the extract in Figure 1.

Figure 1. Relevant elements of the original TOC for the ELEs

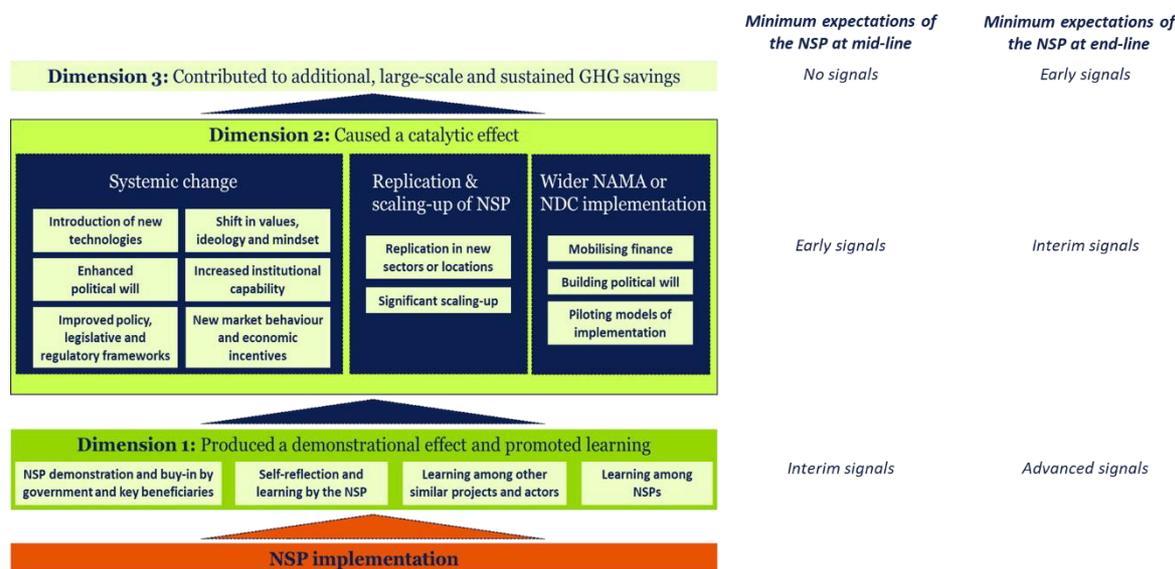


¹⁷ <https://www.nama-facility.org/publications/monitoring-and-evaluation-framework/>

¹⁸ <https://www.nama-facility.org/concept-and-approach/transformational-change>

The NAMA Facility ToC explains how TC is expected to be achieved through its outputs and outcome. The ToC is broad, and there are different ways in which TC can be achieved through the NSPs. These dimensions simplify the different possible pathways for TC outlined in the ToC.

Figure 2. Dimensions of NSP-induced transformational change



There are three dimensions that interact and reinforce each other to produce NSP-induced TC (Figure 2):

Dimension 1: Produced a demonstrational effect and promoted learning. The most direct way in which an NSP can contribute to transformational change is to produce a demonstrational effect and learning process which could imply that: a) the NSP’s innovative approach has been proven valid and bought into by government and other key beneficiaries; b) self-reflection and learning by the NSP in a spirit of ‘fearless learning’ have been observed; c) effective sharing of lessons and experience with and by other similar projects and actors (including other NSPs) has occurred. By mid-line, NSPs are expected to show interim signals¹⁹ of achieving this demonstrational effect and learning process, which should have become clear evidence (advanced signals) by the end-line. This dimension relates to output 3 in the NAMA Facility ToC and the [NAMA Facility Learning Strategy](#). The demonstrational effect and learning generated by the NSP are enablers of achieving a catalytic effect (Dimension 2).

Dimension 2: Causing catalytic effect. In order to achieve the additional, large-scale and sustained GHG emission reductions (Dimension 3), the NSP needs to cause a virtuous catalytic effect in the operating country or region. This can take the form of one or more of the following catalytic changes:

- **Kick-starting wider NAMA or NDC implementation**, by mobilising finance, building political will, and/or piloting models of implementation;
- **Replication of the NSP’s demonstrated approach** in other sectors or locations, and/or significant scaling-up of the NSP; and/or

¹⁹ See Table 2 below for the definition of the levels of signals or evidence.

- **‘Systemic’ change enabled by the NSP**, which could be supported by the one or more of the following: a) introduction of new technologies; b) increased institutional capability; c) improved policy, legislative and regulatory frameworks; d) enhanced political will; e) shift in values, ideology and mindset; f) new market behaviour and economic incentives.

By mid-line, NSPs are expected to have produced some early signals of one or more of these changes, which by the end of the project should have been strengthened into interim signals or evidence that the catalytic effects are likely to be completed in the near future. The catalytic effect relates to outputs 2, 4 and 5 in the NAMA Facility ToC, and Mandatory Core Indicator M3 (catalytic impact self-assessment) and M4-M5 (public/private finance mobilised).

Dimension 3: Contribution to additional greenhouse gas (GHG) savings. This is linked to the outcome in the NAMA Facility ToC and Mandatory Core Indicator M1 – Reduced GHG emissions. It implies that the NSP has resulted in *additional, large-scale and sustained* GHG savings²⁰. Within the lifetime of the project, NSPs are not expected to have achieved this. Yet, by the end of the project, there should be signs that this is likely in the future (*early signals*).

Measuring NSP-induced transformational change

The NAMA Facility has a specific M&E framework that allows to track the progress of the NSPs towards the achievement of the NAMA Facility’s goals, including transformational change. The NAMA Facility Mandatory Core Indicators and the ELEs are both central parts of this M&E framework and they can be used to assess the NSPs’ advancement towards transformational change.

