Mid-Term Review of FAO-GEF Project GCP/LAO/021/LDF

GEF ID - 5462

Strengthening Agro-climatic Monitoring and Information Systems (SAMIS) to improve adaptation to climate change and food security in Lao People's Democratic Republic

Final Report

MTR conducted in March 2021

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Lao PDR, August 2021

Disclaimer

Please note that the analysis and recommendations of this report do not necessarily reflect the views of the Food and Agriculture Organisation of United Nations, its Executive Board, or the United Nations Member States. This publication reflects the views of its authors.

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The MTR team comprised an independent international consultant, Dinesh Aggarwal as lead consultant covering Climate Change Adaptation, an independent international consultant Eunjin Han as climate modelling expert who covered modelling aspects and Thiphavong Boupha as a national consultant, who covered Climate Change Adaptation for Agriculture Sector.

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MTR team:

- *Dinesh Aggarwal, International Consultant*
- *Thiphavong Boupha, National Consultant*
- *Eunjin Han, Climate Modelling Expert*

LIST OF ACRONYMS

ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Centre
AEZ	Agro-Ecological Zoning
AIT	Asian Institute of Technology
AMAT	Adaptation Monitoring and Assessment Tool (GEF Tool used for Monitoring of GEF funded climate change adaptation projects)
AWP/B	Annual work plan and budget
AWS	Automatic Weather Stations
BH	Budget Holder
CAgMD	Climatological and Agro-meteorological Division of DMH
CAWA	Climate Adaptation in Wetlands Areas (CAWA) in Lao PDR (FSP)
CBO	Community based organization
CDE	Centre for Development and Environment
CIAT	International Centre for Tropical Agriculture
COVID-19	Coronavirus Disease 2019
CPF	Country Programme Framework
DALaM	Department of Agricultural Land Management
DIM	Direct Implementation Modality
DMH	Department of Meteorology and Hydrology
FAO	Food and Agriculture Organisation of the United Nations
FFS	Farmers Field School
FPIC	Free, Prior, Informed Consent
FPMIS	Field Programme Management Information System
GCF	Green Climate Fund
GCU	GEF Coordination Unit
GEF	Global Environment Facility
GIZ	Deutsche Gesellschaft fur Internationale Zusammenarbeit (German Federal Enterprise for International Cooperation)
ICT	Information and Communication Technology
IW	Inception Workshop
IWMI	International Water Management Institute
LaCSA	Lao Climate Service for Agriculture
LDCF	Least Developed Country Fund
LoA	Letter of Agreement
LRIMS	Land Resources Information Management System
LTO	Lead Technical Officer
JICA	Japan International Cooperation Agency
MAF	Ministry of Agriculture and Forestry
MPT	Ministry of Post and Telecommunication
MRC	Mekong River Commission
MONRE	Ministry of Natural Resources and Environment
MTR	Mid Term Review
NAFRI	National Agriculture and Forestry research Institute
NIM	National Implementation Modality
NSEDP	National Socio-Economic Development Plan
NPD	National Project Director
NWP	Numerical Weather Prediction
OCC	Office of Corporate Communications (of FAO)
PC	Project Coordinator
PMU	Project management unit
PSC	Project Steering Committee

SAMIS	Strengthening Agro-climatic Monitoring and Information Systems to improve adaptation to climate change and food security in Lao PDR
SAVA	Socio-Agricultural and Vulnerability Analysis
SOP	Standard Operating Procedures
TABI	The Agro Biodiversity Initiative
TOR	Terms of Reference
UN-Habitat	United Nations Human Settlements Programme
UoB	University of Bern
WFP	World Food Programme
WB	World Bank

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EXECUTIVE SUMMARY

Introduction

ES 1 The project 'Strengthening Agro-climatic Monitoring and Information Systems (SAMIS) to improve adaptation to climate change and food security in Lao People's Democratic Republic (Lao PDR)' is being implemented by the Food and Agriculture Organization of the United Nations (FAO) in Lao PDR. The project is supported by Least Developed Countries Fund (LDCF) through Global Environment Facility (GEF). As per the requirements for all full-size GEF Funded projects, a Mid Term Review (MTR) of the project has been carried out by a team of independent consultants comprising of an international consultant (Mr. Dinesh Aggarwal) a National Consultant (Mr. Thiphavong Boupha) and a 'Climate Modelling Expert' (Ms. Eunjin Han). The findings of the MTR are given in this report. A summary of the findings of MTR is given in the following paragraphs. The MTR was delayed and carried out very close to the official closure of the project (rather than at the middle of the project implementation timelines). The implementation of the project started in June 2017 and was scheduled to be complete by May 2021. As per the information shared by the project team, an extension of one year has been requested beyond 30 June 2021. With this extension, the project will be able to work up to Dec 2021, thereafter six months will be available for the official closure of the project. With an extension of six months, the operation closure of the project is now scheduled at December 2021. The MTR was carried out during March and April 2021. The target audiences for the MTR are the funding agencies, GEF Operational Focal Point, project partners and beneficiaries, FAO Country Office (FAO CO) at Laos, FAO at regional and Head Quarter levels, FAO Budget Holder (BH), MTR managers, Project Task Force (PTF) members, Consultants, and FAO Evaluation Office.

ES 2 The National Adaptation Programme of Action (NAPA), for Laos PDR has identified agriculture as one of the four sectors highly vulnerable to climate change. The SAMIS project is aimed at negating the impacts of climate change on the agriculture sector by

- enhancing monitoring, analysis, communication, and use of agro-meteorological data and information for decision-making in relation to agriculture and food security (Component 1 of the project)
- improving monitoring and analysis of agricultural production systems by strengthening Land Resources Information Management System (LRIMS) and Agro-Ecological Zoning (AEZ) to support agricultural policies and climate-change adaptation (Component 2 of the project).

ES 3 The project is being executed by FAO (as GEF agency) under the Direct Execution (DEX) Modality, in close collaboration with the Ministry of Natural Resources and Environment (MONRE) and MAF. Within MONRE and the Ministry of Agriculture and Forestry (MAF), main executing departments are the Department of Meteorology and Hydrology (DMH) and the Department of Agricultural Land Management (DALaM).

Main Findings

Relevance:

ES 4 The project aligns with GEF strategy to promote sustainable development and is aligned with the GEF LDCF objectives. The project is also aligned to FAO's Global Strategic Objectives of increasing and improving the provision of goods and services from agriculture, forestry and

fisheries; increasing resilience of livelihood to threats. The project also fits into FAO-Adapt, which guides climate change adaptation. The project contributes to the FAP country program in Laos. The project also links to Lao's national development goals, plans and policies, and legislation. As mentioned by the project team, the project data are used to validate the 9th National development plan targets based on climate scenarios.

Effectiveness:

ES 5 At the MTR, the effectiveness of the project is assessed in term of the progress made by the project towards achievement of the targeted Outcomes and Outputs and the expected impacts of the results achieved (or likely to be achieved) by the project. Table 1 below provides in brief, the progress towards achievements of the results for different components and Outcomes of the project.

Table 1: Outcomes of the SAMIS Project and Progress towards results at MTR

Component/Outcome	Indicators	EOP Target	Status and rating[1] for progress at MTR
Component 1 **Strengthening agro-climatic monitoring, analysis, communication and use of data and information for decision making in agriculture and food security**			
Outcome 1.1 Improved agro-meteorological monitoring, communication and analysis facilities established at national and provincial level	**Indicator 1.1** A fully renewed Climatological and Agro-meteorological Division (CAgMD) within DMH functioning with clear roles and responsibility	A fully renewed CAgMD connected with all AWS and database	**Satisfactory** This Outcome involved the establishment of 15 automatic weather stations and up-gradation of 15 existing manual weather stations. !5 automatic weather stations have been procured and installed. The activity of 'up-gradation of all the manual weather stations' is delayed and was ongoing at the time of MTR. 'Establishment of the laboratory' for calibration of the sensors of the Automatic Weather Station (AWS) is also delayed but is underway. Upgradation of the manual weather stations and establishment of the calibration laboratory is likely to be completed before the closure of the project. All other activities under this Outcome have been completed successfully
Outcome 1.2 Institutional and technical capacity strengthened to facilitate data sharing, archiving, analysis and interpretation of agro-meteorological information products to users at all levels	**Indicator 1.2** Improved and new climate and agromet products available with users	A fully renewed CAgMD connected with all AWS and database	**Satisfactory** Most of the activities have been completed successfully, and the target value for the indicators achieved, except for the Standard Operating Procedure for CAgMD and guidelines for installation of instruments, data coding, and maintenance. Twelve training sessions were organised for the government officials. In total 267 males and 91 females participated in these trainings
Component 2 **Strengthening institutional and technical capacity for monitoring and analysis of agriculture production systems and development of Land Resources Information Management Systems (LRIMS) and Agro-Ecological Zoning (AEZ)**			
Outcome 2.1 Integrated Land Resources Information Management System (LRIMS) and High-resolution Agro-	**Indicator 2.1** Number of information systems available	At least 2 new systems developed and delivered	**Satisfactory** Most of the outputs and activities for this Outcome have been carried out as initially planned.. Relevant activities for refining the system are ongoing.

[1] Rating Scale: Highly Satisfactory (HS): no shortcomings; Satisfactory (S): minor shortcomings; Moderately Satisfactory (MS); Moderately Unsatisfactory (MU): significant shortcomings; Unsatisfactory (U): major problems; Highly Unsatisfactory (HU): severe problems

Component/Outcome	Indicators	EOP Target	Status and rating[1] for progress at MTR
Ecological Zones (AEZ) and agriculture production Systems at Risk (SAR) developed based on agricultural resources (climate, land, soil, water and crops)			
Outcome 2.2 Technical capacity developed for sustained operation and use of LRIMS, SAVA, AEZ and agriculture production Systems at Risk for policy formulation and adaptation planning in agriculture sector	**Indicator 2.2** MAF/ DALaM staff trained to maintain and provide or apply LRIMS/ NAEZ information (gender disaggregated)	100 staff (30 Female: 70 Males)	**Satisfactory** Most of the activities were performed as scheduled, and 10 training sessions were carried out. However, the effectiveness of the training could not be ascertained during the MTR. Except for a simple question during the interactions with some of the trainees about the effectiveness of the training, a formal assessment of the effectiveness of training was not possible during MTR. The training reports do not have an assessment regarding the effectiveness of the trainings Some of the trainings (particularly those by the international faculty/trainers) which were to be conducted either in the form of actual demonstration/hands-on mode had to be organised in the online format, due to COVID-19 pandemic.
Component 3 **Knowledge management and dissemination of information and lessons learned for local application, planning, monitoring and evaluation**			
Outcome 3.1 Knowledge and information sharing for local application, agriculture and food security planning and programming and project outcomes/outputs monitored and evaluated to ensure sustainability	**Indicator 3.1a** Framework for knowledge-sharing and packaging of lessons learned and experiences developed/ improved	1	**Satisfactory** The main platform being used for knowledge sharing and sharing of lessons learned is the FAO website. At the local level, the weather, climate, land resources, and climate-change impact information is being disseminated to farmer groups through established farmer field schools (FFS). Apart from FFS, the project uses other communication channels such as mobile applications, loudspeakers, TV and radio programming, etc.
	Indicator 3.1 b Trainings and workshops delivered	19	**Satisfactory** The main method used for training of the farmers is the FFS, which was initially piloted in two districts (Champhone and Sing). The project expanded the activity to 10 districts in 5 provinces
	Indicator 3.1 c Number (training materials, products, publications, guidelines, books, handbooks, flyers, web-sites, phone application, radio, T.V, awareness raising event/activities with community) of awareness raising and information sharing publications produced and disseminated	16	**Moderately Satisfactory** The project has produced a number of awareness creation materials which includes, Leaflet of SAMIS, Leaflets for the three components of the project, Assessment book, Land cover mapping poster, Soil Mapping poster, LaCSA poster, SAMIS concept, SAMIS video 1, SAMIS Video 2 (not yet approved by OCC), Land cover mapping book 15. LaCSA booklet 16. LRIMS poster 17. Agro-met News School Poster One video has been prepared and is awaiting approval by OCC. As per the project team, the video cannot be finalized due to FAO rules

ES 6 The project's objective is to enhance capacities to gather, process, analyze and share climatic and geospatial information so that it can be applied to planning and decision-making for adaptation to the impacts of climate change on agriculture sector. The concept relates to two levels of decision-making. At one level, the project is building infrastructure and comprehensive agroclimatic monitoring and information capacity focused on boosting sustainable production by optimizing farmers' and smallholders' resilience to climate change through the preparation and provision of agrometeorological advisory services. At the second level, which has relevance at the national level, the project addresses, future provision of crop distribution and productivity as well as the socio-economic acceptability of farming and cropping systems that will result due to the impact of climate change. The project is on track to achieve its outcomes and objectives.

ES 7 With the successful establishment of the new AWS, the project has led to an increase in the availability and quality of agrometeorological information across the country. The agrometeorological information being delivered through LaSCA to the farming community is positively impacting the earnings either due to prevention of the post-harvesting losses (e.g., for coffee plantations) or increase in the yields of the crops (e.g., for rice) at the pilot locations. Although within the implementation timelines of the project, the impacts/benefits to the farming community are getting realized within the pilot areas, it will be possible for the national government to extend these benefits to the farmers across the nation with minimal incremental efforts.

ES 8 With the likely achievement of Outcomes for component 2 of the project, the government officials and policy makers will have insights into the distribution of agricultural populations that are vulnerable to climatic change. One of the other impacts of the project strengthening of agro-climatic monitoring and information systems will provide input for the development of long-term plans for agriculture and food security. At the organization level, the project has benefited MONRE and MAF by strengthening their skill sets, knowledge base, and understanding regarding the impacts of climate change and the adaptive options to negate the impacts. One of the other benefits is strengthening the collaboration between different agencies in the preparation of agrometeorological advisors and the development of agro-climatic monitoring and research.

ES 9 The project is on track to achieve its objectives and targets for most of the Outcomes of the project.

ES 10 There are no unintended adverse social consequences or adverse environmental impacts due to the project either on the local environment or global environment. There are no adverse impacts due to the project on the indigenous people and on women.

Efficiency

ES 11 The project implementation has taken adaptive measures right from the time of project inception onwards to make effective use of the other ongoing projects to ensure cost-effective implementation. During implementation of the project, available opportunities for collaboration and cost-effective implementation of the SAMIS project were used.

Sustainability

ES 12 The project results are largely sustainable except for the need to further strengthen the organizational and institutional arrangements. For example, after the SAMIS project, there would be different institutions/agencies responsible for specific tasks (compared to those

currently involved) for the overall delivery of advisory to the farmers at the local level, and it would be necessary to ensure coordination among these institutions, to ensure sustainability.

Factors affecting Performance

ES 13 The log frame of the project as given in the project document presents the project objectives. The project objectives given in the project document are predictable and feasible within the project implementation timelines.

ES 14 The project implementation is being carried out by the officials of PMU with a clear monitoring mechanism. FAO CO in Laos provides overall program, administrative, and financial oversight of the project progress in accordance with the common FAO procedures. The Project Steering Committee is the key decision-making body at a project strategic planning level. Some of the challenges faced by the project implementation include co-ordination between DMH and DaLAM as they are under two different line ministries.

ES 15 The project has leveraged the co-financing much beyond the commitments made at the time of project approval. The co-financing by the government has happened in the form of in-kind contributions (office facilities, time of key staff etc.).

ES 16 The project established partnerships for the implementation of the project with the government counterparts and other relevant stakeholders. Some of these partnerships were based on international stakeholder interest and co-financing. This included the partnership with the national and international universities/institutions for supporting the activities like training/capacity building of the government officials and development partners and NGOs.

ES 17 The project uses the website of the FAO for disseminating information regarding the work carried out. Apart from the FAO website, the project also disseminates the results through news channels (both online and print media). The project has a Facebook page and a google site for sharing the information amongst selected stakeholders. However, nation-wide functioning of these could not be validated during the MTR.

ES 18 The M&E plan of the project was well conceived with adequate provision of budget for M&E activities. M&E activities were carried out as planned. Periodic M&E reports were produced regularly and approved by the Project Steering Committee (PSC), which took note of the progress made and approved the work plans for the next period accordingly.

Conclusions

ES 19 Conclusion 1: (Please see para-ES 7). The institutional arrangement across the line ministires and departments has been initiated and strengthened. The agrometeorological information being delivered by the project through LaSCA, to the farming community is positively impacting the earnings of the farmers.

ES 20 Conclusion 2: (Please see para-ES7). The impacts/benefits to the farming community are getting realized within the pilot areas, it will be possible for the national government to extend these benefits to the farmers across the nation with minimal incremental efforts. This is considering that LaCSA is a national product, so the agro-met advisories are already available to the whole country for the crops covered and it would be possible for the national government to extend the benefits to the farmers (which are not yet covered by the pilot activities) with some incremental efforts.

ES 21 Conclusion 3: (please see para-ES 8). The results of Component 2 of the project will provide the required inputs for taking policy and regulatory decisions for adaptation to the impacts of climate change on the agriculture sector. Thus, one of the other impacts of the project will be strengthening agro-climatic monitoring and information systems, leading to the required inputs for the development of long-term plans for the agriculture sector.

ES 22 Conclusion 4: (please see para-ES8). The project has benefited MONRE and MAF by strengthening their skill sets, knowledge base, and understanding, knowledge base, and understanding of the impacts of climate change and the adaptive options to negate the impacts.

ES 23 Conclusion 5: The project aims to negate the effects of climate change on the agriculture sector in Laos. The positive impacts of component 1 of the project are available immediately. The positive impacts due to component 2 of the project will be realized only over a period of time when the increased capacity of the government officials/departments would lead to the identification of the threats of climate change to the agriculture sector and policy-level decisions towards adaptation to the effects of climate change. Thus, the positive impacts due to component 2 will be realized over a period of time beyond the lifetime of the project.

ES 24 Conclusion 6: Presently, there is no concrete plan for upscaling the results and benefits of the SAMIS project. A strategy and plan may be worked out to upscale the results of the pilot activities of the SAMIS project at the national level. For this, the automatic weather stations being established under some ongoing development projects may be leveraged to support the climate data on a real-time basis which is one of the requirements to produce location-specific agro-climate information bulletins for the farmers. Given the limited time left for the completion of the project and considering the feasibility, most of the activities under such a plan would need to be carried out beyond the implementation of the SAMIS project.