As shown, the TC dimensions come directly from the NAMA Facility ToC. Since the NSPs are expected to be aligned to the overall NAMA Facility ToC, then it should be possible to map the dimensions of transformational change in the NSP ToCs. All NSPs are required to monitor their progress using a series of Mandatory Core Indicators and NSP-specific indicators. The NAMA Facility Mandatory Core Indicators partially capture the elements of the TC framework in Figure 2 (see Table 1).

Table 1. How the NAMA Facility Mandatory Core Indicators capture transformational change

TC dimension	Core Indicators
1. Produced a demonstrational effect and promoted learning	Not captured but left to the NSP-specific indicators.
2. Caused a catalytic effect	<p>M2: Number of people directly benefiting from NSP – To a certain extent captures NSP scaling up</p> <p>M3: Degree to which the supported activities are likely to catalyse impacts beyond the NAMA Support Projects (potential for scaling-up, replication)</p>

²⁰ Additional = the GHG savings achieved are in addition to those achieved by the direct implementation of the NSP. Large-scale = the additional GHG savings will have a significant impact on overall GHG savings in the geography/sector. Sustained = there is no chance of the GHG savings being reversed.

TC dimension	Core Indicators
	<p>and transformation) – The TC framework presented can be used to break down / clarify the TC elements and guide the self-assessment.</p> <p>M4-M5: [additional] public/private finance mobilised – These indicators capture the NSP’s scale-up potential and the catalysation of wider NAMA and NDC implementation.</p>
3. Contributed to additional, large-scale and sustained GHG savings	M1: Reduced GHG emissions - NSP M&E Plan distinguish between direct and indirect GHG savings and has long temporal scale

Concerning the ELEs, Table 2 provides some suggestions of potential questions that could be integrated into ELE methodologies to capture the specific elements of the TC framework in Figure 2.

Table 2. How the ELEQs can capture transformational change

Transformational change dimension	Examples of relevant ELE sub-questions
1. Produced a demonstrational effect and promoted learning	<ul style="list-style-type: none"> • How successfully did the NSP produce a demonstrational effect of best practices for systemic low-carbon transformation? To what extent have the government and other key NSP beneficiaries bought into these practices? • What is the evidence that the NSP has learnt from its successes and failures throughout its implementation? • How was learning from this NSP shared with other NSPs, and did they make any changes to their approach as a result?
2. Caused a catalytic effect	<ul style="list-style-type: none"> • Systemic change: How did the NSP result in systemic change [i.e. were national and local capacities and enabling environments (e.g. new technologies, policies, regulations, incentives, behaviours) to implement transformational NAMAs strengthened]? • Replication/Scaling-up: a) How much additional public and/or private finance has been leveraged by the NSP towards zero-carbon development? b) What is the evidence that the NSP approach will be replicated in new sectors and/or locations? • Wider NAMA or NDC contribution: How has the NSP contributed to the implementation of the NDC or wider mitigation actions in the same sector?
3. Contributed to additional GHG savings	<ul style="list-style-type: none"> • Are there signals that the NSP will contribute to additional, large-scale, sustained GHG savings (beyond direct savings of the NSP)? What were the distinct roles of the financial and technical components in contributing to these savings? • What is the likelihood that the additional GHG savings will be sustained in the medium to long term (i.e. 10–15 years and beyond), meaning there is no risk of backsliding or reversing?

In the section dedicated to the OECD DAC criterion “*Impact*” of ELE Reports, sub-headings referring to the three TC dimensions are used to present the evidence observed to that point in time. These sub-sections present the findings related to the relevant questions in Table 2 and describe the NSP’s progress along the TC dimension according to the signal levels defined in Table 3.

Table 3. Transformational Change “Signals” assessment by ELEs

Signal level	Definitions
No evidence	Evidence suggests little to no progress is being made in line with the ToC causal pathways to Transformational Change.
Early signals	There is emerging evidence of the transformation related to the dimension, or the foundations for the transformation have been laid by the NSP but no signals of the change are present.
Interim signals	Evidence shows some signals that the transformation related to the dimension is underway and it is likely to continue.
Advanced signals	Evidence shows strong signals that the transformation related to the dimension is underway and there is little doubt that it will continue.

Annex C Evaluation and Learning Exercise Matrix

This evaluation and learning exercises matrix is based on the Theoretical Framework provided (version October 2020). It is a working tool that allows the evaluators to focus on a feasible target and assemble information for each question that can be synthesised in the final report, hence creating an integrative overview of the **Thai Rice NAMA Support Project** at large.

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	Who can answer this question	Source of information Data gaps
1 RELEVANCE					
1	To what extent does the NSP address an identified need (of the Thai government, mitigation service providers and rice farmers)?	<ul style="list-style-type: none"> The NSP design responds to the beneficiaries' needs and strategic priorities at the time of adoption. The NSP is aligned with the needs of agricultural authorities including financial institutions (BAAC), mitigation service providers and rice farmers. 	<ul style="list-style-type: none"> Farmers lack capacity and access to finance to take up and invest in low-emission rice farming. The NSP is appropriately designed to address those needs (linked to ELE question 1.3) The Technical Component (Technical Component) of the NSP enables farmers and service providers to take up and invest in low-emission rice farming. The Technical Component of the NSP advises the government to create an enabling framework for low-carbon rice production. 	<ul style="list-style-type: none"> Direct beneficiaries (government, mitigation service providers, farmers) NSP Team Independent verifiers (e.g., FAO, other IKI project) 	<ul style="list-style-type: none"> In-depth interviews Semi-structured key informant interviews (KIIs) Context analysis Document review (Project concepts (logical framework matrix) and progress reports) National plans, strategies, and other policy instruments such as norms, standards, etc.
1.1	How well does the NSP align with government and agency priorities regarding GHG emissions from the rice sector?	<ul style="list-style-type: none"> The project is in line with Government targets on environmental emissions (incl. NDC, sectorial plans, etc.). 	<ul style="list-style-type: none"> The NSP supports Thailand's overall climate strategy by providing an effective contribution to the reduction of GHG emissions from the agriculture sector. 	<ul style="list-style-type: none"> Direct beneficiaries from government NSP Team 	<ul style="list-style-type: none"> In-depth interviews Semi-structured key informant interviews (KIIs) National plans and strategies on climate change Data from NSP monitoring system