GEF Rating Table

Table 2: MTR ratings and achievements summary table

GEF criteria/sub-criteria	Summary comments
A. STRATEGIC RELEVANCE	
A1. Overall strategic relevance	Satisfactory, Report Section:
A1.1. Alignment with GEF and FAO strategic priorities	Satisfactory, Report Section: 3.1.1 The project is aligned with the GEF LDCF objectives CCA 2 and CCA 3
A1.2. Relevance to national, regional and global priorities and beneficiary needs	Satisfactory, Report Section: 3.1.2 The SAMIS project Links to national development goals, plans, policies and legislation like National Adaptation Programme of Action to Climate Change; National Climate Change Strategy (2010); 9th National Socio-Economic Development Plan of Laos (2020)
A1.3. Complementarity with existing interventions	Satisfactory, Report Section: 3.1.3 The project is complementing the existing interventions within Laos PDR
B. EFFECTIVENESS	
B1. Overall assessment of project results	Satisfactory, Report Section:

GEF criteria/sub-criteria	Summary comments
B1.1 Delivery of project outputs	Satisfactory, Report Section: 3.2.1 The project is on track to achieve its objectives and most of the targets for different Outcomes of the project.
B1.2 Progress towards outcomes and project objectives	Satisfactory, Report Section: 3.2.1
- Outcome 1.1	Satisfactory, Report Section: 3.2.1, Para 47 Under Outcome 1.1, along with the establishment of the AWS. Most of the activities and results for outcome 1.1 have been fully achieved, except establishment of calibration lab for the instruments of the AWSs and up-gradation of the manual weather stations etc.
- Outcome 1.2	Satisfactory, Report Section: 3.2.1, Para 47 Under Outcome 1.2, there are activities to support the creation of useable agro-met information products. The activities have been successfully competed
- Outcome 2.1	Satisfactory, Report Section: 3.2.1, Para 48 Outcome 2.1 there is provision for the creation of products based on agricultural resources (climate, land, soil, water and crops). Most of the results have been achieved, except for the development of national AEZ (which is delayed)
- Outcome 2.2	Satisfactory, Report Section: 3.2.1, Para 51 At the time of MTR, the capacity building and training under Outcome 2.2 have been completed.
- Outcome 3.1	Satisfactory, Report Section: 3.2.1, Para 52 Outcome 3.1 of the project relates to knowledge management and information sharing aspects of the project. The activities are ongoing and are on track except for the activities like organizing the workshops/conferences for dissemination of project results.
- Overall rating of progress towards achieving objectives/ outcomes	Satisfactory, Report Section: 3.2.1
B1.3 Likelihood of impact	Not Rated at MTR
C. EFFICIENCY	
C1. Efficiency	Satisfactory, Report Section: 3.3 The project implementation has taken adaptive measures right from the time of project inception onwards to make an effective use of the other ongoing projects to ensure cost-effective implementation
D. SUSTAINABILITY OF PROJECT OUTCOMES	
D1. Overall likelihood of risks to sustainability	Likely, Report Section: 4.1
D1.1. Financial risks	Likely, Report Section: 4.1.1. Not much financial resources would be needed to sustain the results of the project
D1.2. Socio-political risks	Likely, Report Section: 4.1.2 there are no risks to the sustainability of the project from the socio-economic viewpoint
D1.3. Institutional and governance risks	Likely, Report Section: 4.1.3 Although the institutional framework for the co-ordination of the activities would need to be further strengthened, as such, there is not much risk to the sustainability
D1.4. Environmental risks	Likely, Report Section: 4.1.4 the project has no negative environmental impacts
D2. Catalysis and replication	Likely, Report Section: 4.2

GEF criteria/sub-criteria	Summary comments
E. FACTORS AFFECTING PERFORMANCE	
E1. Project design and readiness	Satisfactory, Report Section: 3.4.1 The Outcomes of the project are predictable and feasible within the implementation timeframe of the project.
E2. Quality of project implementation	Satisfactory, Report Section: 3.4.2
E2.1 Quality of project implementation by FAO (BH, LTO, PTF, etc.)	Satisfactory, Report Section: 3.4.2 FAO as GEF Executing Agency collaborated effectively with the National Counterparts and other stakeholders for effective implementation of the project
E2.2 Project oversight (PSC, project working group, etc.)	Satisfactory, Report Section: 3.4.2 The Project Steering Committee is the key decision-making body at a project strategic planning level. The Project Steering Committee is meeting once a year. The PSC takes note of the periodic monitoring report and approves the work plans. PSC is working as intended
E3. Quality of project execution	Satisfactory, Report Section: 3.4,2, para 57 FAO is implementing the project under direct execution modality. The implementation of the project is being carried out by FAO in close consultation with MONRE and MAF. The project is following the management arrangements as provided for in the 'Project Document'.
E3.1 Project execution and management (PMU and executing partner performance, administration, staffing, etc.)	Satisfactory, Report Section: 3.4.2 A Project Management Unit (PMU) was established to manage day to day activities of the project. The PMU assisted the MONRE and MAF, and other stakeholders in performing their respective roles as implementing partners. The Project Coordinator runs the project on a day-to-day basis on behalf of FAO. PMU follows FAO procedures.
E4. Financial management and co-financing	Satisfactory, Report Section: 3.4.3 The project has successfully leveraged the co-financing much beyond the commitments made at the time of CEO endorsement
E5. Project partnerships and stakeholder engagement	Satisfactory, Report Section: 3.4.4 The project established an effective partnership arrangement for implementing the project with the other (other than the government counterparts) relevant stakeholders as well. This included the partnership with the national and international universities/institutions for supporting the activities
E6. Communication, knowledge management and knowledge products	Moderately Satisfactory, Report Section: 3.4.5 Publications have been impacted by issues linked to FAO OCC approval and the complexity of FAO rules on publications. As per the design of the project, knowledge and information sharing workshops are to be organized. The project is yet to organize the workshops/conferences for dissemination of the information. Some of the best practices, key lessons, knowledge products have been disseminated through the project website (created on the FAO website). Some of the events organized by the project did get coverage in newspaper articles, radio and newspapers. Apart from this, the national counterpart (officials of MoNRE and MAF) have been disseminating lessons learned from the project at region and international forums.
E7. Overall quality of M&E	Satisfactory, Report Section: 3.4.6
E7.1 M&E design	Satisfactory, Report Section: 3.4.6.1 The plan is well articulated and is sufficient to monitor results and track the progress toward achieving the objectives.
E7.2 M&E plan implementation (including financial and human resources)	Satisfactory, Report Section: 3.4.6.2 The periodic monitoring documents are produced and submitted regularly. The only shortfall is the delay in the MTR.

GEF criteria/sub-criteria	Summary comments
E8. Overall assessment of factors affecting performance	Satisfactory, Report Section: 3.4
F. CROSS-CUTTING CONCERNS	
F1. Gender and other equity dimensions	Satisfactory, Report Section: 3.5.1 The project design and its implementation have taken specific care to ensure women's participation.
F2. Human rights issues	Satisfactory, Report Section: 3.5.1 There is no apparent human rights issue with the implementation and management of the project.
F2. Environmental and social safeguards	Satisfactory, Report Section: 3.5.2 The project was fully compliant with FAO's environmental and social safeguards defined by the integration of precautionary principles into program/project management cycles
OVERALL PROJECT RATING	**Satisfacotry**

Recommendations

#	Recommendation	Rational and Description	Responsibility	Timing/Dates for Action
	Corrective actions for the design, implementation, monitoring and review of the project			
1	**More Training / Capacity Building**	Considering that some of the technical training was imparted by the international specialists in English language, the receptibility of the training imparted was low. The situation got further complicated as some of the training has to be imparted using online platforms. It is recommended that a rapid assessment be carried out to identify the training gaps and further training and capacity building sessions be organized. To the extent possible local language be used for training, in case it is not possible at least the training material be prepared in the local language. During the mission it was emphasized by the stakeholders that more technical training is needed particularly on agro-met.	PMU	During the remaining time of project implementation
2	**Prepare knowledge products**	It is recommended to prioritize the development of case studies and knowledge products from the success of the SAMIS project. Actions may also be initiated to disseminate the case studies and knowledge products to larger audiences.	PMU	During the remaining time of project implementation
	Actions to follow- up or reinforce initial benefits from the project			
3	**Increase geographical coverage by including villages in the neighborhood of the pilot villages**	The project is using the Lao National Radio and loudspeaker system for dissemination of the agroclimatic information/bulletin to the farmers in the villages where pilot activities are being carried out. It is recommended that the geographical spread of the dissemination of the agrometeorological information/bulletin be increased (even if it means a marginal increase in the overall cost for this activity).	PMU	During the remaining time of project implementation

#	Recommendation	Rational and Description	Responsibility	Timing/Dates for Action
		Some of the initiatives which are suggested are as follows: • Wherever possible and practical, take the signals from the amplification systems working the pilot villages and feed them to the loudspeaker system of the neighboring villages. • Wherever required, the location and orientation of the loudspeakers in the villages be optimized to maximize the geographical coverage by the agroclimatic bulletin. • Explore the possibilities of using 'Community Radio' for broadcasting the agroclimatic bulletin. This has the potential to increase the geographical coverage exponentially. For such an initiative, the possibilities of getting the required permission/license from concerned authorities need to be explored. However, wherever Community Radio is existing, it may be utilized for broadcasting the bulletin. • Explore the possibilities of Toll-free call-back service provided by the mobile phone service companies can be provided. Under this a farmer can call a phone number and listen to the pre-recorded agro-climatic information/bulletin. The server menu can provide the choice to a farmer to listen to the information which is specific to his location, crop and other such parameters. Based on discussions with the officials of the mobile telecom service providers, it is assessed that this service can be made upstream within a month's time in the pilot locations. Such a service will enable a farmer to listen to the agromet information at the time of his/her choice. Further, a farmer will be able to listen to the information again in case she/he is not able to understand the complete bulletin in one go. The good thing about it is that this service can be accessed even by someone using a basic mobile phone instrument and in locations where the mobile network speed is low (2G and 3G services).		
4	**Initiate the process of provision of budgetary support by DMH to ensure operations and maintenance of AWSs**	Establishment of AWSs under Component 1 of the project is one of the highlights of the SAMIS project. The real time information feed from the AWSs facilitates generation of agromet information and advisory for the farmers. Going forward the continuation of the provision of the agromet services will depend on the continuation of operations of the AWSs. For this it is necessary to ensure maintenance (including the need to replace the sensors as	PMU/FAO/ Government Counterparts	During the remaining time of project implementation

#	Recommendation	Rational and Description	Responsibility	Timing/Dates for Action
		and when required) and service of the weather stations. It is recommended that the process be initiated to make provisions in the budgets of the respective department towards this end. This needs to be taken on priority as the project is going to end over next the six months.		
	Proposals for future directions underlining main objectives			
5	**Support the initiation of the process of development of Crop Insurance products**	With the establishment of AWSs under the SAMIS project and a couple of other ongoing projects in the country, it is now possible to have weather information-based crop insurance models in the country. Development of crop insurance products, policies, regulations is a time-consuming long process and it would not be feasible to do this as a part of SAMIS project. However, SAMIS project may initiate the overall process.	FAO / National Counterparts	Post SAMIS project implementation
6	**Ongoing Early Warning System / Disaster Risk Reduction initiatives and SAMIS project may collaborate. This will ensure the sustainability of the results of SAMIS project to some extent, while on the other hand this will lead to enhancement of results both for the EWS and SAMIS project**	World Bank is implementing a project in Laos under which a number of new automatic weather stations are being established. The project is focused on 'Early Warning and Disaster Risk Reduction'. This WB project also has activities and outputs like weather forecasting and assessment of climate change. The data from the weather stations being created under the WB project, once functional, will be used for the benefits of the SAMIS project (and beyond the SAMIS project) for the agro-met services, thereby increasing the geographical area served by the SAMIS project. The weather stations created under the SAMIS project can help the WB project by providing a dataset. As the AWS stations under the WB project will be installed after the end of SAMIS, this may require installing additional instruments at the stations and minor revisions in the LaCSA system. As a calibration lab is being created under the SAMIS project, the weather stations created under the WB project may use this lab. The WB project can provide sustainability to some of the activities and results of the SAMIS project by supporting continuation of such activities beyond the implementation timelines of the SAMIS project. With the increase in the number of weather stations in Laos it is a good idea to replicate/upscale the good results from the pilot at the villages under the SAMIS project, to the national level. For the purpose the weather stations being created under the WB project (and maybe some other projects as well) can be leveraged. Such a strategy to leverage will enable upscaling of the results at a minimal	FAO/ National Counterparts	Post SAMIS project implementation

#	Recommendation	Rational and Description	Responsibility	Timing/Dates for Action
		incremental cost. A new project may be proposed in Laos to upscale the results of SAMIS project, using this approach as a strategy		
7	**Actions for Replication and Upscaling**	With the good results out of SAMIS project towards delivery of agrometeorological information to the farmers at selected locations, a plan for replication and upscaling the results at the national level may be initiated. This may be done as a part of a national program or a new externally funded project. In case a new externally funded project is proposed, it may leverage the good results of the SAMIS project and establishment of new AWSs under other ongoing funded projects SAMIS project has supported preparation of a concept note for potential funding from GCF, for a replication/upscaling activity. The government has already extended its approval to the concept note and requested FAO to take it forward. Possibilities to take it further may be explored. Capitalize lessons learned from Farmer Field School (FFS) through a simple extension manual which could be used by local extension workers with a clear cost-benefit analysis . to analyze how much additional margin farmers could get through adopting these agro-met information and production technologies.	FAO/ National Counterparts	During the remaining implementation time of the SAMIS project and to continue after implementation of the SAMIS project
8	**Create a center of excellence in one of the institutions in Laos for Climate Change Adaptation for the Agriculture Sector**	A center of excellence may be created in Laos in one of the institutions to support continuation of the scientific work in the area of climate change impacts on the agriculture sector and adaptation to climate change. This could be linked to the Climate Change Research Center under NAFRI. This will ensure sustainability of the results achieved under Component 2 of the project. This will also ensure continuation of technical support to DALaM for policy and decision making for longer term adaptive action against the likely impacts of climate change on the agriculture sector Such a center of excellence may look for collaboration with other comparatively advanced institutions in other countries working in the area of climate change adaptation to agriculture sector.	PMU / FAO / National Counterparts	Towards the end of the implementation time of the SAMIS project and to continue after implementation of the SAMIS project.

1. INTRODUCTION

1.1 Purpose and Scope of the Mid Term Review

1. The project 'Strengthening Agro-climatic Monitoring and Information Systems (SAMIS) to improve adaptation to climate change and food security in Lao People's Democratic Republic (Lao PDR)' is being implemented by FAO in Lao PDR. The project is supported by LDCF through GEF. As per the requirements for all full-size GEF-supported projects, a Mid Term Review of the projects needs to be carried out at the time of mid-term of the project implementation timelines. MTR of the SAMIS project got delayed due to a number of reasons which include the pandemic due to COVID-19. MTR of the project has now been carried out, findings of which are given in this report.

1.2 Objectives of the Mid Term Review

2. The objective of the mid-term review (MTR) was to assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document. It was also meant to evaluate early signs of project success or failure, with the goal of identifying required changes that should be made in order to set the project on track so that the intended results are achieved. The Mid Term Review has been carried out by a team of independent consultants comprising of an international consultant (Mr. Dinesh Aggarwal), a National Consultant (Mr. Thiphavong Boupha) and a Climate Modelling Expert (Ms. Eunjin Han). The MTR has been carried out in close cooperation with the project team and FAO CO at Laos. The MTR has been carried out in compliance with the monitoring and evaluation plan as elaborated in the project document and in line with GEF/FAO guidelines and policies for MTR of projects.

1.3 Indented Users

3. The primary intended users of the project MTR are the Project Steering Committee (PSC) members, the Project Management Unit (PMU), the national project counterpart and government officials. In addition, FAO technical staff at headquarters, the FAO-GEF CU and other stakeholders will benefit from the MTR findings and lessons learned. At the FAO and project managerial level, the main users include the Budget Holder (BH) and designated MTR manager (RM), including the Funding Liaison Officer (FLO) and the Lead Technical Officer (LTO). The target audience for the MTR includes the funding agencies, GEF Operational Focal Point, project partners and beneficiaries, Project Task Force (PTF) members, Consultants, and FAO Evaluation Office.

1.4 Methodology

4. The design of the MTR is based on the requirements set out in the 'Terms of Reference (TOR)' prepared by the FAO CO/Project Team (please see Appendix 1). Before undertaking the MTR, an Inception Report was presented, including the proposed tasks, activities, and deliverables. The Inception report also provided a review matrix (Please see Appendix 6) contained the questions that need to be answered to determine and assess project results and to identify where the information is expected to come from (e.g., documents, interviews, and field visits). The inception report was shared with the project team and was approved by it prior to the process of stakeholder consultations. Later at the completion of the stakeholder consultation process, a detailed list of review questions and the proposed contents of the MTR report and the details where the answers to different review questions can be found was prepared shared

with the project team (Please see Appendix 7). The review efforts have been focused on the following four categories of project review criteria;

A. Relevance
B. Effectiveness
C. Efficiency
D. Sustainability
E. Factors Effecting Performance
F. Cross-cutting dimensions

5. Sources of data and data collection: Data have been collected through an extensive desk review of all relevant documents, meetings, and interviews with key stakeholders and site visits[2] to answer the MTR questions. The sources of data were carefully identified in order to obtain useful evidence-based information that is credible and reliable. A desk review of the following documents was carried out (please see Appendix 5):

   - Progress reports and project documents; such as the Project Document (ProDoc), Project Identification Form (PIF), Baseline Adaptation Monitoring and Assessment Tool (AMAT) (GEF Tool used for Monitoring of GEF funded (using LDCF/SCCF) climate change adaptation projects), AMAT tracking Tool prepared by the project team before the MTR, Project Inception Report.
   - Project Monitoring documents, namely the Annual FAO/GEF Project Implementation Reviews (PIRs); Annual Performance Reviews (APRs): Minutes of the Steering Committee meetings, Project Progress Reports, Work Plans, Back to Office reports (BOTRs) Financial reports.
   - Project Outcome documents; consultancy reports generated through Project activities, TORs and RFPs prepared by the project team.
   - Background information (websites, reports, national policy papers, or other written information) from relevant Government ministries and institutions, as well as other stakeholders; technical reports; project manuals and guidelines.

6. Mission: Due to the COVID-19 pandemic, in person mission by the international consultant and the modeling expert could not be taken. However, the national consultant met the stakeholders in person for the consultations. The national consultant facilitated remote participation by the International Consultant and the Modelling Expert in the meetings using online meeting platforms (Zoom, Skype). Prior to the mission to Laos, stakeholders were contacted by FAO CO Laos/Project team to schedule meetings and site visits in an optimum way in order to meet with a maximum of relevant stakeholders. During the mission, interviews were held with the Project Team, FAO CO, and a wide range of identified stakeholders, beneficiaries, and key informants which included steering committee members, senior officials of various ministries, academia, local Government. Appendix 4 provides the list of stakeholders consulted/interviewed. The mission included visits to some of the villages where pilot activities under the SAMIS project are being carried out. This included discussions with the farmers. The mission was carried out during the period 09 March 2021 to 26 March 2021 and included visits by the national consultant to Namtha, Sing, Laognam, Champhone districts, where pilot activities under the project are being undertaken. Appendix 3 provides the details of the MTR itinerary and field mission.

[2] Due to COVID-19, physical site visits were undertaken by the national consultant, the international consultant and the modelling expert participated in the site visits/discussions remotely using Skype/Zoom meeting platforms.

7. The review of documents provided the basic facts and information for developing a first draft mid-term review (MTR) report, while the mission was needed to verify the basic facts, obtain missing data and learn the opinions of respondents to help interpret the facts. The individual interviews with key informants were based on open discussion to allow respondents to express what they feel are the main issues. The discussions were facilitated with the use of a checklist of discussion points that were specific to the type of stakeholder. This was followed by more specific questions on the issues mentioned by the stakeholder. The list of mid-term review questions was also used as a checklist to raise relevant questions and issues during the interviews that correspond to the level and type of involvement of the interviewee or the organization being consulted.

8. Regarding the data analysis and methods for analysis, the documents listed in Appendix 5 were reviewed and analyzed. The notes of the interviews with key informants were used to verify facts and information presented in reports and documents and helped to formulate the conclusions and recommendations.

1.5 Limitations

9. The 'Mid Term Review' team spent considerable time on the missions and the stakeholder consultation. However, the mission and stakeholder consultation process needs to be completed within the available resources and time, due to which the consultation process could not include all the stakeholders. In consultation with the project team, it was ensured that none of the important stakeholders gets left out in the consultation process.

10. One of the other limitations was that for the 'International Consultant' and the 'Modelling Expert' a physical mission to meet the stakeholders in person and to visit the pilot project sites for verification could not be taken up due to the travel restrictions in view of the COVID-19 pandemic. However, the reviewers are of the view that the intensive desk review of documents followed by the stakeholder consultation (carried out remotely) has provided the required level of information to make a reasonable assessment of the achievements of the project. Moreover, the national consultant, being based at Lao PDR, met the stakeholders in person and facilitated their discussions with the 'International Consultant' and the 'Modelling Expert' using online meeting platforms. Such an arrangement is considered sufficient to deal with the travel limitations due to COVID-19.

11. Considering that there is considerable delay in carrying out the MTR and the project has already reached its terminal year, sufficient time is not there to implement the recommendations pertaining to mid-term corrections. Further, the mid-term target for the indicators, when compared to the PIR, would not be the true reflection of the achievements of the projects at its mid-term. Thus, instead of using the PIR for the first year of operations as a reference, the PIR for the third year of operation has been used for the MTR. The MTR team has made the recommendations, keeping in mind what is doable during the remaining implementation period of the project.

12. One of the other limitations is that a sixteen working day mission has the limitation of potentially giving a snapshot impression only. Nonetheless, the mid-term reviewers feel that this mix of data collection and analysis tools has yielded viable answers to the review questions within the limits of available time and budget resources.

2. PROJECT BACKGROUND AND CONTEXT

2.1 Development context[3]

13. Agriculture is the most important sector in the national economy of Lao PDR, and the agriculturally dependent population constitutes 76% of the total population. Crop production is mainly based on rice cultivation under lowland and upland conditions. Food self-sufficiency is highly uncertain and very much influenced by climate variability and extreme climate events. The key vulnerabilities of the agriculture sector in the Lao PDR are mainly caused by floods and drought.

14. Climate change is already affecting the natural resources and socio-economic situation of the country. The National Adaptation Programme of Action (NAPA) identified four sectors as highly vulnerable to climate change and required priority adaptation measures: agriculture, forestry, water resources, and health.

15. SAMIS project is directly related to Goal 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture) and Goal 13 (Take urgent action to combat climate change and its impacts) of Agenda for Sustainable Development4.

2.2 Threats and barriers being addressed[5]

16. The expected changes in climate will have a range of impacts mainly due to increases in annual mean temperatures by around 0.1-0.3°C per decade, a longer annual dry season, more intensive rainfall events, and more frequent and severe drought and flooding events. The Mekong basin is expecting increasing maximum monthly flows of +35-41% and decreasing minimum monthly flows of 17-24% over the course of this century, which will substantially increase flooding risks in the wet season and water scarcity and drought in the dry season.

17. The ability of the Government in Lao PDR to deal with food security issues and the likely impacts of climate change/climate variability is not adequate. Monitoring and analysis of climate variability and climate change impacts in the agricultural sector is constrained by;

    (i) insufficient agro-meteorological information from which to map risks and detect long-term trends
    (ii) insufficient information on climate conditions to support regional decision making and providing climatic information to regions not covered by the agro-meteorological stations;
    (iii) limited use of climatic forecasts on seasonal timescales in the agricultural sector
    (iv) lack of understanding of the current and potential future distribution of the areas and populations most vulnerable to climate change and food insecurity
    (v) lack of appropriately formatted information and agro-meteorological services for different audiences to inform risk-reduction efforts by policymakers and farmers
    (vi) lack of trained personnel to run and maintain the Land Resources Information Management Systems (LRIMS) effectively.

[3] Reproduced from the Project Document
[4] Transforming our world: 2030 Agenda for Sustainable Development adopted by UN General Assembly on 25 September 2015
[5] Reproduced from the Project Document

2.3 Description of the project: objective, outcomes and outputs

18. The project's objectives are: (i) to enhance at national and provincial levels, monitoring, analysis, communication, and use of agro-meteorological data and information for decision-making in relation to agriculture and food security and (ii) to improve monitoring and analysis of agricultural production systems by strengthening land resources information management systems (through LRIMS) and Agro-Ecological Zoning (AEZ) to support agricultural policies and climate-change adaptation. Appendix 2 provides the result framework/log-frame of the project. The results framework details out the outcome and outputs of the project along with the targets to be achieved by the end of the project. Table 3 provides the components and targeted outcomes of the project.

Table 3: Components and Outcomes of the SAMIS project

Component/Outcome	Indicators[6]	Baseline	EOP Target
Component 1 **Strengthening agro-climatic monitoring, analysis, communication and use of data and information for decision making in agriculture and food security**			
Outcome 1.1 Improved agro-meteorological monitoring, communication and analysis facilities established at national and provincial level	**Indicator 1.1** A fully renewed CAgMD within DMH functioning with clear roles and responsibility	Very old systems and no climate and agromet services to meet the needs of farmers	A fully renewed CAgMD connected with all AWS and database
Outcome 1.2 Institutional and technical capacity strengthened to facilitate data sharing, archiving, analysis and interpretation of agro-meteorological information products to users at all levels	**Indicator 1.2** Improved and new climate and agromet products available with users	No system in place to communicate and receive feedback from users	A fully renewed CAgMD connected with all AWS and database
Component 2 **Strengthening institutional and technical capacity for monitoring and analysis of agriculture production systems and development of Land Resources Information Management Systems (LRIMS) and Agro-Ecological Zoning (AEZ)**			
Outcome 2.1 Integrated Land Resources Information Management System (LRIMS) and High resolution Agro-Ecological Zones (AEZ) and agriculture production Systems at Risk (SAR) developed based on agricultural resources (climate, land, soil, water and crops)	**Indicator 2.1** Number of information systems available	Several scattered information systems based on partners activities, no dedicated information systems for the comprehensive structure of the MAF and for agriculture MAF ICT Strategy in place	At least 2 new systems developed and delivered
Outcome 2.2 Technical capacity developed for sustained operation and use of LRIMS, SAVA, AEZ and agriculture production Systems at Risk for policy formulation and adaptation planning in agriculture sector	**Indicator 2.2** MAF/ DALaM staff trained to maintain and provide or apply LRIMS/ NAEZ information (gender disaggregated)	0 female 0 male Some DALaM senior staff know the AEZ theoretical concepts	100 staff (30 female; 70 male) trained
Component 3 **Knowledge management and dissemination of information and lessons learned for local application, planning, monitoring and evaluation**			
Outcome 3.1 Knowledge and information sharing for local application, agriculture and food	**Indicator 3.1a** Framework for knowledge-sharing and	Obsolete or no sharing and dissemination of knowledge and	1

[6] Numbering of the indicators was done at the time of MTR, for easy reference

Component/Outcome	Indicators[6]	Baseline	EOP Target
security planning and programming and project outcomes/outputs monitored and evaluated to ensure sustainability	packaging of lessons learned and experiences developed/ improved	information platform available	
	Indicator 3.1 b Trainings and workshops delivered	No relevant Workshops on climate change adaption	19
	Indicator 3.1 c Number of training materials, products, publications, guidelines, books, handbooks, flyers, web-sites, etc.	Limited products, guidelines, publication and information related to climate change adaption issues.	16
	Indicator 3.1 d Framework for knowledge-sharing and packaging of lessons learned and experiences developed/ improved	Obsolete or no sharing and dissemination of knowledge and information platform available	1

2.4 Project Locations

19. The SAMIS project is being implemented with a national focus at the central level, wherein the project modeling and IT processes are the responsibilities of national-level institutions. The modeling component of the project is to produce national-level results. The SAMIS project covers 100 percent of the country. Component 1 of the project has 15 locations in 12 provinces for installation of the automatic weather stations under the auspices of MONRE. The field locations are given in Figure 1. The activities of Component 2 are piloted in Saravan Province only in collaboration with the Provincial Agriculture and Forestry Office (PAFO) and District Agriculture and Forestry Office (DAFO). More than 85 percent of the project budget is devoted to components 1 and 2 modeling activities, including installation of field equipment and local testing. Under Component 3, piloting of the agrometeorological system was initially planned for the provinces of Savannakhet and Champasack. However, for better agro-ecological coverage, the piloting has been conducted in five provinces, and different types of activities have been executed (Figure 1). All of these provinces correspond to areas where SAMIS is also installing automatic weather stations.

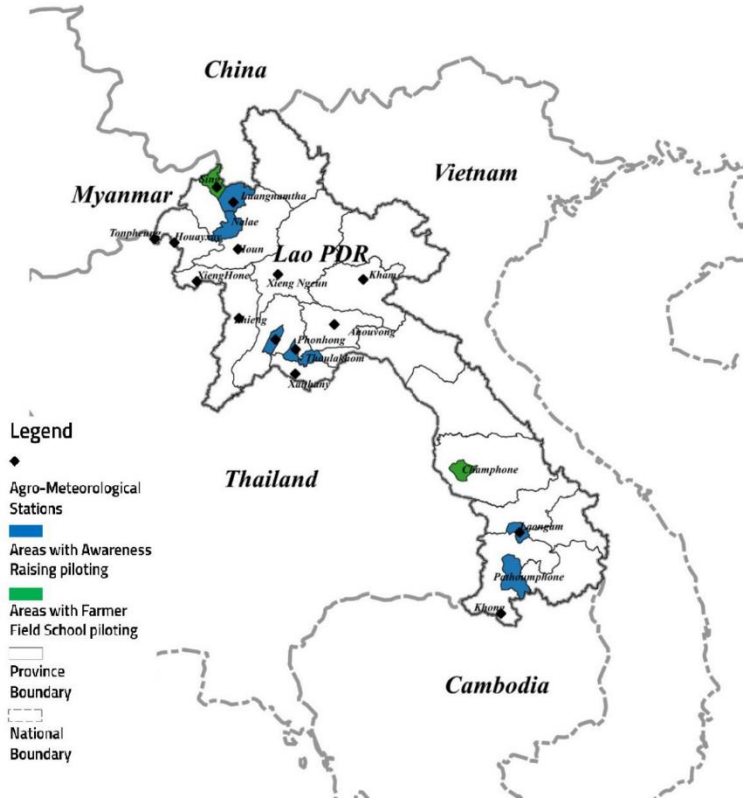

Figure 1. Field locations for SAMIS project agrometeorological activities

2.5 Theory of Change

20. The Theory of Change (ToC) for the SAMIS project is not available in the project document but has been developed by the project team at the time of MTR. The theory of change of the project is given below in Figure 2.

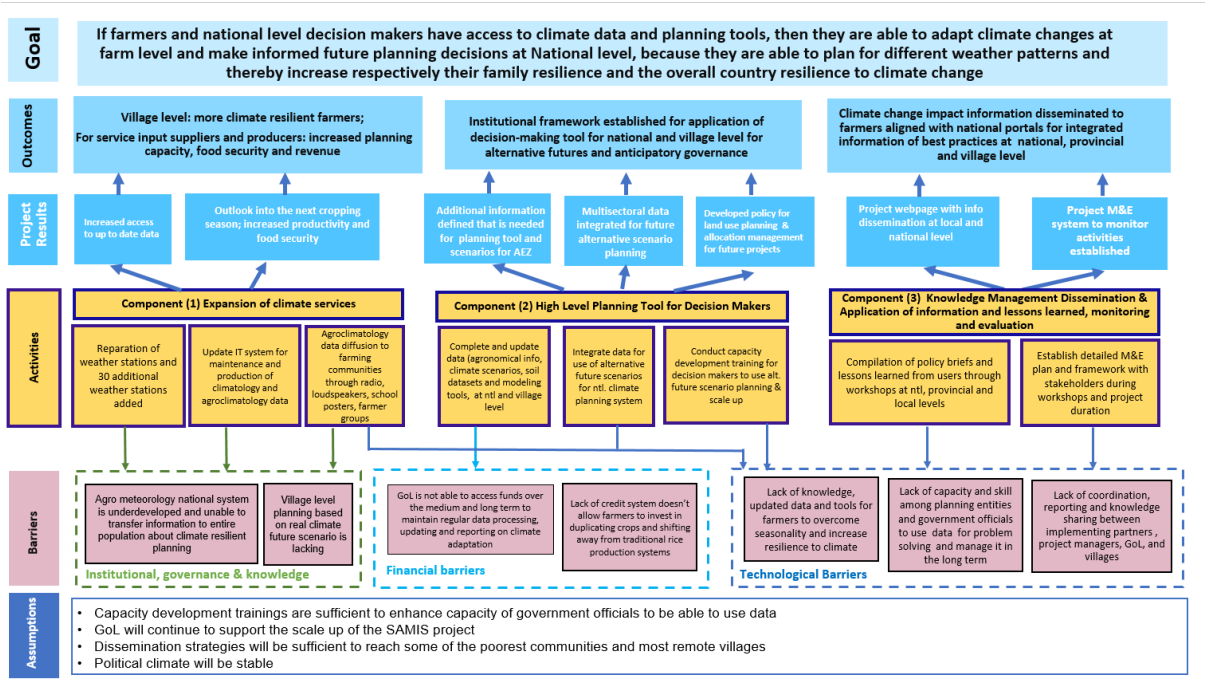

Figure 2: Theory of Change of SAMIS Project (Source: Project Team/TOR for MTR

21. The project's objectives are to enhance capacities to gather, process, analyze and share climatic and geospatial information so that it can be applied to planning and decision-making for adaptation to the impacts of climate change on the agriculture sector. The concept relates to two levels of decision-making. At the first level, the project is building infrastructure and comprehensive agroclimatic monitoring and information capacity focused on boosting sustainable production by optimizing farmers' and smallholders' resilience to climate change. At the second level (which has relevance at the national level) the project addresses, future provision of crop distribution and productivity as well as the socio-economic acceptability of farming and cropping systems (due to the impact of climate change).

2.6 Project Implementation Arrangement[7]

22. The project is being executed by FAO through Direct Execution (DEX) modality in close collaboration with MONRE and MAF. Within MONRE and MAF, the main executing departments are DMH and DALaM at the central level and their field offices (in the provinces and districts). At the local level, key stakeholders and beneficiaries are the respective field offices of MONRE and MAF and the farming community.

23. As the executing agency, FAO is providing supervision and oversight, as well as technical assistance in strengthening technical and institutional capacity for climate change adaptation, assessment, monitoring and provision of advance early warning information on vulnerabilities, risks and agro-meteorological forecasts to assist better adaptation planning and promoting adaptation to strengthen livelihood strategies and sustainable climate-resilient agricultural practices.

24. A 'Project Steering Committee (PSC)' has been established, which has members from MONRE (DMH) and MAF (DALaM and NAFRI) and other relevant government agencies and institutions. FAO is the de facto member as the executing GEF agency. PSC is responsible for major decisions on project coordination and administration. The PSC gives strategic directions to the project. It approves adjustments in the project plan and budget (if any) and reviews the project's progress. The Government appointed Mr. Viengxay Manivong (Deputy Head of DMH), as National Project Director, who is the national focal point for the project, and who convenes the stakeholders from the two Ministries that are stakeholders in the two main components of the project. However, each component has its own component leader during actual implementation whilst the NPD has a limited role for overall project supervision and direction.

25. A Project Management Unit (PMU) comprising of a Project Coordinator, a Knowledge Management and Advocacy Expert, is in place to oversee the implementation of the project on a day-to-day basis. At the provincial and district level offices of DMH and DALaM are providing necessary support to implement activities at local level. Figure 3 presents the overall organization structure for implementation of the project.

[7] Based on Project Document

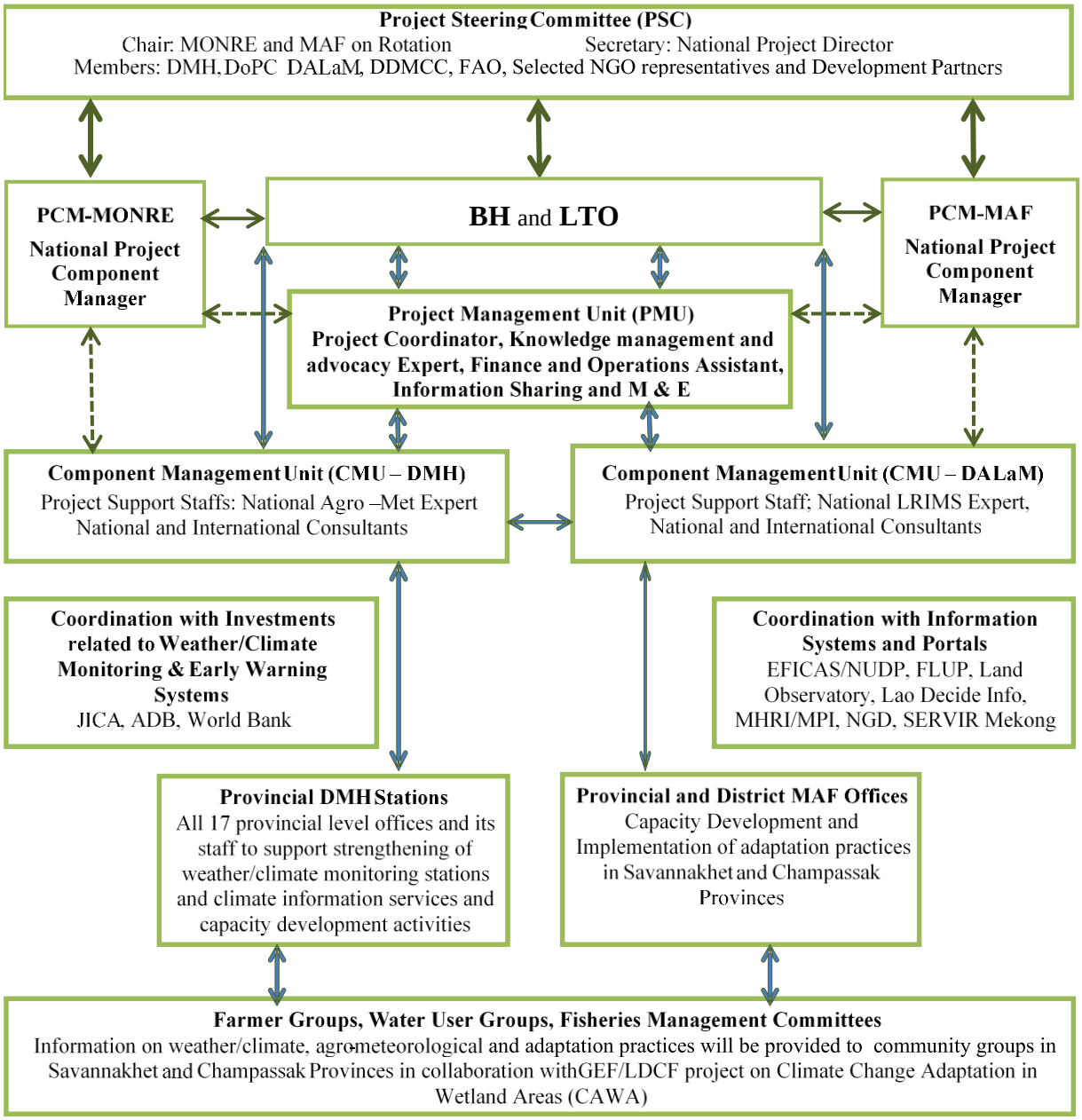

Figure 3. Project Management and Information Flow (Source: Project Document)

2.7 Main stakeholders

26. Table 4 provides the list of the main stakeholders of the project long with their respective roles.

Table 4: Stakeholders of the project[8]

Key stakeholders	Role and responsibilities
Ministry of Natural Resources and Environment (MONRE)	Lead national executing Ministry. MONRE chairs the Project Steering Committee (PSC) on a rotating basis with MAF. It draws membership from its departments and other ministries. The World Bank agreed that the PSC has relevant members of the Mekong Integrated Water Resources Management Project. MONRE nominates the project's National Project Director (NPD) and a component manager for Component 1.
Department of Meteorology and Hydrology (DMH)	Lead executing department and National Project Coordination Office (Secretariat). DMH is the main project executing department and is the project's Secretariat. DMH leads coordination of Component 1 and collaborative implementation of component 3.
Environment Quality and Promotion Department	PSC member. Former National focal point for GEF. Currently, the GEF's National Operational Focal Point is under the Department of Planning and Finance (MONRE)
Department of National Disaster Management and Climate Change (DNDMCC), Ministry of Natural Resources and Environment (MONRE)	PSC member. Focal point for UNFCCC and preparation of NAPA and Second National Communication to the UNFCCC. Participating in capacity development programmes related to impact assessment and climate information system.
Environment Management Support Programme, Ministry of Natural Resources and Environment (MONRE)	Coordination and collaboration to harmonize spatial information products including land-use maps
Land Department, Ministry of Natural Resources and Environment (MONRE)	Coordination and collaboration in the development of Land Resource Information Management System (LRIMS) linking to ongoing work on Land Use Master Plans at the national and local level land use plans. The staff of the department are expected to participate in the capacity development activities of the proposed project.
Ministry of Agriculture and Forestry (MAF)	Joint lead national implementing ministry. MAF chairs the Project Steering Committee (PSC) on a rotating basis with MONRE. MAF nominates a component manager for Component 2.
Department of Planning and Finance; Ministry of Agriculture and Forestry (MAF);	Sub-Component Coordination Office for activities to be implemented by the Ministry of Agriculture and Forestry (MAF) within Component 2 and 3.
Centre for Statistics and Information, Ministry of Agriculture and Forestry (MAF)	Project Implementing Partner. Collaboration with DMH on Crop-monitoring and yield forecasting. Improvement of crop monitoring products and services.
Department of Agriculture Land Management (DALaM), Ministry of Agriculture and Forestry (MAF)	Project Implementing Partner for development of Land Resources Information Management System (LRIMS) and for preparation of Land Suitability Maps. MAF will nominate a project component manager from DALaM and will provide the Component Management Unit for Component 2.
National Agriculture and Forestry Research Institute (NAFRI), Research Management Division	The project design provided for cooperation and collaboration with the project on "Improving Resilience of the Agriculture Sector to Lao PDR to Climate Change Impacts" led by the Research Management Division of NAFRI. However as per the SAMIS.s project team , this project ended before the start of implementation of the SAMIS project.

[8] Source: Project Document

Key stakeholders	Role and responsibilities
Department of Technical Extension and Agricultural Processing (DTEAP)	Cooperation and collaboration in the development of the farmer field schools programme related to the use of the information products at local levels and development of adaptation strategies. However, as per the project team this did not happen because DTEAP has few local offices.
Department of Forestry, Ministry of Agriculture and Forestry	Cooperation and collaboration in activities related to development of spatial information products and climate change related interventions.
National Geographic Department (NGD), Ministry of Home Affairs	NGD will provide use of topographical maps for preparation of spatial information products related to climate change impacts and also for development of Land Resources Information Management Systems.
Mekong River Commission (MRC)	MRC is involved in Mekong Integrated Water Resources Management Project especially on improving hydrological measurements. Collaboration is foreseen, especially on meteorological instrumentation and also awareness raising related to climate change impacts on water resources. MRC's expertise can be drawn upon for the proposed activity on the development of impact scenarios on water availability as part of this LDCF.
Local communities (indigenous people, ethnic minorities, and most vulnerable populations)	Local communities conduct Farmer Field Schools (FFS) under 3.1.1 and deliver location-specific adaptation practices in pilot locations. Local communities, especially the most vulnerable populations, such as ethnic minorities, indirectly benefit from timely weather and climate information for pro-active decision-making, which they can use to reduce risks in bad seasons and enhance opportunities in good seasons. Selection of pilot sites for FFS and for transfer of adaptation practices ensures representation of indigenous, ethnic minorities, and vulnerable populations. These communities will be consulted to understand their issues and needs during the project implementation stage. GOL recognizes over 100 ethnic sub-groups within 49 ethnic groups. Indigenous people are the most vulnerable group in Laos, representing 93% of the country's poor; they will be targeted for inclusion in local activities.
Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs)	Numerous international and national non-governmental organizations work in Lao PDR on climate change adaptation, disaster risk reduction, and early warning systems (CIAT, WFP, IWMI, CCL, CDE etc). Detailed consultations were conducted with the local NGOs during the project preparation.