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	Who can answer this question	Source of information Data gaps
1.2	Are the NSP's design and actions, in particular the financial mechanisms, appropriate to support investments in mitigation actions in the rice sector in an efficient manner?	<ul style="list-style-type: none"> The project is in line with the financial capacities of the Thai government, service providers and rice farmers. 	<ul style="list-style-type: none"> The Thai government and private sector (rice farmers and mitigation service providers) are willing and interested in investing in low-emission rice farming. 	<ul style="list-style-type: none"> Direct beneficiaries NSP Team BAAC 	<ul style="list-style-type: none"> In-depth interviews Semi-structured key informant interviews (KIIs)
2 EFFECTIVENESS					
2	To what extent is the implementation of the NSP achieving intended outcomes (incl. intermediate ones)?	<ul style="list-style-type: none"> What evidence can be found to prove reaching expected results/ interim outcomes? The strength of the NSP contribution to the realisation of those outcomes (see link between outputs and outcomes) 	<ul style="list-style-type: none"> Technical Component activities increase demand as well as the supply of mitigation services in rice production. The Technical Component builds awareness and capacities among farmers to demand mitigation service providers. The Financial Component (Financial Component) builds up structures and offers to enable mitigation service providers to build up their businesses (Revolving Fund). Financial Component enables farmers financially to tap into mitigation service offers (low-interest loans). 	<ul style="list-style-type: none"> Direct beneficiaries NSP Team Independent verifiers 	<ul style="list-style-type: none"> In-depth interviews Semi-structured key informant interviews (KIIs) NSP proposal Progress reports Data from NSP monitoring system / logframe
3 EFFICIENCY					

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	Who can answer this question	Source of information Data gaps
3	To what extent is the relationship between inputs and outputs timely and to expected quality standards?	<ul style="list-style-type: none"> • Timeliness of the delivery of outputs and outcomes • If there are delays in the implementation, what has caused them (endogenous or exogenous factors) and how have they impacted the NSP implementation? • The effectiveness of the measures adopted to reduce delays. • The level of satisfaction of the NSP's direct beneficiaries 	<ul style="list-style-type: none"> • Technical Component activities are on time • The NSP's deliverables are of good quality standards. • Coordination with other interventions by the Thai government on agriculture/ rice add to the efficiency of the NSP (leveraging funds). 	<ul style="list-style-type: none"> • Direct beneficiaries • NSP Team 	<ul style="list-style-type: none"> • NSP proposal • Progress reports • In-depth interviews • Data from NSP monitoring system • Semi-structured KIIs
3.1	Cooperation & steering: Is the NSP being managed, coordinated, and implemented effectively?	<ul style="list-style-type: none"> • The chosen implementation mechanism is conducive to achieving the expected outcomes. • The technical component is tailor-made for achieving the planned outputs. • Cooperation with the Thai government, SRP and IRRI is geared to achieving expected outcomes. • Financial Component and Technical Component are synchronised and build on each other. 	<ul style="list-style-type: none"> • The NSP Team has an enabling governance structure. • Key stakeholders fully own and commit to their roles in the NSP. • Technical Component and Financial Component are implemented in parallel and add value to each other. 	<ul style="list-style-type: none"> • Direct beneficiaries • NSP Team • Implementation partners/ stakeholders • 	<ul style="list-style-type: none"> • Progress reports • In-depth interviews • Semi-structured KIIs
4 IMPACT					
4	What evidence is there that the NSP is likely to contribute to the intended impact (incl. transformational change)?	<ul style="list-style-type: none"> • The strength of the evidence that key outcomes are going to be achieved and the robustness of the causal links/ pathways to the intended impact (namely proving that climate finance can transform the Thai rice sector towards reduced GHG emissions). 	<ul style="list-style-type: none"> • Technical Component + Financial Component jointly build up the capabilities at farmer and service provider level to create a functioning market for mitigation services. • Interim signals of installed learning processes and indications for a potential catalytic effect are evident (as per the NAMA Facility's Transformational Change Framework). 	<ul style="list-style-type: none"> • Direct beneficiaries • NSP Team • Independent verifiers 	<ul style="list-style-type: none"> • NSP proposal • Progress reports • In-depth interviews • Data from NSP monitoring system • Semi-structured KIIs

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	Who can answer this question	Source of information Data gaps
		<ul style="list-style-type: none"> The extent to which the NSP is geared towards transformational change. 			
5 SUSTAINABILITY					
5	What is the likelihood that the outcomes will be sustained after the end of the NSP funding period?	<ul style="list-style-type: none"> The extent of the evidence supporting the NSP's sustainability (e.g., evidence of self-sustaining institutional structures, and political and financial commitment of key stakeholders). Levers endangering the sustainability of project results beyond its duration are addressed. 	<ul style="list-style-type: none"> Built-up capacities will remain available and on offer beyond the project duration. Financial offers by BAAC addressing mitigation service providers as well as rice farmers are maintained by a share of their profits and by paid-back loans. 	<ul style="list-style-type: none"> Direct beneficiaries NSP Team Independent verifiers 	<ul style="list-style-type: none"> NSP proposal Progress reports In-depth interviews Data from NSP monitoring system Semi-structured KIIs
6 LEARNING					
6	What key lessons can be learnt to the benefit of this NSP or other projects or NSPs in achieving their results?	<ul style="list-style-type: none"> The NSP's generation of important lessons for: 1) itself; and 2) other projects and/or NSPs and thus the NAMA Facility. 	<ul style="list-style-type: none"> The NSP generates and captures important lessons to improve its own implementation strategy The NSP generates and captures important lessons for other projects and/or NSPs 	<ul style="list-style-type: none"> Direct beneficiaries NSP Team Independent verifiers 	<ul style="list-style-type: none"> Progress reports In-depth interviews Semi-structured KIIs Literature review

Annex D Evidence and answers to the ELE matrix

The following table has been part of the ELE analysis effort to link the answers to the ELEQs with the evidence from the ELE sources that underpins them. The strength of the evidence is assessed following the methodology explained in Section 2 and the legend in Table 4. The codes found in the answers' text are the references to the specific sources (interviews, workshops, documents). Each code refers to a specific source and follows this legend: N = NSP Team; S = NSP Stakeholder; V = Third Party/Verifier; W = Workshops, AR = Annual Report; SAR = Semi-Annual, PP = Project Proposal.

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	ELE evidence
			1 RELEVANCE	
1	To what extent does the NSP address an identified need (of the Thai government, mitigation service providers and rice farmers)?	<ul style="list-style-type: none"> The NSP design responds to the beneficiaries' needs and strategic priorities at the time of adoption. The NSP is aligned with the needs of agricultural authorities including financial institutions (BAAC), mitigation service providers and rice farmers. 	<ul style="list-style-type: none"> Farmers lack capacity and access to finance to take up and invest in low-emission rice farming. The NSP is appropriately designed to address those needs (linked to ELE question 1.3) The Technical Component (Technical Component) of the NSP enables farmers and service providers to take up and invest in low-emission rice farming. The Technical Component of the NSP advises the government to create an enabling framework for low-carbon rice production. 	<ul style="list-style-type: none"> Strong evidence that out of the three target groups (government, service providers, farmers) the NSP aligns best with government needs: 1S23, 1S12, 1S9, 1S14, 2S21, 1S12, 1S16, 1S20, 2S20, 2S21, 2S12, 1N7, 2N6, 3N7, PP, AR 2018-2020 Strong evidence that changes in farmers' priorities due to drought and income losses based on COVID-19 affected the relevance of the NSP for this target group from the project design stage up to today: 1N6, 1N7, 2N7, VW1, 2S8, 1S23, AR 2018-2020 Very strong evidence that farmers rather need adaptation than mitigation (but many agricultural practices offer benefits towards both): KW1, VW1, 1N6, 2N6, 1N7, 2N7, 2S8, 2S12, 1S14, 1S21, 1S8, 1S19, 1S16, 1V6 Strong evidence that service providers are not yet seeing enough demand by farmers: 2S19, 1S19, 1S16, 1N7, AR 2020
1.1	How well does the NSP align with government and agency priorities regarding GHG	<ul style="list-style-type: none"> The project is in line with Government targets on environmental emissions (incl. NDC, sectorial plans, etc.). 	<ul style="list-style-type: none"> The NSP supports Thailand's overall climate strategy by providing an effective contribution to the reduction of GHG emissions from the agriculture sector. 	<ul style="list-style-type: none"> Very strong evidence that the NSP is building a suitable evidence base for the government to work on mitigation targets for the agricultural sector in the framework of the NDCs: 1S9, 1S14, 2S21, 1S12, 1S16, 1S23, 1S12, 2S8, IV6, KW1, 2N6, 1N7, 2N7, PP Weak evidence that mitigation in the rice sector is not a governmental priority: 2S19, 1S21