3. KEY FINDINGS: ISSUES OF THE REVIEW

3.1 Relevance[9]

Main Mid-term review questions (please see Appendix 7)

- **Are the project outcomes congruent with country priorities?**
- **Are the project outcomes congruent with GEF focal areas/operational programme strategies?**
- **Are the project outcomes congruent with FAO Country Programming Framework?**
- **Are the project outcomes congruent with the needs and priorities of targeted beneficiaries (local communities, men and women, and indigenous peoples, if relevant)?**
- **Has there been any change in the relevance of the project since its formulation, such as the adoption of new national policies, plans or programmes that affect the relevance of the project's objectives and goals? If so, are there any changes that need to be made to the project to make it more relevant?**

3.1.1 Alignment with GEF and FAO strategic priorities

27. The SAMIS project is aligned with the following GEF LDCF 5 objectives.
    - CCA2: Increasing Adaptive Capacity: Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level;
    - CCA3: Adaptation Technology Transfer: Promote transfer and adoption of adaptation technology.

28. The project is in line with GEF strategy to promote sustainable development by supporting climate change adaptation as well as enhancing productivity in agricultural sector. The strategy of the project, promotes climate monitoring and information systems for better informed decision-making, to reduce risks of economic losses, and to diversify and strengthen livelihoods.

29. The project is aligned with the following FAO's Global Strategic Objectives (SO);
    - SO2: Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. The project contributes in particular to Organizational Outcome 1 (OO1) under SO2 (Producers and natural resource managers adopt practices that increase and improve the provision of goods and services in the agricultural sector production systems in a sustainable manner). In addition, the project's work to strengthen the relevant policy framework in Lao PDR, will contribute to OO2 of SO 2 (Stakeholders in member countries strengthen governance - the policies, laws, management frameworks, and institutions that are needed to support producers and resource managers - in the transition to sustainable agricultural sector production system)
    - SO5: Increase the resilience of livelihoods to threats and crises. The project contributes to increased resilience of livelihoods to threats and crises OO2 under SO5 (Countries and regions deliver regular information and trigger timely actions against potential, known, and emerging threats to agriculture, food, and nutrition).

30. In addition, the project fits into FAO-Adapt, an organization-wide framework programme launched in 2011. It provides general guidance and introduces principles as well as priority themes, actions, and implementation support to FAO's multi-disciplinary activities for climate change adaptation. FAO's Inter-Departmental Working Group (IDWG) on Climate Change and its subgroup on adaptation facilitate the implementation process of FAO-Adapt. Technical units in FAO Headquarters and decentralized offices lead the delivery of outputs and actions consolidated under the priority themes defined in the Strategic Framework.

[9] Some parts in this section have been taken from the Project Document

31. The Project is also aligned with and contributes to the FAO Country Programming Framework (CPF) (2013-2015). In particular, it contributes to CPF Priority Outcome 3 (Strengthened governance, policies, laws, strategies and community participation for sustainable management of land, forestry, and fisheries and aquaculture resources). The project is also closely aligned with Priority Outcome 4 (Enhanced capacity of governments and communities to adapt and mitigate climate change and reduce natural disaster vulnerabilities related to agriculture, forestry, and fisheries) and contributes to the achievement of Output 4.2 (Developed institutional and technical staff capacity at national, provincial, and district level for agro-climatic monitoring, analyzing, and disseminating information related to climate variability and its impact on the agricultural sector. With the 9th NSEDP (2021-2025), FAO Laos has contributed to the sectoral development plan (10-years strategy) in agriculture sector such as Forestry and Fishery, etc. (whilst agro-met information produced by the SAMIS project has been considered). At sub-national level, the contribution to support is on how to translate these strategies into action plan. The draft of weather dependent climate smart recommendations has been prepared as part of the LaCSA.

32. The project is consistent with the GEF and FAO strategic frameworks for agricultural development and environmental management. The project's relevance from the viewpoint of alignment with GEF and FAO strategic priorities is rated as satisfactory.

3.1.2 Relevance to national, regional and global priorities and beneficiary needs

33. The SAMIS project links to national development goals, plans, policies and legislation including the following:
    - National Adaptation Programme of Action to Climate Change (2009) (NAPA);
    - National Climate Change Strategy (2010);
    - DMH's Five Year Strategic Plan (2011-2015);
    - National Early Warning Strategy (2011);
    - The Strategy for Agricultural Development (2011 – 2020);
    - Government Decree No. 321/GOV on climate change;
    - The 8th five-year National Socio-Economic Development Plan (2016-2020) reporting that Meteorology and agrometeorology have been developed and improved nationwide.

    Lao PDR is highly vulnerable to climate change, floods, droughts, pests and diseases have significant adverse impacts on agricultural production and food security. There is climate change forecast system and drought-flood surveillance system that caters to timely reporting and responding. The country also has a pilot of seasonal animal disease prevention and preparedness information system. The 9th Plan of the country (2021-2025), under Outcome 4 (Environmental protection and natural disaster risk reduction), Output 3 (Disaster preparedness) has prioritized mainstreaming climate change adaptation and mitigation to sectoral and local development plans.; implementing natural disaster and climate change management and preventive measures (early warning system, prevention system, and emergency response) etc.

34. The project aims to support the implementation of national policies, strategies, and legislation that foster sustainable agricultural production and natural resources management by identifying the appropriate policy concerns and analyzing data based on prioritized policy concerns .The project is aligned with Lao PDR's priorities for sustainable agricultural development and adaptation to climate change.

35. **The relevance of the project from the viewpoint of national and local community priorities is rated as Satisfactory.**

3.1.3 Complementarity with existing interventions

36. Some of the existing interventions in Laos PDR are the World Bank - Disaster Risk Management project to upgrade the facility to improve weather forecast under the implementation of DMH; Another one is CAWA project in Savannakhet which also implemented by FAO; CIAT – Applying seasonal climate forecasting and innovative insurance solutions to climate risk management in Southeast Asia (DeRisk Southeast Asia); The project is complementing the existing interventions within Laos PDR. When it comes to the complementarity of the project with existing interventions, the relevance of the SAMIS project is rated as Satisfactory.

37. **At an aggregate level (from the viewpoint of national policies, alignment with GEF/FAO priorities, local community priorities), the relevance of the project is rated as Satisfactory.**

3.2 Effectiveness

38. The effectiveness of the project at the mid-term of the project has been assessed in terms of the progress made by the project towards the achievement of the targeted Outcomes and Outputs and the expected impacts of the results achieved (or likely to be achieved) by the project. Both intended and unintended, positive and negative impacts of the projects have been considered.

3.2.1 Progress towards results

Main Mid-term review questions (please see Appendix 7)

- **To what extent has the project delivered on its outputs, outcomes and objectives?**
- **What broader results (if any) has the project had at the regional and global level to date?**
- **Were there any unintended consequences? Is there any evidence of environmental stress reduction (for example, indirect threats to biodiversity) or environmental status change (such as an improvement in the populations of target species), reflecting global environmental benefits or any change in policy, legal or regulatory frameworks?**
- **To what extent can the achievement of results be attributed to the GEF-funded component?**

39. Appendix 8 provides the details regarding progress made towards achievements of the project results in terms of the indicators for different outcomes and outputs of the project. As per the guidelines for MTR of GEF funded/FAO supported projects, the rating for the progress towards achievement of results has been provided for different Outcomes in the 'Results Framework / Log-frame' of the project.

40. The Tables in Appendix 8 are as per the guidelines for the MTR of GEF funded projects, wherein the assessment regarding the progress towards results at MTR are required to be compared with the targets for the indicators at the mid-term of the project and with the self-assessment of the achievement by the project team, as per first PIR of the project. However, considering that the MTR of the project is considerably delayed and the PIR for the first year of project implementation is not the true reflection of the achievements at the time of MTR, the reviewers have chosen to use the PIR for the third year (PIR for the Year 2020) in the Table.

41. Table 5 below provides in brief, the progress towards achievements of the results for different components and Outcomes of the project.

Table 5: Summary of the Ratings for Progress towards results for different Outcomes

Component/Outcome	Indicators	EOP Target	Status and rating[10] for progress at MTR
Component 1 **Strengthening agro-climatic monitoring, analysis, communication and use of data and information for decision making in agriculture and food security**			
Outcome 1.1 Improved agro-meteorological monitoring, communication and analysis facilities established at national and provincial level	**Indicator 1.1** A fully renewed CAgMD within DMH functioning with clear roles and responsibility	A fully renewed CAgMD connected with all AWS and database	**Satisfactory** This Outcome involved the establishment of automatic weather stations and up-gradation of the existing manual weather stations. The activity of 'up-gradation of manual weather stations' is delayed and is ongoing. Establishment of the laboratory for calibration of the sensors of the AWS is also delayed but is underway. Upgradation of the manual weather stations and establishment of the calibration laboratory is likely to be completed before the closure of the project. All other activities under this Outcome have been completed successfully
Outcome 1.2 Institutional and technical capacity strengthened to facilitate data sharing, archiving, analysis and interpretation of agro-meteorological information products to users at all levels	**Indicator 1.2** Improved and new climate and agromet products available with users	A fully renewed CAgMD connected with all AWS and database	**Satisfactory** Most of the activities have been completed successfully and the target value for the indicators achieved, except for the Standard Operating Procedure for CAgMD and guidelines for installation of instruments, data coding, and maintenance. A number of training sessions were organized for the government officials.
Component 2 **Strengthening institutional and technical capacity for monitoring and analysis of agriculture production systems and development of Land Resources Information Management Systems (LRIMS) and Agro-Ecological Zoning (AEZ)**			
Outcome 2.1 Integrated Land Resources Information Management System (LRIMS) and High resolution Agro-Ecological Zones (AEZ) and agriculture production Systems at Risk (SAR) developed based on agricultural resources (climate, land, soil, water and crops)	**Indicator 2.1** Number of information systems available	At least 2 new systems developed and delivered	**Satisfactory** Most of the outputs and activities for this Outcome have been carried out as originally planned. LRIMS and software were developed successfully and running. Relevant activities for refining the system ongoing.
Outcome 2.2 Technical capacity developed for sustained operation and use of LRIMS, SAVA, AEZ and agriculture production	**Indicator 2.2** MAF/ DALaM staff trained to maintain and provide or apply LRIMS/ NAEZ information (gender disaggregated)	100 staff (30 Female: 70 Males)	**Satisfactory** Most of the activities were performed as scheduled and the number of training programs were carried out. However, the effectiveness of the training could not be ascertained during the MTR. Some of the

[10] Rating Scale: Highly Satisfactory (HS): no shortcomings; Satisfactory (S): minor shortcomings; Moderately Satisfactory (MS); Moderately Unsatisfactory (MU): significant shortcomings; Unsatisfactory (U): major problems; Highly Unsatisfactory (HU): severe problems

Component/Outcome	Indicators	EOP Target	Status and rating[10] for progress at MTR
Systems at Risk for policy formulation and adaptation planning in agriculture sector			trainings (particularly those by the international faculty/trainers) which were to be conducted either in the form of actual demonstration/hands-on mode had to be organized in the online format, due to COVID-19 pandemic.
Component 3 **Knowledge management and dissemination of information and lessons learned for local application, planning, monitoring and evaluation**			
Outcome 3.1 Knowledge and information sharing for local application, agriculture and food security planning and programming and project outcomes/outputs monitored and evaluated to ensure sustainability	**Indicator 3.1a** Framework for knowledge-sharing and packaging of lessons learned and experiences developed/ improved	1	**Satisfactory** The main platform being used for knowledge sharing and sharing of lessons learned is the FAO website. At the local level, the weather, climate, land resources, and climate change impact information will be disseminated to farmer groups through established farmer field schools (FFS). This is complemented by the development of interactive communication channels such as mobile applications, loudspeakers, TV, and radio programming, etc.
	Indicator 3.1 b Trainings and workshops delivered	19	**Satisfactory** The main media used for training of the farmers is the loudspeaker and FFS, which is being piloted in 30 villages, 8 districts in 5 provinces
	Indicator 3.1 c Number of training materials, products, publications, guidelines, books, handbooks, flyers, web-sites, etc.	16	**Moderately Satisfactory** These activities have been impacted by issues linked to FAO OCC approval and the complexity of FAO rules on publications. Few booklets and training programs have reached the final stage of publication. One video has been finalized is awaiting approval by OCC.

42. Under Component 1, along with the establishment of the AWS for weather data (Outcome 1.1) there are activities to support the creation of useable agro-met information products (Outcome 1.2). Most of the activities and results for component 1, outcome 1.1, have been fully achieved, except the establishment of a calibration lab for the instruments of the AWSs and up-gradation of the manual weather stations, etc. Procurement for the calibration lab and up-gradation of the old weather stations has already been completed, and implementation is underway. These activities are expected to be completed by the end of the project. The progress towards results for Outcome 1.1 is rated as Satisfactory.

43. Under Component 2, under Outcome 2.1, there is provision for the creation of the following products based on agricultural resources (climate, land, soil, water, and crops);
    - Integrated database, information system/portal, impact scenarios, and adaptation strategies for the agriculture sector in Laos
    - Integrated Land Resources Information Management System (LRIMS)
    - Socio-Agricultural Vulnerability Assessment (SAVA)
    - High-resolution Agro-Ecological Zones (AEZ)
    - Agriculture production Systems at Risk (SAR)

44. While Outcome 2.1 has provided for the development of products, Outcome 2.2 is focused on capacity building and training of the government officials to continue the work on these products (developed under Outcome 2.1) to support policy and adaptation planning for the agriculture sector in the country. At the time of MTR, all the activities for Outcome 2.1 have been completed except for the following activities, which are delayed and were ongoing.

- Development of national AEZ (NAEZ) has been delayed
- Future CC scenarios and downscaling are being finalized at the time of MTR.
- Development of high-resolution climate change scenarios and their use for policy decisions

45. The progress towards results for Outcome 2.1 is rated as Satisfactory at the time of MTR; the capacity building and training under Outcome 2.2 has been completed, except for the future CC adaptation strategies. However, the effectiveness of the training could not be ascertained during the MTR. Except for a casual question during the interactions with some of the trainees regarding the effectiveness of the training, a formal assessment of the effectiveness of training was not possible during MTR. The training reports did not carry out an assessment regarding the effectiveness of the trainings. Some of the trainings (particularly those by the international faculty/trainers) that were to be conducted either in the form of actual demonstration/hands-on mode had to be organized in the online format due to the COVID-19 pandemic. During the discussions, some of the participants in the trainings shared the difficulties faced by them during the training. In some of the cases, the language issues (trainings were conducted in the English language) further complicated the situation. Some of the activities for Outcome 2.2 are delayed (e.g., identification of relevant adaptation strategies, prioritization of policies and adaptation strategies). The delayed activities are likely to be completed during the remaining time for implementation of the project. Progress towards results for Outcome 2.2 is rated as Satisfactory.

46. Component 3 of the project relates to knowledge management and information sharing aspects of the project. Outcome 3.1 has the following two parts;
    - Information sharing for local application, agriculture, and food security planning and programming; Packaging of lessons learned and experiences (through workshops and publications). FAO website, and the Facebook page of the project are being used as the main platform for the dissemination of lessons learned and experiences. Achievement regarding the publications is lagging due to the cumbersome process of approval for all the publications at the level of FAO OCC. When it comes to organizing the workshop (please see Appendix 9, Table 13, Output/Indicator 3.1.2a. The information provided in the PIR against this indicator cannot in any manner be considered as knowledge/information sharing workshop), there is a need to do a bit of catching up.
    - Local application of climate information and location specific adaptation strategies facilitated through Loudspeakers and Farmer Field Schools (FFS). Under the SAMIS project, FFS is being piloted at 30 villages, 8 districts in 5 provinces.

47. The progress towards achievement of results for Outcome 3.1 is rated as Satisfactory.

48. When measured in terms of the indicators for the outcomes, the project is on track to achieve its objectives. However, the assessment of the likely impacts due to the project is provided in the next section (3.2.2) of this report. At the time of MTR, one of the significant achievements of the SAMIS project is that the weather information and data is being used to produce the Laos Climate Services for Agriculture (LaCSA) that provides usable and actionable agro-meteorological services to farmers by analyzing real-time and weather/seasonal climate forecasts agro-meteorological and crop cycle data of Lao PDR. The online system has been fully functioning since mid-2019 and is accessible at the web page: https://147.46.250.219:8081/

49. There are no unintended adverse consequences or adverse environmental impacts due to the project either on the local environment or global environment. The results thus far and the

progress towards results is attributable to the funding provided by GEF and, to some extent, to the co-financing.

3.2.2 Likelihood of impacts

Main Mid-term review questions (please see Appendix 7)

- **Are there any barriers or other risks that may prevent future progress towards and the achievement of the project's longer-term objectives?**
- **What can be done to increase the likelihood of positive impacts from the project?**
- **To what extent can the progress towards long-term impacts be attributed to the project?**

50. As the MTR of the project is being carried out very close to the end of the project implementation, most of the results of the performance of the projects are already available. Thus, at the time of MTR, there are lesser uncertainties regarding the likelihood of the positive or negative impacts of the project. The objective of carrying the analysis of the remaining barriers at the time of MTR is to identify the areas where the project should focus for the remaining implementation duration of project. As the project is already close to the end of its implementation period, it is not practical to analyze the remaining barriers and risks at this stage.

51. With the successful establishment of the AWS and up-gradation of the manual weather stations, the project has led to an increasing in the availability and quality of agrometeorological information across the country. The agrometeorological information being delivered by the project through Lascar, to the extension workers and farming community at the pilot locations has positively impacted the earnings, either due to prevention of the post-harvesting losses (e.g., for coffee and cassava plantations) or an increase in the yields of the crops (e.g., for rice) at the pilot locations. Although within the implementation timelines of the project, the impacts/benefits to the farming community are getting realized within the pilot areas, it will be possible for the national government to extend these benefits to the farmers across the nation with minimal incremental efforts. This is given the national coverage of the weather stations being supported by the project, due to which it is possible to provide improved information on agrometeorology to support all smallholders and farmers across the country. The only incremental effort required is the dissemination of the location-specific agromet information and advisory to the farmers throughout the country.

52. The impacts of component 2 of the project are related to the development of the in-country capacity regarding projections of the potential impacts of climate change which can feed into the development of scenarios, plans and policies relating to adaptive measures to negate the impacts of climate change on the agriculture sector. With the achievement of the results, the project, will be able to provide through LRIMS and NAEZ substantive insight to the agricultural population which is vulnerable to climatic change.

53. One of the other impacts of the project is, that strengthening agro-climatic monitoring and information systems will provide input to the development of long-term plans for agriculture and food security. At the organization level the project has benefited MONRE and MAF by strengthening their skill sets, knowledge base, and understanding regarding the impacts of climate change and the adaptive options to negate the impacts.

54. The impacts of the project can be expanded to other development areas like Early Warning Systems, Disaster Risk Reduction etc., even if it means installation of a couple of additional instruments/sensors at the AWS, which has been installed under the SAMIS project. To enhance the results of the project replication of the pilot projects for dissemination of agro-

met information may be carried out in a couple of other locations, where the benefit of data collection has already been facilitated by the project.

55. A strategy and plan may be worked out to upscale the results of the SAMIS project at the national level. For this, the automatic weather stations being established under some ongoing development projects may be leveraged to support the climate data on a real-time basis which is one of the requirements to produce location-specific agro-climate information bulletins for the farmers.

3.3 Efficiency

Main Mid-term review questions (please see Appendix 7)

- **To what extent has the project been implemented efficiently and cost-effectively?**
- **To what extent has project management been able to adapt to any changing conditions to improve the efficiency of project implementation?**
- **To what extent has the project built on existing agreements, initiatives, data sources, synergies and complementarities with other projects, partnerships, etc. and avoided duplication of similar activities by other groups and initiatives?**

56. At the time of MTR the project has already achieved its objective of improving monitoring and analysis of agro-meteorological data and information for decisions by the farming community in relation to cultivation and agriculture by it. The project has led to improvement of cropping calenda, increase in the yields and reduction in post-harvest losses, thereby leading to the income levels. The other objective of the project is to improve monitoring and analysis of agricultural production systems by strengthening land resources information management systems (through LRIMS) and Agro-Ecological Zoning (AEZ) to support agricultural policies and climate change adaptation is also likely to be achieved by the end of the project.

57. Due to the proactive approach of the project implementation team and the able guidance of the Project Board, the implementation of the project could be carried out in an effective and timely manner.

58. The project implementation has taken adaptive measures right from the time of project inception onwards to make effective use of the other ongoing projects to ensure cost-effective implementation. A number of ongoing and planned projects which could benefit the implementation of the SAMIS project were identified at the PPG stage and the collaborative working arrangements were worked out to ensure cost-effectiveness.

59. During the implementation of the project, the available opportunities which got identified for collaboration and cost-effective implementation of the SAMIS project were used. For example, the existing infrastructure (loudspeakers etc.) at the local district and village levels were used to the extent possible for dissemination of the agro-climatic information in the pilot areas. The results thus far have been achieved in a cost-effective manner; the Efficiency of the project has been rated as 'Satisfactory'.

3.4 Factors Affecting Performance

3.4.1 Project design and readiness

Main Mid-term review questions (please see Appendix 7)

- **Is the project design suited to delivering the expected outcomes?**
- **Is the project's causal logic (per its theory of change) coherent and clear?**
- **To what extent are the project's objectives and components clear, practical and feasible within the timeframe allowed?**
- **To what extent was gender integrated into the project's objectives and results framework?**
- **Were other actors – civil society, indigenous peoples or private sector – involved in project design or implementation and what was the effect on project results?**

60. The log-frame of the project providing the objectives, the expected outcomes and the outputs along with corresponding indicators is presented in Appendix 2. During the project's inception, there were minor adjustments in the log-frame of the project and some additional indicators from Adaptation Monitoring and Assessment Tool of GEF (AMAT) were also introduced. The project objectives and its three components' outcomes are clear. The Outcomes of the project are predictable and feasible within the implementation timeframe of the project. The Outcomes are predictable means that at the time of project design, the activities and the corresponding Outputs specified in the 'Project Design' were leading to the desired outcomes of the project. In the results frame-work, Component 3 contains Knowledge Management (KM) and dissemination of results, as well as project M&E. It is a practise to have project management as one of the components in the results framework; however mixing it with knowledge management creates some confusion.

61. The indicators for different Outputs and Outcomes are SMART (Specific, Measurable, Achievable, Relevant and Time Bound) except for the issues mentioned in the next sentence. One of the issues with the log-frame of the project is that the indicators for the capacity building and training kind of outputs are in terms of the number of persons which participated in the training. It needs to be appreciated that participation in the training or capacity-building sessions does not necessarily mean increased skills/knowledge/capacity. Having said this, it is appreciated that measuring the level of skills and capacity is one of the most challenging tasks. No changes in the indicators or additional indicators are recommended, as the project is almost at the end of its implementation and it would not be beneficial to do so. In addition, the agrometeorological capacity in the country at all levels is rather weak; therefore, a monitoring mechanism to support during and post-training is very necessary, particularly at the local level.

62. The project log-frame has provided gender-segregated indicators. There are provisions in the project design to implement the mechanisms to ensure effective participation by the stakeholders. As per plan the commencement of the project happened with an inception meeting in which all the important stakeholders participated and contributed. Apart from the inception meeting, the project has provision for conducting regular stakeholder meetings, implementing strong project management practices, and having close involvement with FAO Laos. The principles of partnerships are being adopted in the implementation of the project. The project team and FAO (as the implementing agency) have entered into agreements with national government agencies, appropriate research and development institutes, consultants, NGOs, and universities to implement the project's selected outputs and activities.

3.4.2 Quality of project implementation and execution

Main Mid-term review questions (please see Appendix 7)

- **To what extent did the executing agency effectively discharge its role and responsibilities in managing and administering the project?**
- **What have been the main challenges in terms of project management and administration?**
- **How well have risks been identified and managed?**
- **What changes are needed to improve delivery in the latter half of the project?**
- **To what extent has FAO delivered oversight and supervision and backstopping (technical, administrative and operational) during project identification, formulation, approval, start-up and execution?**

63. The project is being implemented by FAO under direct execution modality. The implementation of the project is being carried out in close consultation with MONRE and MAF. FAO, in consultation with the MONRE and MAF, is delivering procurement and contracting services to the project using FAO rules and procedures, as well as financial services to manage the GEF resources. The management arrangements as presented in the 'Project Document'

had been clearly described. The project is following the management arrangements as provided for in the 'Project Document'. FAO has to a large extent discharged its role and responsibilities in managing and administering the project. This is based on the assessment that there have not been any major administrative and managerial issues during implementation of the project. A Project Management Unit (PMU) was established to manage day to day activities of the project. The PMU assisted the MONRE and MAF and other stakeholders in performing their respective roles as implementing partners. The Project Coordinator runs the project on a day-to-day basis on behalf of FAO. PMU follows FAO procedures. The project has formed a capable and skilled team to run the project activities under a clear monitoring mechanism from the project coordinator, LTO and FAO technical focal point persons.

64. A couple of challenges were faced by the project team. As per PPR for the period July-Dec 2020, some of the challenges faced includes;
    - Raising the visibility of the project with partners other than MoNRE and MAF
    - The role of NPD has not been fully functioning, although coordination mechanism between DMH and DaLAM has been initiated by the SAMIS project as they are under two different line ministries.
    - Issues regarding securing support from experts. There have been needs for updated datasets and inputs from national agencies that have delayed modeling progress.
    - The process to revise the SOPs for agro-met service. The proposed new version of the SOP was submitted to the PSC in July 2020 and received general endorsement. The process presents challenges due to the need for multisector buy-in and agreement.

65. The project team identified an additional risk to the project. PPR for 2018 mentions an additional risk "Excess of non-coordinated financing impacting the capacities of the national entities in term of staff availability and continuity of activities" with the risk rating as low. This risk is mentioned in all the subsequent PIRs and PPRs. It is not very clear what is meant by this risk and how financing to DMH by other agencies for the project-related activities (other than SAMIS project) can be a risk.

66. FAO country office in Laos provides overall program, administrative, and financial oversight of the project progress in accordance with the common FAO procedures. The Project Steering Committee (PSC) is the key decision-making body at a project strategic planning level. PCS has met once every year, against the provision (in the project document) for meeting twice in a year. Quality of FAO Execution has been rated as Satisfactory.

67. The project inception happened in a timely manner, and the project's implementation started in a timely manner. FAO as GEF Executing Agency collaborated effectively with the National Counterparts and other stakeholders for effective implementation of the project. The quality of Implementation is rated as Satisfactory.

3.4.3 Financial management and co-financing

Main Mid-term review questions (please see Appendix 7)

- **What have been the financial-management challenges of the project?**
- **To what extent has pledged co-financing been delivered?**
- **Has any additional leveraged co-financing been provided since implementation?**
- **How has any shortfall in co-financing or unexpected additional funding affected**

68. The planned expenditure for the project and its distribution amongst different components of the project is given in Table 6. The funding by the bi-lateral and multilateral agencies, corresponds to the planned expenditure by these agencies under different related projects

being executed by them in the country. The planned Government funding is mainly through the MONRE in the form of in-kind in terms of office facilities and time of key staff, including the PCM

Table 6: Project Cost (as per project document) (figures in USD)

Co-funders	Component 1	Component 2	Component 3	Project Management	Total
JICA	4,900,000	-	-	-	4,900,000
ADB	3,020,000	-	2,210,000	-	5,230,000
CDE	-	4,500,000	-	-	4,500,000
Government	500,000	500,000	-	-	1,000,000
FAO	-	-	250,000	250,000	500,000
GEF	2,440,659	2,137,986	639,881	260,926	5,479,452
Total	10,860,659	7,137,986	3,099,881	510,926	21,609,452

Source: Project Document

69. Table 7 provides the details of the actual funding realised at the time of MTR. As the MTR is being conducted very close to the date of the closure of project implementation, the utilisation of the budget at the time of MTR is quite significant.

Table 7: Financing and Co-financing of the Project at MTR (figures in USD)

Sources of financing	Name of co-financer	Type of co-financing	Amount confirmed at CEO endorsement/ approval		Amount reconfirmed/ newly materialized during implementation		Actual amount of co-financing materialized at MTR		Expected total co-financing by EOP
			Cash	In kind	Cash	In kind	Cash	In kind	
GEF/LDCF/SCCF allocation		Grant	5,479,452						
Japan	JICA	Bilateral Aid Agency		4,900,000		5,221,681		4,900,000	321,681
CGIAR	CIAT	Multi-lateral Aid Agency				250,000		40,000	210,000
National Govt.	DMH/MONRE	In-Kind		1,000,000		721,876		66,840	597,838
ADB	Thru DMH/MONRE	Grant		5,230,000		184,440			
CDE				4,500,000					
World Bank	Thru DMH/MONRE	In-Kind				21,466			
China	DMH/MONRE	Grant				5,774,354			5,460,701
South Korea	Thru DMH/MONRE	In-Kind				175,000			
GEF	WB thru DMH/MONRE	Loan				1,846,508		1,846,508	
National Government	DALaM/MAF	In-Kind				656,580		303,520	353,060
SDC	TABI	In-Kind				466,850		346,850	120,000
Germany	Thru DALaM/MAF	In-Kind				65,837		27,358	38,479
GEF	FAO RAP	In-Kind		500,000		234,000		234,000	
France	Thru DALaM/MAF	In-Kind				50,045			50,045

Sources of financing	Name of co-financer	Type of co-financing	Amount confirmed at CEO endorsement/ approval		Amount reconfirmed/ newly materialized during implementation		Actual amount of co-financing materialized at MTR		Expected total co-financing by EOP
			Cash	In kind	Cash	In kind	Cash	In kind	
South Korea	Thru DALaM/MAF	In-Kind				20,000			20,000
GEF	FAO RAP	Grant				348,617			348,617
GEF	MAF/IFAD	In-Kind				99,000			99,000
		TOTAL		**16,130,000**		**16,136,254**		**7,765,076**	**7,619,421**

Source: Prepared by the Project Team at the time of MTR

70. The project has successfully leveraged the co-financing much beyond the commitments made at the time of CEO endorsement.

3.4.4 Project partnerships and stakeholder engagement

Main Mid-term review questions (please see Appendix 7)

- **To what extent have stakeholders, such as government agencies, civil society, indigenous populations, disadvantaged and vulnerable groups, people with disabilities and the private sector, been involved in project formulation and implementation?**
- **What has been the effect of their involvement or non-involvement on project results?**
- **How do the various stakeholder groups see their own engagement with the project?**
- **What are the mechanisms of their involvement and how could these be improved?**
- **What are the strengths and challenges of the project's partnerships?**
- **Has the stakeholder engagement plan been adhered to and documented?**
- **Have all stakeholders been made aware of the ESS plan and the grievance complaint mechanism?**

71. In an earlier section of the report (please see Section 2.6), details about different stakeholders of the SAMIS project were provided. Section 2.6 also provided details about the planned roles and responsibilities of different stakeholders in the project. The project went ahead with the partnership arrangements as planned. The 'Project Board' was duly constituted.

72. The project design provided forPSC as the primary tool for national stakeholder engagement and co-ordination amongst different agencies, which are participating in implementation of the project. The 'Project Board' had representatives from key partners for project implementation and the project's beneficiaries. As per the project design, the other opportunities for formal engagement of stakeholders (including local governing bodies) were implementing pilot projects, training sessions, workshops, awareness creation, results dissemination, etc. The project coordinated well with the local government agencies at the province, district, and village level for effective implementation of the pilot project.

73. The project established an effective partnership arrangement for implementing the project with the other (other than the government counterparts) relevant stakeholders as well. This included the partnership with the national and international universities/institutions for supporting the activities carried out under Component 2 of the project and for training/capacity building of the government officials.

3.4.5 Communication, knowledge management and knowledge products

Main Mid-term review questions (please see Appendix 7)

- **How effective has the project been in communicating and promoting its key messages and results to partners, stakeholders and to general audience?**
- **How can this be improved?**
- **How is the project assessing, documenting and sharing its results and lessons learned and experiences?**
- **To what extent are communication products and activities likely to support the sustainability and scaling up of project results?**

74. As explained by the project team, FAO does not allow for a project-specific website. However, FAO website can host information on the project. Accordingly, the SAMIS project is doing so. Thus, the project does not have a website of its own. The project is using the website of FAO to disseminate information about the work carried out by it. The project is regularly disseminating the information about the activities of the project on the FAO website. The project also has a Facebook page and a google group (LaoFAB[11]) . Apart from this, the project also disseminates the results through news channels (both online and print media). The FAO website is also being used for disseminating the information booklets, knowledge products and other publications.

75. The project is making effective use of the capacity building, training, and awareness creation activities for targeted stakeholders, under different components of the project as a means of communication.

76. At local level, the weather, climate, land resources, and climate-change impact information is being disseminated to farmer groups through established farmer field schools (FFS). The activity of dissemination of the weather/climate information, is also carried out through other communication channels such as mobile application, loudspeaker, TV and radio programming etc. Threat information pertaining to agro climatic conditions is disseminated to farmers at select pilot locations through loudspeakers.

77. The project design has provision for the organization of a number of workshops for Knowledge and information sharing (please see Appendix 9, Table 13, Output/Indicator 3.1.2a). The information provided in the PIR against this indicator does not relate to organising of workshops etc. This is one of the areas in which the project is lagging behind. Publication of training materials, products, publications, guidelines, books, handbooks, flyers, websites, etc., have been impacted by issues linked to FAO OCC approval and the complexity of FAO rules on publications. Few booklets and training programs have reached the final stage of publication. One video has been finalized is awaiting approval from OCC. Some of the best practices, key lessons, knowledge products have been disseminated through the project website (created on the FAO website). Some of the events organized by the project did get coverage in newspaper articles, radio and newspapers. Apart from this, the national counterpart (officials of MoNRE and MAF) have been disseminating lessons learned from the project at region and international forums.

78. More outreach and awareness creation activities are being planned by the project. The communications aspect of the project management has been rated as Moderately Satisfactory.

3.4.6 Quality of M&E

3.4.6.1 M&E design

Main Mid-term review questions (please see Appendix 7)

- **Is the project's M&E system practical and sufficient?**
- **How has stakeholder engagement and gender assessment been integrated into the M&E system?**
- **How could this be improved?**

79. A monitoring and evaluation plan was put in place at the time of the design of the project. There was a provision to review the plan at the time of project inception. As per the plan, the project was to be monitored through periodic quarterly and annual monitoring. There were

[11] LaoFAB is a forum for sharing information about Farmers and AgriBusiness in Laos. Members include Government officials, staff of donor agencies and NGOs, project experts, academics and business people

provisions for the preparation of the PPRs and PIRs. The PIR combines both FAO and GEF reporting requirements. Provisions were also made in the project design for an independent MTR and the TE. The GEF Focal Area Tracking Tool for climate change adaptation was to be prepared at the time of CEO endorsement and before the MTR, and at the TE. The set of indicators to be monitored and the corresponding targets were provided in the log-frame of the project. The results of the monitoring and evaluations were to be provided to the project board.

80. The M&E plan at the design stage is well-conceived. The plan is well articulated and was sufficient to monitor results and track the progress toward achieving the objectives. Adequate provisions were made in the budget for monitoring and evaluation activities. The M&E design at entry is rated as Satisfactory. The M&E design at entry is rated as Satisfactory.

3.4.6.2 M&E implementation **(***including financial and human resources***)**

Main Mid-term review questions (please see Appendix 7)

- **Does the M&E system operate per the M&E plan?**
- **Has information been gathered in a systematic manner, using appropriate methodologies?**
- **To what extent has information generated by the M&E system during project implementation been used to adapt and improve project planning and execution, achieve outcomes and ensure sustainability?**
- **Are there gender-disaggregated targets and indicators?**
- **How can the M&E system be improved?**

81. Annual PIRs and bi-annual PPRs were produced regularly using the set of indicators provided in the log frame. The project document has provided for the meeting of the PB twice a year. However, the PB could happen only once every year. The meetings between the project team and the focal points at the ministry were held regularly for quick decision-making and to efficiently solve any difficulties or delays. Owning to a number of reasons (including COVID-19), the MTR of the project got delayed. As per the provisions in the project design (project document), GEF Focal Area Tracking Tool climate change adaptation was prepared at the time of CEO endorsement and before the MTR.

82. Apart from the provisions in the project documents for M&E activities, the log-frame of the project (Output 3.1.1 in component 3) has made separate provisions for M&E activities. LOAs were signed with DoPF of MONRE to monitor the progress of project activities and log frame and feedback provided. This Output was more or less to follow the detailed M&E plan of the project as specified in the M&E section of the project document. The project is continuing to undertake the M&E as mentioned in the project document. M&E Plan Implementation has been rated as Satisfactory. The overall quality of M&E is rated as Satisfactory

3.5 Cross Cutting Concerns

3.5.1 Gender and other equity dimensions

Main Mid-term review questions (please see Appendix 7)

- **To what extent were gender considerations taken into account in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender-equitable participation and benefits?**
- **Was a gender analysis done?**
- **Sex disaggregated and gender-sensitive indicators and results**

83. At the time of project designing, no formal gender analysis was done. The project document mentions the intentions of strengthening and enhancing the involvement of women in the implementation of the project activities. The log frame of the project has gender-segregated indicators. The project team tried to include as many female participants in the trainings and capacity building sessions as possible. However, the participation by females has fallen short

of the targets, mainly because there are fewer female employees in the government departments targeted for the training and capacity building initiatives.

84. As such the project is not leading to specific changes which impact the lives of women differently. The impacts of climate change on the agriculture sector in Laos do not affect the life of females differently or more than their male counterparts.

3.5.2 Environmental and social safeguards

Main Mid-term review questions (please see Appendix 7)

- **To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?**
- **Has the project been implemented in a manner that ensures the ESS Mitigation Plan (if one exists) has been adhered to?**

85. The project was fully compliant with FAO's environmental and social safeguards defined by the integration of precautionary principles into program/project management cycles. The project design and its implementation have taken specific care to ensure women's participation. The project did not undertake 'Free, Prior, Informed Consent' (FPIC). The project design has provisions to involve the local/indigenous people at the level of 'Farmers Field School' (FSS). At the time of project preparation, ESS assessment was undertaken and the project was classified under category C (pre-approved list of projects which are excluded from detailed assessment as the project will have minimal or no adverse environmental or social impacts).

86. The project components include both investment and technical assistance. The investments are related to agro-climatic monitoring systems that include automatic weather stations and manual observation networks. As per the 'Project Document', a detailed assessment has been carried out in all the 15 locations where AWSs are going to be established and no negative impacts are anticipated.

87. The Project will contribute towards sustainable management of agricultural resources through Agro-Ecological Zoning (AEZ) concept. None of the activities under the project leads to pollution, watershed degradation, or impacts the indigenous people. The project will also lead to generation of socio-ecological data for food security and social vulnerability assessment.

4. FINDINGS: SUSTAINABILITY AND REPLICATION

4.1 Sustainability

Main Mid-term review questions (please see Appendix 7)

- **What is the likelihood that the project results will be useful or persist after the end of the project?**
- **What are the key risks that may affect the sustainability of the project results and its benefits (consider financial, socioeconomic, institutional and governance, and environmental aspects)?**

4.1.1 Financial risks to sustainability

88. For component 1 of the project, new infrastructure has been created by way of new AWSs. Going forward, funds would be needed to maintain and operate these AWSs. This would require additional allocation of funds for DMH to ensure smooth operations of the AWSs, after the SAMIS project. Discussions with the officials of DMH revealed that the action for provision of the required financial resources for the operation and maintenance of the weather stations is already underway. There are no financial risks to sustainability for Component 1 of the project.

89. For Component 2 of the project, the completion of activities will lead to the development of models and increased institutional capacity for operations, monitoring, and analysis of agro-climate information for medium and long-term actions towards adaptation towards the impacts of climate change. There won't be any significant requirement of funds beyond the SAMIS project to sustain the results.

90. The sustainability of the project results from the viewpoint of financial resources is rated as Likely

4.1.2 Socio-economic risk to sustainability

91. At the national level, the project will strengthen the capacity to monitor and analyze agriculture production systems, leading to adaptive actions to negate the impacts of climate change on the agriculture sector. At the local level, the project results will lead to an increase in the resilience of the farmers towards the impacts of climate change. Further, the project at the local level will lead to an increase in the income levels of the farmers (by reducing the post-harvest losses and by increasing the yields of the crops). Please see para 51 for the details of the benefits. There is an existing level of high awareness within the national counterparts and within the general public, regarding the issues with food security in the country. This will help sustainability of the results of the project from Socioeconomic view point. There are no risks to the sustainability of the project results from the socioeconomic viewpoint and sustainability is rated as Likely

4.1.3 Institutional framework and governance risks to sustainability

92. The institutional framework for the implementation of the project is embedded in the Ministry of Natural Resources and Environment (Department of Meteorology and Hydrology) and Ministry of Agriculture and Forestry (Department of Planning and Finance). The local ministry officials of the Ministry of Agriculture and Forestry form the backbone of the institutional framework for the management of the operations at the field level and for the issuance of the agro-climate bulletin to the farmers. The operations of the weather stations, collection, compilation, and analysis of weather data and forecasting of the agro-climatic conditions is the responsibility of the DMH. In order to sustain the operations beyond the SAMIS project, it

is important that the two departments have good coordination of the activities. The institutional framework for the coordination of the activities would need to be strengthened to ensure sustainability. The sustainability of the results of the project from the viewpoint of institutional framework and governance is rated as Likely.