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	ELE evidence
	emissions from the rice sector?			
1.2	Are the NSP's design and actions, in particular the financial mechanisms, appropriate to support investments in mitigation actions in the rice sector in an efficient manner?	<ul style="list-style-type: none"> The project is in line with the financial capacities of the Thai government, service providers and rice farmers. 	<ul style="list-style-type: none"> The Thai government and private sector (rice farmers and mitigation service providers) are willing and interested in investing in low-emission rice farming. 	<ul style="list-style-type: none"> Strong evidence that the private sector (farmers and service providers) has little interest in investing so far: 3S12, 1S19, 1S8, 1N7, SAR2020, AR2020 Strong evidence that farmers are already heavily indebted and would hardly want to take on additional debts: 3S12, 1S19, 1S8, 1S16, 2S19 Service providers do not yet trust the business case. Very strong evidence that the NSP's approach to work via a Revolving Fund for farmers and the existing Green Loan Programme of BAAC for service providers do not overcome existing barriers to enable investments: 1N9, 2S9, 2S12, 2S20, 1V13 Personal opinion: The majority of the target farmers are eligible for the Green Loan Programme: 2S20 Strong evidence that not owning the land is a barrier to invest in LLL: 2S21, 2S20, 2S19, 1S19, 1S8
			2 EFFECTIVENESS	
2	To what extent is the implementation of the NSP achieving intended outcomes (incl. intermediate ones)?	<ul style="list-style-type: none"> What evidence can be found to prove reaching expected results/ interim outcomes? The strength of the NSP contribution to the realisation of those outcomes (see link between outputs and outcomes) 	<ul style="list-style-type: none"> Technical Component activities increase demand as well as the supply of mitigation services in rice production. The Technical Component builds awareness and capacities among farmers to demand mitigation service providers. The Financial Component (Financial Component) builds up structures and offers to enable mitigation service providers to build up their businesses (Revolving Fund). Financial Component enables farmers financially to tap into mitigation service offers (low-interest loans). 	<ul style="list-style-type: none"> Strong evidence that uptake of promoted technologies is low: 2S9, 2N7, 1N6, 2S12, 1S8, 2N6, 3N7, AR2018-2020 Strong evidence that uptake among service providers is low: 2S9, 2N7, 1N6, 2S12, 1S8, 2N6, 3N7, AR2018-2020 Very strong evidence that reaching defined targets for low-emission rice production (100,000 farmers) and service mitigation provision (210 service providers) in the defined timeframe is endangered/ targets are too ambitious: 2N7, 2S20, 1S14, 1S23, 2S12, 1S8, 1V6 Very strong evidence that approval of GAP++ underpins fruitful policy integration: 1V6, 2N6, 3N7, 2S12, 3S12 Very strong evidence that external factors, mainly drought and COVID-19, are causes for delays: 1V6, 1N6, 2N6, 3N7, 1S16, 1S19

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	ELE evidence
				<ul style="list-style-type: none"> Strong evidence that underlying hypotheses regarding creditworthiness and -willingness were missing/ wrong leading to issues in uptake now: 2S9, 1N9, 3S12, 2S19, 1N7, 2N6 Personal opinion: The majority of the target farmers are eligible for the Green Loan Programme: 2S20
			3 EFFICIENCY	
3	To what extent is the relationship between inputs and outputs timely and to expected quality standards?	<ul style="list-style-type: none"> Timeliness of the delivery of outputs and outcomes If there are delays in the implementation, what has caused them (endogenous or exogenous factors) and how have they impacted the NSP implementation? The effectiveness of the measures adopted to reduce delays. The level of satisfaction of the NSP's direct beneficiaries 	<ul style="list-style-type: none"> Technical Component activities are on time The NSP's deliverables are of good quality standards. Coordination with other interventions by the Thai government on agriculture/ rice add to the efficiency of the NSP (leveraging funds). 	<ul style="list-style-type: none"> Strong evidence that procedural and institutional bottlenecks in collaborating with BAAC have led to delays: 1N7, 1N9, 3N6, 1S14 Strong evidence that implementation is delayed by around one year due to COVID-19, drought and lengthy procedures setting up the Financial Component: AR2020, 2S20, 1S12, 3S12, 1S14, 1S9, 1S23, 1S8, 2N6, 3N7 Strong evidence that reports are consistent, and monitoring is done continuously: AR2018-2020, 1N7, 2N7
3.1	Cooperation & steering: Is the NSP being managed, coordinated, and implemented effectively?	<ul style="list-style-type: none"> The chosen implementation mechanism is conducive to achieving the expected outcomes. The technical component is tailor-made for achieving the planned outputs. Cooperation with the Thai government, SRP and IRRI is geared to achieving expected outcomes. Financial Component and Technical Component are 	<ul style="list-style-type: none"> The NSP Team has an enabling governance structure. Key stakeholders fully own and commit to their roles in the NSP. Technical Component and Financial Component are implemented in parallel and add value to each other. 	<ul style="list-style-type: none"> Strong evidence that project steering is complex involving many different stakeholders and committees: KW1, 2N6, 3N7, 3S12, 1N9 Very strong evidence that the many stakeholders are needed to ensure alignment and uptake by the Thai government: 1N9, 2N6, 2S8, 1V6 Moderate evidence that some stakeholders perceive the management structure as partly inefficient and consider themselves rather disconnected from the project: 3S12, 2N6

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	ELE evidence
		synchronised and build on each other.		
			4 IMPACT	
4	What evidence is there that the NSP is likely to contribute to the intended impact (incl. transformational change)?	<ul style="list-style-type: none"> The strength of the evidence that key outcomes are going to be achieved and the robustness of the causal links/pathways to the intended impact (namely proving that climate finance can transform the Thai rice sector towards reduced GHG emissions). The extent to which the NSP is geared towards transformational change. 	<ul style="list-style-type: none"> Technical Component + Financial Component jointly build up the capabilities at farmer and service provider level to create a functioning market for mitigation services. Interim signals of installed learning processes and indications for a potential catalytic effect are evident (as per the NAMA Facility's Transformational Change Framework). 	<ul style="list-style-type: none"> Strong evidence that building blocks for institutional architecture are being developed, e.g., capacity building measures and awareness-raising (early signs of transformative change): AR2020, 1S19, 1S20, 1S12, 1S16, 2N6, 1S23, 3N7 Strong evidence that effective market linkages are emerging: 1S14, 1S19, 1S20, 1S12, 1S16, 3N7 Strong evidence that scaling is still to be done: 1S16, 1S12, 2N7, 2N6
			5 SUSTAINABILITY	
5	What is the likelihood that the outcomes will be sustained after the end of the NSP funding period?	<ul style="list-style-type: none"> The extent of the evidence supporting the NSP's sustainability (e.g., evidence of self-sustaining institutional structures, and political and financial commitment of key stakeholders). Levers endangering the sustainability of project results beyond its duration are addressed. 	<ul style="list-style-type: none"> Built-up capacities will remain available and on offer beyond the project duration. Financial offers by BAAC addressing mitigation service providers as well as rice farmers are maintained by a share of their profits and by paid-back loans. 	<ul style="list-style-type: none"> Strong evidence for early signs of mainstreaming of this project approach into the MoAC: AR2020, KW, 1N6, 1S20, 1S14, 1S16 Very strong evidence for strong alignment between the project scope and the Thai GAP++: 1N6, 3N7, 1V6, 3S12 Strong evidence for interest from other regions outside CAPSAS: AR2019, 1N7, 2S19, 1S14, 2S20
			6 LEARNING	
6	What key lessons can be learnt to the benefit of this NSP or other	<ul style="list-style-type: none"> The NSP's generation of important lessons for: 1) itself; and 2) other projects and/or 	<ul style="list-style-type: none"> The NSP generates and captures important lessons to improve its own implementation strategy 	<ul style="list-style-type: none"> Very strong evidence that reaching 100,000 farmers is likely not possible within project duration: KW1, 1N6, 2N6, 1V6, 1N7, 2S8, 2S12

ELEQ No.	Evaluation Question	Evaluation criteria	Original hypotheses	ELE evidence
	projects or NSPs in achieving their results?	NSPs and thus the NAMA Facility	<ul style="list-style-type: none"> The NSP generates and captures important lessons for other projects and/or NSPs 	<ul style="list-style-type: none"> Strong evidence that any additional loan is yet another debt for a farmer: 1S16, 1S19, 2S19, 1S21, 1V13 Very strong evidence that introducing new technologies is taking more time than planned for: KW1, VW1, 2N6, 1V6, 2S8 Strong evidence that activities around financial literacy are needed: 1N9, 1V13, VW1 Strong evidence creditworthiness and -willingness need to be considered further/ differently than is the case: 1N9, 2S12, 1S16, 1S19, AR2019 Very strong evidence that adaptation and livelihood aspects must be considered at farmer level rather than applying a pure mitigation focus: 1S14, KW1, VW1, 1N6, 1V6 Strong evidence that overlapping mandates of RD and DoAE complicate/ reduce implementation on farm-level: 2N6, 3N7, 1S12 Medium evidence that ToC inconsistencies are leading to challenges in implementation: KW1, 1N6, 1N9, 1N7, 2N7

Annex E Validity of the causal pathways using process tracing tests

The table below shows the result of the application of formal process tracing tests on the causal pathways of the NSP ToC to assess the strength of the evidence collected by the ELE to either confirm or reject the hypotheses behind each causal chain.

Overview on the validity of the causal pathways using process tracing tests

Formal test	Test description	Causal pathways of the NSP	Process tracing test
Smoking gun (confirmatory)	If evidence is observed, the hypothesis is confirmed. If evidence is not observed, the hypothesis is not confirmed, but this is not enough to reject the hypothesis.	<p>Causal pathway supporting Intermediate Outcome 1: If mitigation services are provided (output 2), if farmers are trained (output 1), if public and private funds are leveraged (output 3), and if innovative financing mechanisms and incentives are proven (output 4) low-emission rice production will be in place (intermediate 1). This will enable reduced GHG emissions in the CAPSAS region (outcome 1) and motivate further public and private investments (outcome 2).</p> <p>Causal pathway supporting Intermediate Outcome 2: If mitigation services are provided (output 2), if public and private funds are leveraged (output 3), and if innovative financing mechanisms and incentives are proven (output 4), mitigation service provision will be in place (intermediate outcome 2). This will enable reduced GHG emissions in the CAPSAS region (outcome 1) and motivate further public and private investments (outcome 2).</p>	<p>Causal pathway supporting Intermediate Outcome 1: Initial evidence of the outputs and the intermediate outcome and outcome 1 is observed, and it is likely the hypothesis is correct although incomplete. It lacks addressing farmers’ risk aversion and their eligibility for respective financing mechanisms, and it discounts farmers’ technological readiness to adopt the LLL & AWD technologies. Due to just one service provider being operational (part-time) so far and due to the delays (COVID-19 and drought) and under-performance of the Financial Component, there is not enough evidence to confirm the hypothesis yet.</p> <p>Causal pathway supporting Intermediate Outcome 2: Initial evidence of the outputs and the intermediate outcome and outcome 1 is observed, and it is likely the hypothesis is correct although incomplete. It lacks considering the needed farmer demand to stimulate investment willingness of service providers. Due to just one service provider being operational (part-time) so far and due to the delays and thus under-performance of</p>

Formal test	Test description	Causal pathways of the NSP	Process tracing test
		<p>Causal pathway supporting Intermediate Outcome 3: If good practice examples of innovative financing and incentive mechanisms are demonstrated (output 4), if national capacities and local structures are strengthened to support NAMAs (output 5), and if sustainable co-benefits (such as adaptation) of the Thai Rice NSP are demonstrated (output 6), supportive policy formulation will be in place (intermediate outcome 3). This will enable reduced GHG emissions in the CAPSAS region and motivate further public and private investments (outcome 2).</p>	<p>the Financial Component, there is not enough evidence to confirm the hypothesis yet.</p> <p>Causal pathway supporting Intermediate Outcome 3: Initial evidence of the outputs and the intermediate outcome and outcome 2 (public investments) is observed, and it is likely the hypothesis is correct. Limitations exist regarding the motivation of further private investments (outcome 2) due to the delays and underperformance of the Financial Component so far. Besides its contribution to outcome 2, ELE results confirm the hypothesis.</p>
<p>Hoop test (disconfirmatory)</p>	<p>If the evidence is not observed, the hypothesis is rejected. If the evidence is observed, the hypothesis is not rejected, but this is not sufficient to confirm the hypothesis.</p>	<p>No causal pathway falls into this category.</p>	
<p>Double decisive</p>	<p>If evidence is observed, the hypothesis is confirmed. If the evidence is not observed, the hypothesis is rejected.</p>	<p>No causal pathway falls into this category.</p>	
<p>Straw in the wind</p>	<p>If the evidence is observed, this is not sufficient to confirm the</p>	<p>No causal pathway falls into this category.</p>	

Formal test	Test description	Causal pathways of the NSP	Process tracing test
	hypothesis. If the evidence is not observed, this is not sufficient to reject the hypothesis.		