4.1.4 Environmental risks to sustainability

93. As had been mentioned before (please see Section 3.5.2), the project has no negative environmental impacts. From the viewpoint of environmental risk, the sustainability of the project is rated as Likely .

4.2 Replication and catalysis

Main Mid-term review questions (please see Appendix 7)

- **What project results, lessons or experiences have been replicated (in different geographic areas) or scaled up (in the same geographic area, but on a much larger scale and funded by other sources)?**
- **What results, lessons or experiences are likely to be replicated or scaled up in the near future?**

94. The project is using the loudspeaker system for dissemination of the agroclimatic information/bulletin to the farmers in the villages where pilot activities are being carried out. It is recommended that the geographical spread of the dissemination of the agroclimatic information/bulletin be increased. It is considered that it would be possible to do so at no additional or minimal additional cost (Please see recommendation 4 as well).

95. With the good results out of SAMIS project towards the delivery of agroclimatic information to the farmers at selected locations, a plan for replication and upscaling the results at the national level has been initiated by supporting development of a follow-up project focused on replication of the results of SAMIS project. The proposed follow up project may be a new externally funded project. The proposed follow-up project will leverage the good results and impacts of the SAMIS project and establishment of new AWSs under other ongoing funded projects. SAMIS project has supported the preparation of a concept note for potential funding from GCF, for a replication/upscaling activity. The government has already extended its approval to the concept note and requested FAO to take it forward.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Main Mid-term review questions (please see Appendix 7)

- **Identify remaining barriers to achieving the project objective in the remainder of the project, and by reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits**
- **MTR Ratings & Achievement Summary Table will be provided, summarising the ratings on a) results, b) implementation and adaptive management, c) sustainability with a short description of the rating's justification**

5.1.1 Conclusions

96. The project's objectives were to enhance capacities to gather, process, analyze and share climatic and geospatial information so that it can be applied to planning and decision-making for adaptation to the impacts of climate change on the agriculture sector. The concept relates to two levels of decision-making. At one level, the project is building infrastructure and comprehensive agroclimatic monitoring and information capacity focused on boosting sustainable production by optimizing farmers' and smallholders' resilience to climate change through the preparation and provision of agrometeorological advisory services. At the second level, which has relevance at the national level, the project addresses, future provision of crop distribution and productivity as well as the socio-economic acceptability of farming and cropping systems that will result due to the impact of climate change. The project is on track to achieve its outcomes and objectives.

97. With the successful establishment of the new AWS, the project has led to an increase in the availability and quality of agrometeorological information across the country. The agrometeorological information being delivered through LaSCA, to the farming community is positively impacting the earnings either due to prevention of the post-harvesting losses (e.g., for coffee plantations) or increase in the yields of the crops (e.g., for rice) at the pilot locations. Although within the implementation timelines of the project, the impacts/benefits to the farming community are getting realized within the pilot areas, it will be possible for the national government to extend these benefits to the farmers across the nation with minimal incremental efforts.

98. With the likely achievement of Outcomes for component 2 of the project, the government officials and policymakers will have insights into the distribution of agricultural populations that are vulnerable to climatic change. One of the other impacts of the project strengthening of agro-climatic monitoring and information systems will provide input for the development of long-term plans for agriculture and food security. At the organization level, the project has benefited MONRE and MAF by strengthening their skill sets, knowledge base, and understanding regarding the impacts of climate change and the adaptive options to negate the impacts. One of the other benefits is strengthening the collaboration between different agencies in preparation of agrometeorological advisors and development of agro-climatic monitoring and research.

99. While the positive impacts of component 1 of the project are available immediately, the positive impacts die to component 2 will be realized over a period of time

100. A strategy and plan may be worked out to upscale the results of the pilots of the SAMIS project at the national level. In this regard, it is important to note that PSC had asked the project team to develop a follow-on initiative as a 'Green Climate Fund' (GCF) project. The project team in turn, has already prepared the 'Project Concept Note', which is proposed to be submitted to

GCF. For this, the automatic weather stations being established under some ongoing development projects may be leveraged to support the climate data on a real-time basis which is one of the requirements to produce location-specific agro-climate information bulletins for the farmers.

101. Specifically, some of the conclusions of the MTR are as follows:

- **Conclusion 1: (please see para 97). The institutional arrangement across the line ministries and departments has been initiated and strengthened. The agrometeorological information being delivered by the project through LaSCA to the farming community is positively impacting the earnings of the farmers.**

- **Conclusion 2: (please see para 97). The impacts/benefits to the farming community are getting realized within the pilot areas, it will be possible for the national government to extend these benefits to the farmers across the nation with minimal incremental efforts. This is considering that LaCSA is a national product, so the agro-met advisories are already available to the whole country for the crops covered and it would be possible for the national government to extend the benefits to the farmers (which are not yet covered by the pilot activities) with some incremental efforts.**

- **Conclusion 3: (please see para 98). Component 2 of the project will provide the required inputs for taking policy and regulatory decisions for adaptation to the impacts of climate change on the agriculture sector. Thus, one of the other impacts of the project will be strengthening agro-climatic monitoring and information systems, leading to the required inputs for the development of long-term plans for the agriculture sector.**

- **Conclusion 4: The project has benefited MONRE and MAF by strengthening their skill sets, knowledge base, and understanding regarding the impacts of climate change and the adaptive options to negate the impacts.**

- **Conclusion 5: The project aims to negate the effects of climate change on the agriculture sector in Laos. The positive impacts of component 1 of the project are available immediately. The positive impacts due to component 2 of the project will be realized only over a period of time, when the increased capacity of the government officials/departments would lead to identification of the threats of climate change to the agriculture sector and policy-level decisions towards adaptation to the effects of climate change. Thus, the positive impacts due to component 2 will be realized over a period of time beyond the lifetime of the project.**

- **Conclusion 6: Presently, there is no concrete plan for upscaling the results and benefits of the SAMIS project. A strategy and plan may be worked out to upscale the results of the pilot activities of the SAMIS project at the national level. For this, the automatic weather stations being established under some ongoing development projects may be leveraged to support the climate data on a real-time basis which is one of the requirements to produce location-specific agro-climate information bulletins for the farmers. Given the limited time left for the completion of the project and considering the feasibility, most of the activities under such a plan would need to be carried out beyond the implementation of the SAMIS project.**

5.2 Recommendations

Main Mid-term review questions (please see Appendix 7)

- **Corrective actions for the design, implementation, monitoring and review of the project**
- **Actions to follow- up or reinforce initial benefits from the project**
- **Proposals for future directions underlining main objectives**

#	Recommendation	Rational and Description	Responsibility	Timing/Dates for Action
	Corrective actions for the design, implementation, monitoring and review of the project			
1	**More Training / Capacity Building**	Considering that some of the technical training was imparted by the international specialists in English language, the receptibility of the training imparted was low. The situation got further complicated as some of the training has to be imparted using online platforms. It is recommended that a rapid assessment be carried out to identify the training gaps and further training and capacity building sessions be organized. To the extent possible local language be used for training, in case it is not possible at least the training material be prepared in the local language. During the mission, it was emphasized by the stakeholders that more technical training is needed, particularly on agro-met.	PMU	During the remaining time of project implementation
2	**Prepare knowledge products**	It is recommended to prioritize the development of case studies and knowledge products from the success of the SAMIS project. Actions may also be initiated to disseminate the case studies and knowledge products to larger audiences.	PMU	During the remaining time of project implementation
	Actions to follow-up or reinforce initial benefits from the project			
3	**Increase geographical coverage by including villages in the neighborhood of the pilot villages**	The project is using the Lao National Radio and loudspeaker system for dissemination of the agroclimatic information/bulletin to the farmers in the villages where pilot activities are being carried out. It is recommended that the geographical spread of the dissemination of the agrometeorological information/bulletin be increased (even if it means a marginal increase in the overall cost for this activity). Some of the initiatives which are suggested are as follows: • Wherever possible and practical, take the signals from the amplification systems working the pilot villages and feed them to the loudspeaker system of the neighboring villages. • Wherever required, the location and orientation of the loudspeakers in the villages be optimized to maximize the	PMU	During the remaining time of project implementation

#	Recommendation	Rational and Description	Responsibility	Timing/Dates for Action
		geographical coverage by the agroclimatic bulletin. • Explore the possibilities of using 'Community Radio' for broadcasting the agroclimatic bulletin. This has the potential to increase the geographical coverage exponentially. For such an initiative, the possibilities of getting the required permission/license from concerned authorities need to be explored. However, wherever Community Radio is existing, it may be utilized for broadcasting the bulletin. • Explore the possibilities of Toll-free call-back service provided by the mobile phone service companies can be provided. Under this, a farmer can call a phone number and listen to the pre-recorded agro-climatic information/bulletin. The server menu can provide the choice to a farmer to listen to the information which is specific to his location, crop and other such parameters. Based on discussions with the officials of the mobile telecom service providers, it is assessed that this service can be made upstream within a month's time in the pilot locations. Such a service will enable a farmer to listen to the agromet information at the time of his/her choice. Further, a farmer will be able to listen to the information again in case she/he is not able to understand the complete bulletin in one go. The good thing about it is that this service can be accessed even by someone using a basic mobile phone instrument and in locations where the mobile network speed is low (2G and 3G services).		
4	**Initiate the process of provision of budgetary support by DMH to ensure operations and maintenance of AWSs**	Establishment of AWSs under Component 1 of the project is one of the highlights of the SAMIS project. The real-time information feed from the AWSs facilitates the generation of agromet information and advisory for the farmers. Going forward the continuation of the provision of the agromet services will depend on the continuation of operations of the AWSs. For this, it is necessary to ensure maintenance (including the need to replace the sensors as and when required) and service of the weather stations. It is recommended that the process be initiated to make provisions in the budgets of the respective department towards this end. This needs to be taken on priority as the project is going to end over the next six months.	PMU/FAO/ Government Counterparts	During the remaining time of project implementation
	Proposals for future directions underlining main objectives			

#	Recommendation	Rational and Description	Responsibility	Timing/Dates for Action
5	**Support the initiation of the process of development of Crop Insurance products**	With the establishment of AWSs under the SAMIS project and a couple of other ongoing projects in the country, it is now possible to have weather information-based crop insurance models in the country. Development of crop insurance products, polices, regulations is a time-consuming long process and it would not be feasible to do this as a part of SAMIS project. However, SAMIS project may initiate the overall process.	FAO / National Counterparts	Post SAMIS project implementation
6	**Ongoing Early Warning System / Disaster Risk Reduction initiatives and SAMIS project may collaborate. This will ensure sustainability of the results of SAMIS project to some extent, while on the other hand this will lead to enhancement of results both for the EWS and SAMIS project**	World Bank is implementing a project in Laos under which a number of new automatic weather stations are being established. The project is focused on 'Early Warning and Disaster Risk Reduction'. This WB project also has activities and outputs like weather forecasting and assessment of climate change. The data from the weather stations being created under the WB project, once functional, will be used for the benefits of the SAMIS project (and beyond the SAMIS project) for the agro-met services, thereby increasing the geographical area served by the SAMIS project. The weather stations created under the SAMIS project can help the WB project by providing a dataset. As the AWS stations under the WB project will be installed after the end of SAMIS, this may require installing additional instruments at the stations and minor revisions in the LaCSA system. As a calibration lab is being created under the SAMIS project, the weather stations created under the WB project may use this lab. The WB project can provide sustainability to some of the activities and results of the SAMIS project by supporting the continuation of such activities beyond the implementation timelines of the SAMIS project. With the increase in the number of weather stations in Laos, it is a good idea to replicate/upscale the good results from the pilot at the villages under the SAMIS project to the national level. For the purpose the weather stations being created under the WB project (and maybe some other projects as well) can be leveraged. Such a strategy to leverage will enable upscaling of the results at a minimal incremental cost. A new project may be proposed in Laos to upscale the results of SAMIS project, using this approach as a strategy	FAO/ National Counterparts	Post SAMIS project implementation
7	**Actions for Replication and Upscaling**	With the good results out of SAMIS project towards the delivery of agrometeorological information to the farmers at selected locations, a plan for replication and upscaling	FAO/ National Counterparts	During the remaining implementation time of the SAMIS project and to

#	Recommendation	Rational and Description	Responsibility	Timing/Dates for Action
		the results at the national level may be initiated. This may be done as a part of a national program or a new externally funded project. In case a new externally funded project is proposed, it may leverage the good results of the SAMIS project and establishment of new AWSs under other ongoing funded projects SAMIS project has supported preparation of a concept note for potential funding from GCF, for a replication/upscaling activity. The government has already extended its approval to the concept note and requested FAO to take it forward. Possibilities to take it further may be explored. Capitalize lessons learned from Farmer Field School (FFS) through a simple extension manual that could be used by local extension workers with a clear cost-benefit analysis. To analyze how much additional margin farmers could get through adopting these agro-met information and production technologies.		continue after implementation of the SAMIS project
8	**Create a center of excellence in one of the institutions in Laos for Climate Change Adaptation for the Agriculture Sector**	A center of excellence may be created in Laos in one of the institutions to support the continuation of the scientific work in the area of climate change impacts on the agriculture sector and adaptation to climate change. This could be linked to the Climate Change Research Center under NAFRI. This will ensure sustainability of the results achieved under Component 2 of the project. This will also ensure continuation of technical support to DALaM for policy and decision making for longer-term adaptive action against the likely impacts of climate change on the agriculture sector Such a center of excellence may look for collaboration with other comparatively advanced institutions in other countries working in the area of climate change adaptation to the agriculture sector.	PMU / FAO / National Counterparts	Towards the end of the implementation time of the SAMIS project and to continue after implementation of the SAMIS project.

APPENDIX 1: TERMS OF REFERENCE

Terms of reference for the mid-term review of the FAO-GEF project – 'Strengthening Agro-climatic Monitoring and Information Systems (SAMIS) to improve adaptation to climate change and food security in Lao People's Democratic Republic (GCP /LAO/021/LDF), GEF ID 5462

Background and context of the project

1. Lao People's Democratic Republic is continuing to develop rapidly in terms of economic indicators and has focused on graduating into a middle-income country in recent years. Juxtaposing impressive performance in overall economic development, the country has made progress in rural development and has made advances in terms of poverty reduction. On the negative side, however, impressive achievements in terms of economic growth and poverty reduction have not translated into significant reductions in the country's seriously high levels of food insecurity and undernutrition. At the same time, climate change impacts are posing constant threats to crop production systems. Future mean annual temperature change in the Lower Mekong Basin is projected to increase by around 1 to 2ºC from baseline conditions (1982–2002) by 2050 (USAID 2013). The region will likely have longer annual dry seasons and annual regional precipitation will likely increase by 10 to 30 percent, with the highest increase likely in the eastern and southern parts of the country. Climate variability will also increase; the difference in precipitation between dry and wet years will be greater (2014 project document). In fact, currently, anticipated climate change is seriously affecting the agriculture sector, particularly for rural populations with limited adaptive capacities. The last rainy seasons (2018, 2019), for example, have been characterized by cycles of floods and droughts. These seasons are currently being forecasted and monitored by the Strengthening Agro-climatic Monitoring and Information Systems (SAMIS) to improve adaptation to climate change and food security in Lao PDR (GCP /LAO/021/LDF) project using the online Laos Climate Services for Agriculture (LaCSA) application and by producing weekly and monthly agrometeorological bulletins for farmers. However, although the government is ready to prepare timely alerts, the problem continues to be that the government system is not yet ready to promptly raise awareness about these alerts or make appropriate and timely decisions about floods and droughts. The need to properly react in a timely manner to weather and agrometeorological conditions will need to be the focus of a follow-up project.

2. The project's components include: (1) strengthening agroclimatic monitoring, analysis, communication and use of data and information for decision-making in agriculture and achieving food security; (2) strengthening institutional and technical capacity for monitoring and analysis of agricultural production systems and development of the Land Resources Information Management System (LRIMS) and agro-ecological zoning (AEZ); and (3) knowledge management, dissemination and application of information at the local level including integrating lessons learned into planning and in operating a project monitoring and evaluation (M&E) activity.

3. The SAMIS project proposal was developed between 2012 and 2016. In 2012, the first mission replying to a request of the government, focused on agrometeorology only. During project information form (PIF) preparation, the key link between short- and long-term climate services for multiple decision-making processes was added, including a component on climate scenarios. The PIF was approved on 1 January 2014. Project document formulation ended on 27 July 2016. The project was approved for funding by the Global Environmental Facility (GEF) to be managed by the FAO Lao PDR office and led by the Ministry of Natural Resources and Environment (MONRE), the Department of Meteorology and Hydrology (DMH) in collaboration with the Ministry of Agriculture and Forestry (MAF), and Department of Planning and Cooperation (DOPC), which assigned the lead to the Department of Agricultural Land Management (DALaM).

4. The beginning of the project presented some challenges related to work plan revision given the scarcity and quality of the baseline assessment prepared during the project preparation grant (PPG) phase, particularly with respect to aspects of future climate and crop scenarios. The deep revision of

the work plan related mostly to DALaM activities and took six months. Currently, the delay has been recovered but Component 2 of the project continues to run slightly late. In addition, now the mid-term point has been reached, it is evident that the financial planning of the agrometeorology component has not been tailored to local targets or the real conditions of the country; moreover it is underfunded and has to rely strongly on partnerships or co-financing to reach goals.

5. During the project, the general conditions for information technology exposure to the Lao general public is increasing exponentially. This is partly due to the influence of nearby countries and partly to the active involvement of the renewed private and public sector (i.e. BCEL One application [app] for the banking and tax system, Lao Telecom for communication, the One Health system, the Ministry of Transport's internal database for road maintenance, Lao DECIDE for land concession and socio-economic data on agriculture). Climate change information management has, however, only recently been targeted by innovations thanks to the SAMIS project. This is due to two policy issues. First, based on the Presidential Decree no.3/2012, any weather station data have to be paid with a fee but no research entity has sufficient funds to purchase the data and such data are not available at World Meteorological Organization (WMO) database levels. Second, although it is vital for multiple issues related to infrastructure management, the Policy on Meteorology and Hydrology that was approved in 2016 is not helping to improve the situation. The policy gives vast decision-making power related to alerts and data use to stakeholders and actors who have no capacity to make climate change-related decisions, such as the DMH. In addition, the same policies do not create any accountability system over lack of alerts by the same entities. Finally, any activities related to early warnings or climate change continue to be uncoordinated with little impact on people and on policies by the Ministry of Social Welfare and by the Department of Climate Change, respectively. At the agricultural level, specific issues related to the role of the National Agriculture and Forestry Research Institute (NAFRI) on information and data and on climate change modelling are present. First, NAFRI is responsible for the information and communication technology strategy of the MAF, notwithstanding lack of capacity, staff and infrastructure to fulfil this role. Also, the Climate Change Centre of NAFRI has good capacities related to agrometeorology but works in an isolated manner producing results that are not accessible and difficult to scale up.

6. It must be underlined that the timing of the present MTR has been seriously affected by the covid pandemic, as it was due to happen around February 2020. In order to avoid affecting the successful continuation of the project, corrective measures and activity calendar have been adjusted to have the maximize efficiency. In particular, being the scope of the project mostly focusing on production of climate services and production of climate data, the capacities and technical expertise able to assess the entire activities are relatively limited at global scale. For this, discussions held at FAO level have concluded that there is no capacity, at Lao level, to undertake such a MTR. In addition, due to covid travel restriction, is also not possible to undertake missions by international experts. For this, it was recommended to undertake a remote MTR.

Description of the project, project objectives and components

7. The four-year FAO/GEF SAMIS project was conceived to improve adaptation to climate change and food security in Lao PDR. It started in June 2017 and has a total GEF budget envelope of USD 5 479 452. Anticipated co-financing is USD 16 130 000 of which USD 16 136 254 had materialized by the end of year 3 (June 2020).

Project locations

8. The main SAMIS localization is at the national and central level, as the project modelling and IT processes are all responsibilities of national-level institutions. The SAMIS modelling component produces national-level results and does not work at the pilot scale. As such, SAMIS covers 100 percent of the country.

9. However, in more detail, the project has multiple field locations that have three different components.

Component 1 locations

10. Component 1 has 15 locations in 12 provinces for the installation of automatic weather stations, under the auspices of MONRE. The field locations are given in Figure 1. Table 1 presents locations where weather stations are being rehabilitated by SAMIS while Table 2 indicates locations where new stations have been developed and installed by SAMIS. Table 3 shows additional stations with no installation yet but staff have been trained to collect crop data relevant for agrometeorological modelling.