Annex F NSP achievements against logframe indicators

Below are reported the Thai Rice NSP logframe indicators grouped under the relevant elements of the ToC. Target and achieved figures are reported with a Red-Green (i.e. target not met-met) assessment. Only indicators relevant to the Technical Component are reported.

F.1 Impact indicators*

Impact: Reduced GHG emissions in Thai rice production, access to higher value markets for Thai rice

#	Indicator	Baseline	Target 2023 and achievements
M1	See paragraph F.2 below	See F.2	See F.2
M3.2	Low-emission rice value chain has been recognized and segregated from conventional rice value chain.	0	100,000 mt of low-emission rice available in the market Achieved: 108,147mt

* Specific impact indicators are not defined in the proposal. To show progress on the impacts laid out in the proposal, the ELE Team inserted this section accordingly, based on existing indicators.

F.2 Outcome indicators

Outcome: Reduced GHG emissions in focus provinces (CAPSAS; outcome 1) and increased public- and private investments in low-emission rice production (outcome 2)

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
M1	Reduced GHG emissions in the Thai Rice NAMA's focus provinces (CAPSAS) in Thailand's Central Plains	0	108,909	67,904
M2	Number of people directly benefitting from NSP (Member of Household)	0	63,530	54,733

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
M3	Degree to which the supported activities are likely to catalyse impacts beyond the NSP (potential for scaling-up, replication and transformation)	0	2	1
M4	Public finance mobilised in [EUR]	0	€2,640,000 in-kind	€3,599,000
M5	Private finance mobilised in [EUR]	0	€11,960,000	€517,000

*Note: Figures from M&E plan 2020

Output 1:
Promoting the adoption of low-emission, irrigated rice production

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
1.1	Cumulative number of farmer groups in watershed areas of the 6 target provinces (1 group about 35 HHs) that implement the basic low-emission rice farming practices of SRP/Thai GAP++	0	800	267
1.2	Site-specific supporting practices: rice variety, planting, plant protection, cropping system	0	550	267
1.3	Number of “Smart Farmers” acting as ‘trainers of trainer’	0	400	394

*Note: Figures from M&E plan 2020

Output 2:
Availing mitigation services on the market

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
	Number of mitigation services offering field implementation of core technologies (LLL, AWD, SSNM & SSM)	0	140	1

*Note: Figures from M&E plan 2020

Output 3:
Leveraging additional public and private funds for low-emission investments

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
	See M4 for public funds			
	See M5 for private fund			

*Note: Figures from M&E plan 2020

Output 4:
Demonstrating good practice examples of innovative financing and incentive mechanisms

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
4.1	At least 5 million EUR remain in the RF by 2023 (to ensure fore-casted financial sustainability & functioning)	0	701,809	8,383,203 (under spent)
4.2	At least 3 business cases by 2019 (1. LLL+AWD combined, 2. SSNM, 3. SSM)	0	2019: 3	1

*Note: Figures from M&E plan 2020

Output5:
Strengthening national capacities and local structures to maintain NAMAs

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
5.1	Information generated by GHG monitoring system & tools are regularly updated for the Central Plains by Rice Department	No info	Continuing update information	Yes
5.2	Fund management by BAAC or RD after 2023	No fund management	Fund management by BAAC or RD after 2023	Not yet due

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
5.3	Number of institutions benefitting from capacity-building measures implemented by the NSP	0	160	121

*Note: Figures from M&E plan 2020

Output 6:
Demonstrating sustainable co-benefits of the Thai Rice NAMA

#	Indicator	Baseline	Targets (2020)*	Achieved (2020)*
6.1	Cumulative number of farmers' groups that apply SRP/Thai GAP++ practices in addition to the site-specific supporting & basic mitigation practices, which provide co-benefits.	0	550	267
6.2	Number of farm households that show a net reduction in the use of pesticides, fertilizer, water etc. in comparison to BAU	0	2023: 50,000	9,362
6.3	Income increase by 20% among farm households through the application of low-emission rice farming	0	2023: 50,000 households	9,362
6.4	Increase in number of women participating in low-emission rice farming (practice & service)	0	2023: >50% of the target households	50% women participating

*Note: Figures from M&E plan 2020

Annex G List of ELE sources

G.1 Internal documents

1. Project Proposal
2. Annual Report 2018
3. Semi-annual Report 2019
4. Annual Report 2019
5. Semi-annual Report 2020
6. Annual Report 2020
7. Monitoring and Evaluation Data 2019 + 2020

G.2 Public documents

1. Thailand's Roadmap to the NDCs
2. SRP Standard for Sustainable Rice Cultivation
3. SRP Performance Indicators for Sustainable Rice Cultivation
4. SRP Assurance Scheme
5. Sustainability Announcements by LIDL (retailer)