Table 1. Locations with rehabilitated weather stations

Province	Station district	Station village
Champasak	Kong	HadXaiKhun
XiengKhouang	Kham	LongPiew
Saravanh	Laongam	HauyNamsun
Vientiane	NalongKhoun	NaYang
Vientiane Capital	NaPhok	NaPhok
Luangnamtha	Luangnamtha	ThongNalue
Luangnamtha	Sing	ThongYon-SiriHeung
Borkeo	Houaxay	Oudom

Table 2. Locations with new weather stations

Province	Old station district*	Old station village*	New station district	New station village
Xaisomboun	Anouvong	PhouHaoxang	Anouvong	PhouHaoxang
Luangprabang	XiengNgune	Houay Khot	XiengNgune	SamukKhixay
Vientiane	Feaung	NaKang	Feaung	Laokham
Xayabouli	Phieng	NamPoiu	Pheing	NamPoiu
Xayabouli	Hongsa	ChomChang	XiengHone	Ban Phrat
Borkeo	Tone Pheung	SiDoneDeng	Tone Pheung	NamKeungKoa
Oudomxay	Houn	VangLam	Houn	Phonesavanh

*In project document.

Table 3. Locations with agrometeorological crop data using the CIAT online questionnaire

	Station name	District	Province	X	Y	Station procured by
1	Houyxay	Houyxay	Bokeo	100.437222	20.261944	FAO
2	Tonpheung	Tonpheung	Bokeo	100.10705	20.32265	FAO
3	Louangnamtha	Louangnamtha	Louang Namtha	101.416389	20.930833	FAO
4	Sing	Sing	Louang Namtha	101.140833	21.179722	FAO
5	Houn	Houn	Oudomxai	101.493056	20.154167	FAO
6	Houay khot	Xiang_Ngeun	Louangphrabang	102.155833	19.735278	FAO
7	Kham	Kham	Xiangkhoang	103.570556	19.651667	FAO
8	Xienghon	Hongsa	Xaignabouri	101.475917	19.556667	FAO
9	Phieng	Phieng	Xaignabouri	101.508889	19.009167	FAO
10	Phongsaly	Phongsaly	Phongsali	102.092111	21.676306	JICA
11	Xamneua	Xamneua	Houaphan	104.062464	20.418104	Vietnam
12	Naphok	Xaythany	Vientiane_C	102.442778	18.088056	FAO
13	Nalongkhoun	Phonhong	Vientiane_P	102.448889	18.493056	FAO
14	Fueng	Feuang	Vientiane_P	102.116111	18.655556	FAO
15	Xaysomboun	Anouvong	Xaisomboun	103.090278	18.906389	FAO
16	Viengthong	Viengthong	Bolikhamxai	104.441333	18.511139	JICA
17	Nongbook	Nongbok	Khammouan	104.809444	17.1425	ADB
18	Dongheng	Atsaphangthong	Savannakhet	105.291667	16.698333	ADB
19	Laongam	Lao Ngarm	Saravan	106.164167	15.461667	FAO
20	Khong	Khong	Champasak	105.853889	14.118333	FAO

21	Thateng	Thateng	Xekong	106.374694	15.450667	WB
22	Attapeu	Samakkhixay	Attapeu	106.824194	14.816417	WB

Component 2 location

11. The activities of Component 2 are piloted in Saravan Province only in collaboration with the Provincial Agriculture and Forestry Office (PAFO) and District Agriculture and Forestry Office (DAFO).

Component 3 locations

12. The piloting of the agrometeorological system was initially planned for the provinces of Savannakhet and Champasack. However, for better agro-ecological coverage, the piloting has been conducted in five provinces and different typologies of activities have been executed (Figure 1). All provinces correspond to areas where SAMIS is also installing stations. A detailed list of villages tested is provided in Tables 4a–c.

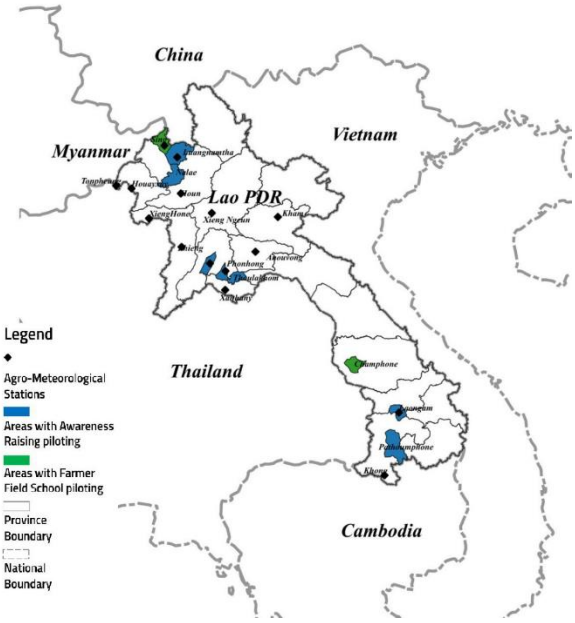

Figure 2. Field locations for SAMIS project agrometeorological activities

Table 4a. Pilot villages for agrometeorological bulletin testing in the 2019 wet rice season

Province	District	Village	Activities	Collaboration
LuangNamtha	Sing	Namai	Village speakers/FFS	DAFO/PALaM
LuangNamtha	Sing	Chiengmoun	Village speakers/FFS	DAFO/PALaM
LuangNamtha	Nalae	Konechan	Village speakers	DAFO/PALaM
LuangNamtha	Nalae	Hardlom	Village speakers	DAFO/PALaM
LuangNamtha	Namtha	Donekhoun	Village speakers	DAFO/PALaM
LuangNamtha	Namtha	ViengNeua	Village speakers	DAFO/PALaM
Saravan	Laongam	PhakkoudGai	Village speakers	DAFO
Saravan	Laongam	Dong	Village speakers	DAFO
VTN Province	Thoulakhom	Boungphao	Village speakers	DAFO
VTN Province	Thoulakhom	Nongphong	Village speakers	DAFO
VTN Province	Phonhong	Napho-Tai	Village speakers	DAFO
VTN Province	Phonhong	Aekxang	Village speakers	DAFO/ NAFRI
VTN Province	Feuang	Namon	Village speakers	DAFO
VTN Province	Feuang	Phonthone	Village speakers	DAFO
Savannakhet	Xe Champone	Kadarn	Village speakers/FFS	CAWA/DAFO/PALaM
Savannakhet	Xe Champone	Laonard	Village speakers/FFS	CAWA/DAFO/PALaM

Savannakhet	Xe Champone	Nonsithan	Village speakers/FFS	CAWA/DAFO/PALaM
Savannakhet	Xe Champone	Xakheun-Neua	Village speakers/FFS	CAWA/DAFO/PALaM
Champasack	Pathoumphone	Phapho	Village speakers	CAWA
Champasack	Pathoumphone	Nongmark-Aek	Village speakers	CAWA

Notes: FFS = farmers' field school; CAWA = Climate Adaptation in Wetland Areas of Lao PDR project; PALa M = Provincial Office of Agricultural Land Management.

Table 4b Pilot villages for agrometeorological bulletin testing in the 2019–2020 wet rice season

Province	District	Village	Activities
Vientiane	Phonhong	Napho-Tai	Loudspeaker
Vientiane	Phonhong	AekXang	Loudspeaker
Vientiane	Fuang	Namon	Loudspeaker
Vientiane	Fuang	Phonthone	Loudspeaker
Vientiane	Thoulakhom	Nongphong	Loudspeaker
Vientiane	Thoulakhom	Boungphao	Loudspeaker
Saravan	LaoNgam	Phakkout-Gnai	Loudspeaker
Saravan	LaoNgam	Dong	Loudspeaker
Savannakhet	Champhone	Kadan	FFS+Louspeaker
Savannakhet	Champhone	Laonard	FFS+Louspeaker
Savannakhet	Champhone	Xakheun-Nuea	FFS+Louspeaker
Savannakhet	Champhone	Nonsithan	FFS+Louspeaker
Champasak	Pathoumphone	Phapho	Loudspeaker
Champasak	Pathoumphone	NongMarkAek	Loudspeaker
LuangNamtha	Namtha	Viengneua	Loudspeaker
LuangNamtha	Namtha	Donekhoun	Loudspeaker
LuangNamtha	Sing	Chiangmoun	FFS+Louspeaker
LuangNamtha	Sing	Namai	FFS+Louspeaker
LuangNamtha	Nale	Khonechan	Loudspeaker
LuangNamtha	Nale	Hardlom	Loudspeaker
Savannakhet	Champhone	Palaeng	FFS+Louspeaker
Savannakhet	Champhone	Dongmeuang	FFS+Louspeaker
Savannakhet	Champhone	Xe	Loudspeaker
Savannakhet	Champhone	Nakathang	Loudspeaker
Savannakhet	Champhone	Lamthen	Loudspeaker
LuangNamtha	Namtha	Poung	Loudspeaker
LuangNamtha	Namtha	Namthoung	FFS+Louspeaker
LuangNamtha	Namtha	Mai	Loudspeaker
LuangNamtha	Sing	Silimoun	Loudspeaker
LuangNamtha	Sing	Patoy	FFS+Louspeaker

Constraints the project seeks to address

13. Based on the project document, the main constraints are mostly linked to inadequate capacities and lack of data. However, the experience of the project contradicts the initial evaluation and the most important initially identified constraint is item number 3: "Inadequate technical capacity within the Ministry of Agriculture and Forestry (MAF) impedes translation of the generic information into practical, relevant, and applicable information. Other barriers include (i) lack of trained personnel to maintain an observational network, (ii) lack of expertise in generating information for specific sectors, and (iii) insufficient expertise in tailoring data interpretations for different, non-technical stakeholders". DALaM has some good basic capacity that is being enhanced by the project and is one of the best GIS units in the country, but the technical level could still improve and in this context they are focusing on learning very complex methodologies under SAMIS. The DMH's lack of capacity has been one of the main issues of the project. Willingness to learn and apply methods, appetite to cooperate and some technical-level collaboration skills are all present. However, the main constraints are related to anomalies concerning management, the working environment, career opportunities

and rewards for good results, and proper planning of employee time agendas. However, the situation has improved considerably over time.

14. This lack of proper initial identification of challenges and constraints has delayed the project by forcing the team to revise the work plan and to undertake a significant amount of procurement that could have been avoided, such as obtaining automatic weather stations (still ongoing). However, the main challenges that the project is addressing in the medium term are:

    - Lack of management capacities, including inconsistent planning, lack of employee agenda time planning, minimal employee motivation and no follow up on infrastructure maintenance. This has become one of the main focuses of the SAMIS project, but currently it is not equipped to address these circumstances.
    - Lack of proper data-sharing policies and environment, forcing people to work in data siloes (i.e., it is difficult to access climate data from the DMH). Also, lack of vision in the use of data and lack of confidence in data quality (even if these data are validated by international entities). This has become one of the main targets of SAMIS and technical collaboration between DALaM and the DMH is actually working well for data sharing, while DALaM has been able to involve multiple actors through the data-sharing agreement process.
    - Lack of awareness among policy-level stakeholders and decision-makers about existing data. In particular, policy-makers do not understand central and decentralized level data collection and data analysis capacities. Although capacities need to be improved, the culture of data trust and the culture of data use for policy and by policy-makers is missing. Generally speaking, policy-makers tend to assume that there are no data. This challenge is being addressed by a follow-up pilot project by FAO.
    - Lack of data use for policy. Data are not used for policy planning nor for policy implementation monitoring. This is because the data are not known or are not publicly available. Also, policy-makers have no contact with or knowledge about government data-producing entities. Finally, there is no acceptance of data that are not produced by government entities directly (i.e., project data) so much information remains unused. This barrier is being addressed by SAMIS and FAO in a follow-up pilot project.

Project components

15. Project articulation is quite complex, comprising a considerable number of activities. The project is addressing monitoring, observation, analysis, data storage and the development of value-added information products; it is also promoting information sharing and better-informed agricultural decision-making. The mid-term review could give some analysis and propose changes if necessary. A synthesis of the project objectives, methods, expected results and stakeholders is provided in the video available at this link:

    https://drive.google.com/open?id=1XiPgw02Zh-pUNhXgfJJbs9T-5pDowGmw

    The project's components include:

    (1) Strengthening agroclimatic monitoring, analysis, communication and use of data and information for decision-making in agriculture and food security. This national-level activity has already reached an advanced stage and the resulting IT system has been published in a demonstration version, focusing on farmers' focused climate services. The system aims at supporting day-by-day or seasonal decision-making at the field level. The climate services are produced by the LaCSA[12] system and the following information is provided:

    - Daily collected data and forecasts through the 'Akad Lao' application, which is maintained by the Weather Forecast Division of the DMH;
    - Automatically connected data from the World Bank (WB), the Asian Development Bank (ADB), the People's Republic of China and Japan International Cooperation Agency (JICA) weather stations; and

[12] Available at http://147.46.250.219:8081

- All existing historical data from the DMH's Climatology and Agro-Meteorology Division to interpolate seasonal forecasts.

The LaCSA also provides two innovative products: a provincial seasonal bulletin covering the entire country updated on a monthly basis (at the end of every month) and a weekly bulletin (at the beginning of every week) with recommendations on rice productivity and pest and disease control for each of the 141 districts in the country. The bulletins can be accessed from the LaCSA webpage on Facebook.[13]

(2) Strengthening institutional and technical capacity for monitoring and analysis of agricultural production systems and development of LRIMS and AEZ. This national-level component focuses on producing climate services targeting longer term decision-making. The component is currently producing future climate and crop scenarios that can support high-level decision-makers to design policies or make provincial- and district-level decisions and improve planning. In addition, the component is starting the development of capacity for anticipatory governance and alternative future planning.

(3) Knowledge management, dissemination and application of information at the local level including integrating lessons learned into planning and in operating a project M&E activity. This part of SAMIS includes national-level M&E and awareness-raising and field-level activities that are piloting the LaCSA application and climate services for farmers. The activities of Component 1 do not focus on covering the last stretch between the production of the bulletin and the use of the bulletins by farmers. In that sense, the project is testing multiple methods of data sharing including farmers' field schools (FFS), using village speakers, WhatsApp, e-mail and so forth.

One of the main transversal capacities of SAMIS is to produce information systems that benefit multiple sectors within agriculture and agro-environmental policy and decision-making processes. This is based on continued collaboration among the different project partners and other development partners working on similar areas.

16. The main executing partners of the project are the DMH of MONRE and DALaM of the MAF. The Project Steering Committee (PSC) includes MONRE (DMH) and MAF (DALaM and NAFRI) and other relevant government agencies and institutions. FAO is a de facto member as the executing GEF agency and the PSC is in theory responsible for major decisions on project coordination and administration. However, no action has been so far taken about the concerns raised by the project in the context of lack of management capacities (mentioned as barriers and challenges).

17. A Project Management Unit (PMU) comprises the Project Coordinator (international), a Knowledge Management and Advocacy Expert who facilitates and supports action on Component 3, and one Finance and Operations Assistant who handle the administrative elements of the project. Two component management units have been established but, as far as the PMU is concerned, they have been of limited use as collaboration was initially well established by the technical team at the local level, and later at the policy-maker level (minister, vice-minister). The government (MONRE/DMH and MAF/DALaM) has provided office space and administrative support to the project components. In addition, DMH staff working in the project are located in the rehabilitated Climate and Agro-Meteorology Unit, and DALaM staff are working in the rehabilitated GIS unit.

18. The key project framework details are provided in Annex 1.

Links to related policies

19. The project links to the policies and strategies mentioned in the Project Document. In addition, the project is in line with the recent Law on Meteorology and Hydrology (2017), and Climate Change Decree (2019). Finally, the project accords with the GCF Strategy for Investment on the Agricultural Sector (2017) and National Green Growth Strategy (2019).

[13] Available at https://www.facebook.com/samisdmh

20. The project is in line with the FAO Country Programming Framework, FAO regional priorities and initiatives, FAO strategic objectives, GEF priorities and the Sustainable Development Goals. The project, through co-financing with the International Center for Tropical Agriculture (CIAT), is working to refine the objectives of the National Determined Contribution for Adaptation.

Project stakeholders and their roles

21. Key partners and stakeholders involved in the project include the national implementing agencies, the international collaborating and co-financing entities, collaborators and partners, and local groups. Beneficiaries of the project are the general public, government officials and local beneficiaries. A brief outline of the role each plays in the project and the MTR manager's and PMU's views on why they should be included in the MTR is presented in Annex 2.

Theory of Change

22. The SAMIS Theory of Change (ToC) was not available in the project document, but a draft has been designed for MTR purposes (Figure 2) and will be reviewed by the MTR team and then discussed and validated with the Project team, PTF and key stakeholders during the MTR exercise. This draft has been designed in the context of the preparation of the SAMIS sustainability strategy. Figure 3 synthesizes the project concept, i.e. SAMIS increasing decision-making and planning capacity for the agriculture sector at national and decentralized levels in Lao PDR. Its objective is to enhance capacities to gather, process, analyse and share climatic and geospatial information so they can be applied to planning and decision-making. The concept relates to two levels of decision-making. At the small scale (Figure 3, left), the project is building infrastructure and comprehensive agroclimatic monitoring and information capacity focused on boosting sustainable production by optimizing farmers' and smallholders' resilience to climate change. Farmers will therefore be able to make informed judgements about the most appropriate technologies and approaches when confronted by climate vagaries. At the national level (Figure 3, right), future provision of crop distribution and productivity as well as the socio-economic acceptability of farming and cropping systems that will result due to the impact of climate change are indicated.