G.3 List of organisations interviewed

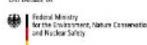
Institution	Position
NSP Team	
GIZ	Project Director (AV)
GIZ	Director of Operations
GIZ	Project Coordinator
GIZ	Financial Advisor
GIZ	Financial Advisor
GIZ	Senior Advisor on Sustainable Rice Policy
GIZ	Technical Advisor
GIZ	Senior Field Manager

GIZ	Field Manager
NSP Stakeholder	
MoAC, Rice Department	Director Bureau of Rice Policy and Strategy
MoAC, Rice Department	Director of Foreign and Special Project Group
MoAC, Rice Department	Advisor to Director General
MoAC, National Bureau of Agricultural Commodity and Food Standards	Secretary-General
MoAC, Royal Irrigation Department	Director of Bureau of Research and Development
MoAC, Department of Agricultural Extension	Director of Rice Production System Promotion Group
MoAC, Department of Agricultural Extension	Agronomist, Rice Production System Promotion Group, DOAE
MoAC, Office of Agricultural Economics	Senior Economist
Ministry of Natural Resources and Environments, Office of Natural Resources and Environmental Policy and Planning	Director of Climate Change Management and Coordination Division
Ministry of Finance, Bank of Agriculture and Agricultural Cooperatives	Credit Work Analyst
MoAC, Cooperative Promotion Department	Expert on Cooperative Rice Business
OLAM International Ltd.	Country Head of Thailand
Sustainable Rice Platform	Executive Director
International Rice Research Institute	Mechanization and Post-harvest Specialist
International Rice Research Institute	Scientist - Rice postharvest and by product management
International Rice Research Institute	CIM Expert for rice
Rice Community Centres (farmer group)	President of Suphanburi President of Chinat
Suphanburi Rice Mill Association	Chairman
Service provider	Owner
Third Party	
Agricultural Pacific Rural and Agricultural Credit Association (APRACA)	Secretary General and Project Manager to an IFAD programme
UNEP	Sustainable Rice Platform Outreach and Technical Support Consultant

Annex H ELE Terms of Reference



On behalf of



ELE #6

NSP Thailand Rice NAMA

Mid-term evaluation of the NSP

Background

This document describes the mid-term Evaluation and Learning Exercise (ELE) of the NAMA Support Project (NSP) 'Thai Rice NAMA' (referred in this document as Thai Rice NSP). This is a work package commissioned under the Project title and contract number below.

Project title:	Project evaluation and learning exercises for the NAMA Facility
Project and reference number:	12.9097.2-108.00 / 81238912
ELE scope (mid-term/final):	Mid-term ELE
ELE focus (TC/FC/both):	Both components

1 Terms of reference

1.1 General TORs as defined in TORs for all ELEs and theoretical framework

This ELE is implemented within the general Terms of References (TORs) and following the theoretical framework, and these two documents are binding.

However, as a short reminder, the focus is on the following three questions (slightly amended to the context of a mid-term rather than a final ELE):

- Is the NSP achieving its planned results?
- Is the NSP starting to trigger transformational change?
- What can be learnt from the NSP so far?

1.2 Specific additional elements to be considered in this ELE

Please note below the additional elements/questions to be considered in this ELE:

1. Options for better utilisation of the Financial Component (FC), e.g., by broadening supported mitigation technologies next to Laser Land Levelling (LLL) and by providing subsidies/promotions to mitigation services, investments by service providers and extension services (*this aspect will be covered under evaluation questions 1.1, 1.3 and 2.1 – see evaluation matrix below*)
2. Options for additional promotion/ awareness raising of service provider business model (*this aspect will be covered under evaluation questions 1.1, 1.3 and 2.1 – see evaluation matrix below*)
3. Options for accelerating uptake of LLL from farmers (in addition to the planned subsidies) for the different provinces (*this aspect will be covered under evaluation questions 1.1, 1.3 and 2.1 – see evaluation matrix below*)
4. The Thai Government's (Ministry of Agriculture and Cooperatives and Ministry of Natural Resources and Environment) willingness to continue and extend the objectives/benefits of the Thai Rice NSP to further projects: proposals for scaling up are currently being developed under the Green Climate Fund (GCF) and the Global Environment Facility (GEF). Interest in such initiatives by the Thai Government should be explored during the ELE (*this aspect will be covered under evaluation questions 1.2 and 5 – see evaluation matrix below*).

1.3 Specific elements/questions that will not be considered in this ELE

The general TORs and the theoretical framework allow for a prioritisation of some evaluation questions at the expense of other evaluation questions. Please note below those elements/questions which will not be considered in this ELE:

The six main evaluation questions as per the Theoretical Framework will be addressed. However, the evaluation criteria on impact, sustainability and learning will only be explored based on the NSP’s engagement to reach impact, sustainability, and learning. As this is a mid-term ELE the evaluators will explore relevant set-up mechanisms rather than achieved results.

2 Suggested staff

The contractor suggests the following staff (see CVs attached):

- Senior International Expert A (ELE Team Leader): Kerstin Linne
- Senior International Expert B: Rishika Das Roy
- Senior National Expert: Juejan Tangtermthong

3 Timing

The contractor suggests the following timing:

Item	Date / period	Comment
Kick-off call TSU / ELE team / NSP	07/06/2021	
Exchange of preliminary information	10/06/2021	
Availability of detailed agenda	02/07/2021	
Field phase	5-23/07/2021	Virtually
Draft report delivery	21/09/21	
Final report delivery	22/10/21	Assuming one feedback cycle. (Note that the TORs allow for more feedback cycles if necessary)

4 TSU agreement

The TSU agrees to the TORs, team and timing described above.

First Name Last Name (electronic signature)

Berlin, DD MM YYYY

**Ernesta
Maciulyte**

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