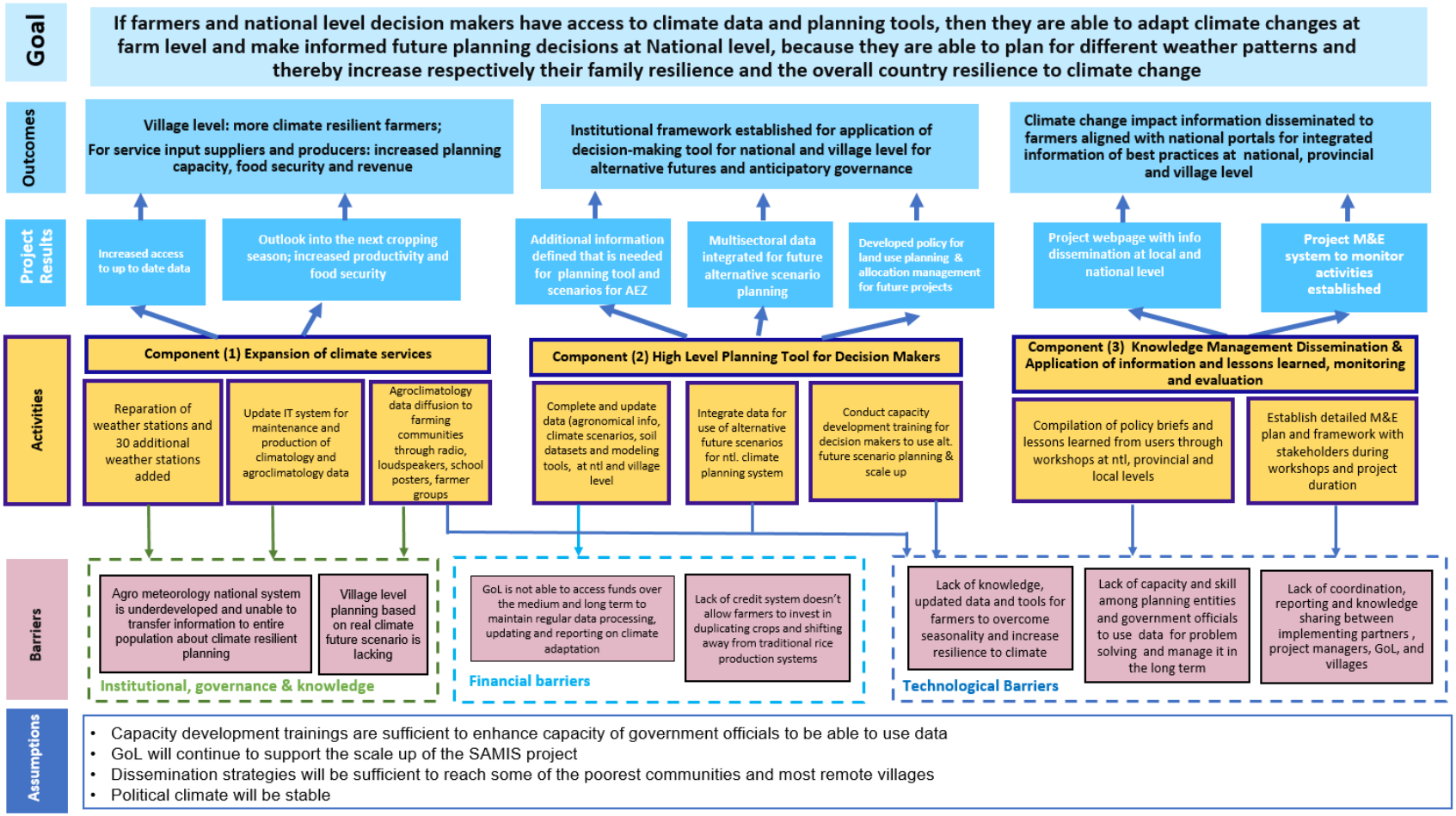

Figure 3. The SAMIS Theory of Change

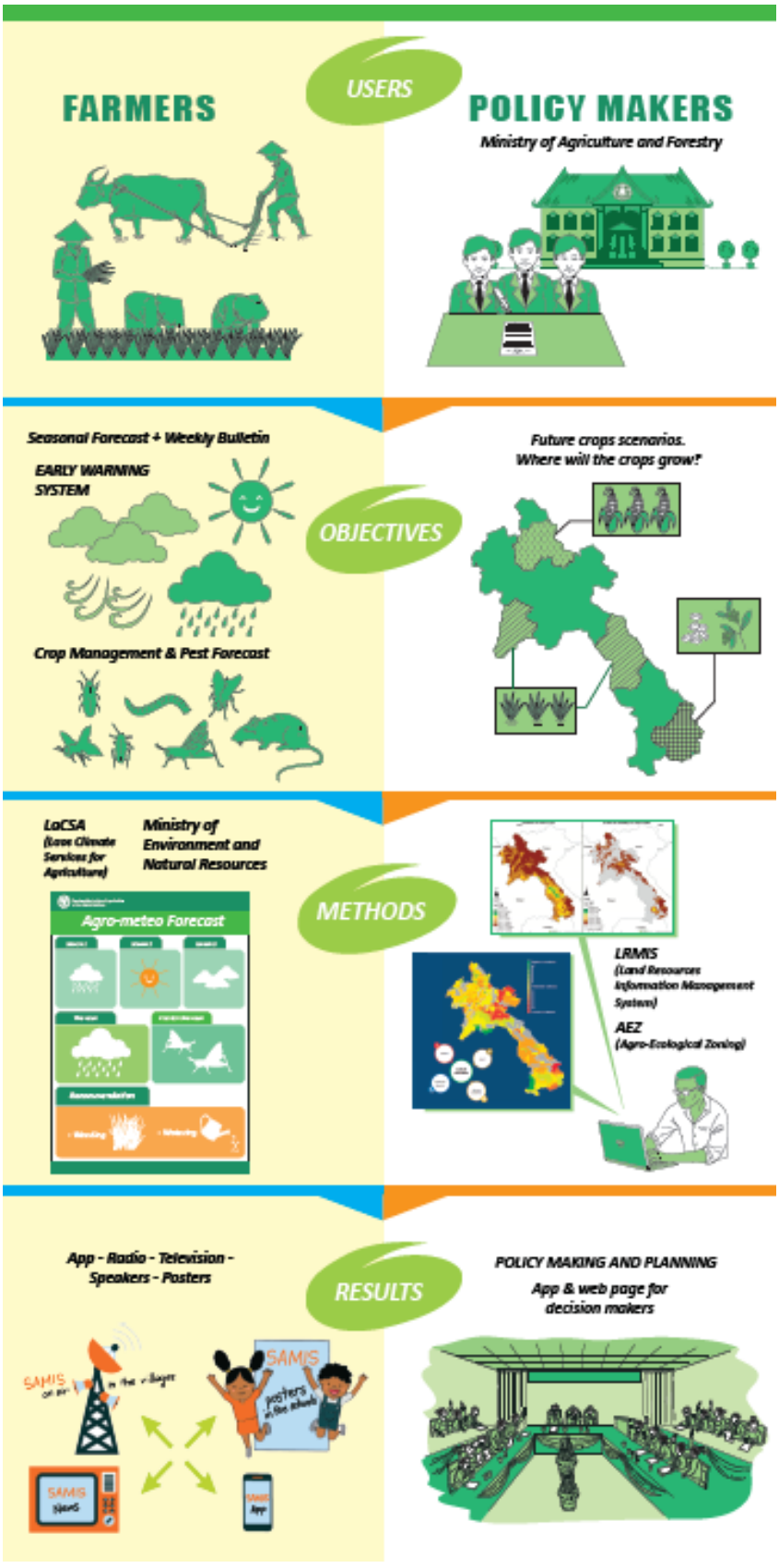

Figure 4. The SAMIS concept (users, objectives, methods, results)

Implementation progress and main challenges faced to date

23. The status of project activities by December 2020 is given below.

Main progress to date

Component 1. Strengthening agroclimatic monitoring, analysis, communication and use of data and information for decision-making in agriculture and food security

- The civil work and installation of the 15 agrometeorological stations have been completed. Installation of the automatic stations has been finalized;
- Policy preparation for standard operating procedures is underway;
- The climate indicators database has been developed and the LaCSA pilot system is online;
- Weekly and monthly bulletins have been produced and distributed through WhatsApp, e-mail and Facebook since May 19; and
- The training needs' assessment for component 1 finalized and staff training is ongoing (> 100% target reached).

Component 2. Strengthening institutional and technical capacity for monitoring and analysis of agricultural production systems and development of LRIMS and AEZ

- Design, development and presentation of the LRIMS system demonstration have been completed; the AEZ software is under development;
- Multiple spatial and tabular datasets have been made available to the project and for uploading on the LRIMS. DALaM has received permission to use and publish data online through the data sharing agreement system;
- The preparation of soil maps is ongoing, the crop land cover map has been completed, current climate map preparation is nearing completion, future climate scenario maps and AEZ preparation are being initiated and Socio-Agricultural Vulnerability Assessment (SAVA) activity training has started. Land Utilization Type (LUT) data collection work has progressed and crop calendar, crop input and output data have been collected for all the 177 districts of the country. All annual district-level agricultural statistical data from 2005 to 2018 have been digitized; and
- The training needs' assessment for component 1 finalized and staff training is ongoing (> 100% target reached).

Component 3. Knowledge management, dissemination and application of information at the local level including integrating lessons learned into planning and in operating a project M&E activity

- The M&E plan has been completed and the knowledge management strategy is under revision. The project has made presentations at multiple local, national and international events, including conferences, students' fairs, science fairs, IT fairs and so forth. Numerous leaflets, videos and books have been issued.
- 10 FFS 6 villages in Savannakhet and 4 villages in LuangNamtha.
- 30 Loudspeaker sets for awareness raising activity distributed to 30 villages (including 39 tablets and nine projectors to 30 villages, two 2PALaM and nine DAFO offices).

Challenges to date

The main challenges that have affected the project have included:

The project operation system. The project is demanding in terms of procurement of expendable and non-expendable equipment as well as the number of consultants hired and Letter of Agreement (LoA) contracts to be signed.

The slow IT approvals' process in FAO's Information Technology Division (CIO). Although the CIO inputs are extremely valuable in terms of IT harmonization, system assessment, copyright issues, permissions and procedures, the approval processes are time-consuming. For example, the first IT approval process for the SAMIS project took two months for unclear reasons. As this issue can only be solved at the FAO corporate level, the project is planning to present approval requests to the CIO with at least two months' notice to avoid delays.

Readdressing the project targets and budget. An extraordinary PSC meeting was convened mainly because project pilot areas need to be expanded and the details of activities in Component 2 need improvement. The activities and representative areas proposed in the project document were not representative of the variety of country conditions. The lack of good planning in the PPG phase has posed constant difficulties. For example, the long appropriation required for Component 2 was because DALaM, the main partner, was not sufficiently informed about SAMIS activities during the PPG phase and its role was deeply underestimated. The situation is now resolved.

SAMIS ambition. The project was ambitious in terms of what it hoped to achieve with its modelling activities. There may have been an expectation that a significant portion of activities could be outsourced (i.e., IIASA for the AEZ, IT companies for the LRMIS, etc.). As noted above, the delivery model adopted has shifted demands for expertise to the regional and local levels. Every new step of the modelling process is time consuming but ensure strong national buy-in.

Institutional instability. Due to DMH institutional instability a reconciliation and revision of the staff and institutional training needs' assessment methodology were required to ensure the sustainability of project results. In addition, the lack of managerial capacity has affected the project. The DMH has not supported the planning and technical activities during the first part the project. However, over the time the MONRE management has been focused on improving the situation, and the DMH management has been reinforced strongly at ministerial level. In addition, FAO has started developing a project sustainability strategy and a scaling up phase. As of today, the activities undertaken would not be sustainable without a substantial follow up phases, but roles and responsibilities are clear and the sustainability of the IT system is likely to be high.

Changes in the FAO consultants' recruitment processes have delayed the hiring of key experts. This has resulted in further delays because additional procurement could not proceed until consultants' inputs had been received. In addition, multiple consultants had resigned by the beginning of 2019.

Headquarters team support. The project is supported by a technical team at FAO headquarters. So far, the team has been somewhat slow in responding to requests for technical assistance or undertaking necessary administrative procedures. This could affect future implementation and the project's innovation capacity. In fact, DALaM has strong technical capacity and is proceeding without support from FAO headquarters in some instances. More recently, the project has hired one consultant who is positioned at headquarters. This has solved all collaboration problems, but unfortunately headquarters demonstrates that at the moment it lacks support capacity in the long term. The support and co-financing by the FAO regional office both involving the HQ and ensuring new expertise for software production for national level modelling.

Lack of coordination between Component 1 and 2 activities. This issue has been present at inception and is linked to the lack of managerial capacity of the DMH. The lack of interest by DMH management was palpable and should be tackled by FAO and by MONRE to maintain results over time and increase project sustainability. In the recent past, common activities have been organized between the DMH and DALaM to consolidate collaboration at least at the technical level. Also, common missions have been conducted. The role of DALaM and CIAT (co-financing project) in effectively maintaining relationship between entities and enabling the project to act in unison has been crucial for progress under Component 2.

Expansion of the number of involved institutions. The project team has struggled to pursue a contract and further cooperation with NAFRI. Thanks to CIAT co-financing activities and to the intervention of MAF's vice-minister, the issue is now solved.

Issues with the formal project M&E system at the MONRE level. An M&E LoA was suggested by the DMH and established within MONRE for the realization of a project M&E system. However, this is not being used for monitoring by MONRE and no results have been delivered. As such, reporting continues to be undertaken by the project.

Co-financing

The expected co-financing is USD 16 130 000 of which USD 16 136 254 had materialized by the end of year 3 (June 2020). The details are presented in Table 5. It is evident that Component 1 relies mostly on co-financing to continue operating.

Table 5. Co-financing received by the end of the third year of the project

Sources of Co-financing[1]	Name of Co-financer	Type of Co-financing[2]	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at 30 June 2018- Highly recommended but not mandatory	Actual Amount Materialized at Midterm or closure (confirmed by the review/evaluation team) Mandatory for projects that has completed an MTR or closure	Actual Amount Materialized at 30 June 2020 for year 3- Highly recommended but not mandatory
Bilateral Aid Agency	JICA*	In-Kind	4900000		4,900,000	321,681
Other	CIAT CGIAR De-Risk Project	In-Kind			40,000	210,000
National Government	DMH/MONRE	In-Kind	1,000,000	57,198	66,840	597,838
GEF Agency*	ADB though DMH/MONRE	Grant	5,230,000	184,440		
GEF Agency	WB through DMH/MONRE	Grant	0	21,466		
Bilateral Aid Agency	China through DMH/MONRE	Grant	0	313,653		5,460,701
Bilateral Aid Agency	South Korea DMH/MONRE	Grant	0	175,000		
GEF Agency*	WB DRM through DMH/MONRE	Loan			1,846,508	
National Government	DALAM/MAF	In-Kind			303,520	353,060
Bilateral Aid Agency	Swiss through DALAM (TABI)	In-Kind			346,850	120,000
Bilateral Aid Agency	Germany through DALAM	In-Kind			27,358	38,479
GEF Agency*	FAO RAP regular programme	In-Kind			234,000	
Bilateral Aid Agency	France through DALAM	In-Kind				50,045
Bilateral Aid Agency	South Korea through DALAM	In-Kind				20,000
GEF Agency*	FAO RAP regular programme	Grant				348,617
GEF Agency*	MAF through IFAD through FAO	In-Kind				99,000
		TOTAL		751,757	7,765,076	7,619,421

MTR purpose and scope

24. The MTR is a GEF requirement and should happen at mid-point in the project life., the present MTR is being undertaken after 44 months of the start date due to delays linked to Covid pandemic and hiring of international expert, to review project progress in achieving its results procedures, outputs and financial flows against targets, over a given period of time, to identify reasons for positive or negative variance, to suggest recommendations for corrective actions to put the project back on track if there is divergence and to identify good practices and lessons learned for future application. Given the rapidly changing policy and economic environment in the country, the MTR will also link SAMIS to the broader climate change policy priorities of the government. This exercise will also be useful for outlining the basis of the SAMIS sustainability strategy, including the GCF proposal that is being developed as a follow up.

25. The *primary intended users* of the project MTR are the PSC members, the PMU, the national project counterpart and government officials. They will gain insights for enhancement of the considerable advances realized at the national level already over the next few years. In addition, FAO technical staff at headquarters, the FAO-GEF CU and other stakeholders will benefit from the MTR findings and lessons learned At the FAO and project managerial level, the main users include the Budget Holder (BH) and designated MTR manager (RM), including the Funding Liaison Officer (FLO) and the Lead Technical Officer (LTO).

26. The main purposes of the MTR and intended users are listed below:

    a. For accountability – to respond to the information needs and interests of policy-makers and other actors with decision-making powers – the main users are the GEF and FAO management.

    b. For project/programme improvement and organizational development the MTR provides valuable information for managers or others responsible for regular project/programme operations; as such, the main users are project management, the PMU, government counterparts and the PSC.

    c. MTR coverage of the project and its development will inform neighbouring countries, the GCU and FAO staff as well as future developers and implementers with regard to progress.

Mid-term review audience

27. The primary intended users of the project evaluation will include the BH, FAO technical staff at headquarters and the Regional Office for Asia and the Pacific (FAO RAP), the donor, the PMU, the government entities that are leading the project and other partner agencies and key stakeholders. Also, the Chief Technical Advisor (CTA) and the LTO will benefit and be able to use the results to guide the final part of the project.

Scope and timeline

28. The MTR will review the results achieved since the initiation of the project in June 2017 up to December 2020. The MTR will assess key elements of the project to date across the three components of intervention outlined in section 1.1.3.

MTR objective and key questions

MTR objectives

29. The MTR will address and rate the following GEF evaluation criteria:

    A. Relevance – The extent to which the intervention's design and intended results are consistent with local, national, sub-regional and regional environmental and development priorities and policies and to GEF and FAO strategic priorities and objectives; its complementarity with existing interventions and relevance to project stakeholders and beneficiaries; its suitability to the context of the intervention over time.
    B. Effectiveness – assessment of project results to date including the overall quality of project outputs, progress towards achieving project outcomes and objectives, and a brief assessment of the likelihood of longer-term impacts resulting from the project;
    C. Efficiency – The cost-effectiveness of the project and timeliness of activities; the extent to which the intervention has achieved value for resources by converting inputs (funds personnel, expertise, equipment etc) into results in the timeliest and least costly way compared with alternatives.

D. Sustainability of project outcomes, including assessment of the overall likelihood of risks to sustainability from financial risk, socio-political risk, institutional risk, environmental risk as well as separate consideration of replicability and catalytic roles; Also, linking broader climate policy environment to the results and activities of SAMIS;
E. Factors affecting the performance and delivery of the project results, focused on the quality of project design, oversight, execution and management, including financial management and materialization of co-financing, partnerships and stakeholder engagement, communications and knowledge management and M&E, with specific attention on M&E design and M&E plan implementation; and
F. Cross-cutting dimensions, including gender and equity concerns, environmental and social safeguards.

MTR questions

30. The review will be guided by the following questions:

1. Relevance (rating required)	Are the project outcomes congruent with the GEF focal areas/operational programme strategies, country priorities, FAO Country Programming Framework and beneficiaries' needs? Has there been any change in the relevance of the project since its design, such as new national policies, plans or programmes that affect the relevance of the project objectives and goals? If so, are there any changes that need to be made to the project to make it more relevant?
2. Effectiveness Achievement of project results (rating required)	(Delivery of results) To what extent has the project delivered on its outputs, outcomes and objectives, and what, if any, wider results have the project had at regional and global levels to date? Were there any unintended results? Is there any evidence of environmental stress reduction and environmental status change (reflecting Global Environmental Benefits), or any change in policy/legal/regulatory framework? To what extent can the attainment of results be attributed to the GEF-funded component? (Likelihood of impact) Are there any barriers or other risks that may prevent future progress towards and the eventual achievement of the project's intended longer-term impacts, and what can be done to improve the likely achievement of positive impacts from the project? To what extent may the progress towards long-term impact be attributed to the project?
3. Efficiency (rating required)	To what extent has FAO fulfilled its role as an implementing agency with regard to identifying the project, preparing the concept, forecasting, preparation, approval and launch, monitoring and supervision? To what extent has the project been implemented efficiently and cost-effectively, and management has been able to adapt to any changing conditions to improve the efficiency of project implementation? To what extent has the project built on existing agreements, initiatives, data sources, synergies, complementarities with other projects and partnerships, etc., and avoided duplication of similar activities of other groups? Is the project cost-effective? How does the project cost/time versus output/outcomes equation compare to that of similar projects?
4. Sustainability (rating required)	(Sustainability) What is the likelihood that the project results will continue to be useful or will remain after the end of the project? What are the key risks that may affect the sustainability of the project results and benefits (consider financial, socio-economic, institutional and governance, and environmental issues)? (Replication and catalysis) What project results, lessons and experiences generated by the project have been replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources) or are likely to be in the near future?

5. Factors affecting progress (Rating required)	(Project design) Is the project design appropriate for delivering the expected outcomes? Is the project's mandate coherent and clear? To what extent are the project's objectives and components, clear, practical and feasible within the time frame? (Project execution and management) To what extent did the execution agency effectively discharge its role and responsibilities related to the management and administration of the project? What have been the main challenges in relation to the management and administration of the project? How well have risks been identified and managed? What changes are needed to improve delivery in the second half of the project? (Financial management and co-financing) What have been the challenges related to the financial management of the project? To what extent has the pledged co-financing been delivered, and has any additional co-financing been provided since implementation began? How has any shortfall in co-financing or materialization of greater than expected co-financing affected project results? (Project oversight, implementation role) To what extent has FAO delivered on project identification, concept preparation, appraisal, preparation, approval and start-up, oversight and supervision? (Partnerships and stakeholder engagement) Have other actors, such as civil society organizations, indigenous populations or the private sector, been sufficiently involved in project design and implementation, and what has been the effect of their involvement/non-involvement on the project results? What are the strengths and challenges of the project's partnerships? (Communication and knowledge management) How effective has the project been in communicating and promoting its key messages and results to partners, stakeholders and a general audience? How can this be improved? (M&E design) Is the M&E design plan practical and sufficient? (M&E implementation) Does the M&E system operate according to the M&E plan? Has information been gathered in a systematic manner, using appropriate methodologies? To what extent has information generated by the M&E system during project implementation been used to adapt and improve project planning and execution, achievement of outcomes and ensure sustainability? How can the M&E system be improved?
6. Cross-cutting dimensions	**(Gender and minority groups)** To what extent were gender considerations taken into account in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender equitable participation and benefits? (**Environmental and social safeguards**) To what extent were environmental and social concerns taken into consideration in the design and implementation of the project?

Methodology

31. The MTR will be conducted in accordance with the guidance, rules and procedures established by FAO and the GEF. It should adhere to the United Nations Evaluation Group Norms & Standards,[14] GEF evaluation policy and be in line with FAO's GCU manual and its methodological guidelines and practices. It will be in line with the UN principles of independence, impartiality, transparency, disclosure, ethics, partnership, competencies/capacities, credibility and utility.

[14] http://www.uneval.org/document/detail/21

32. The MTR will adopt a consultative and transparent approach with internal and external stakeholders throughout the process, and follow a participatory process ensuring appropriate gender representation to ensure effective inputs by key project implementing partners and stakeholders. The MTR will be conducted by an independent suitably qualified professional team (the MTR Team), the members of which will have had no prior interaction with the project. The MTR Team will undertake field visits to interview stakeholders to ensure their views on the contribution of the project's progress towards its stated outputs and or outcomes are captured.

33. Desk reviews and consultative interviews with the main government technical and high-level officials. In addition, for the pilot activities, consultative interviews with farmer beneficiaries, indigenous peoples' leaders, local government units, community officials, municipal and provincial agriculturists and extension workers will be held. Heads and representatives of partner agencies and project staff at FAO Lao PDR will constitute an important aspect of the review, primarily in relation to questions of efficiency. Evidence gathered will be triangulated to ensure its validation underpins analysis and the drawing of conclusions and recommendations. All beneficiaries could in principle be interviewed, but since this is not possible the MTR team will need to prioritize. An independent local interpreter with knowledge of the dialect of sites to be visited will be available for the MTR team.

34. The MTR will make use of the following methods and tools:

    a. Review of project reports and other relevant background documents;

    b. Semi-structured interviews with representatives from key stakeholders and partners, supported by checklists and/or interview protocols (most of the interviews will be done virtually but the national consultant should be able to visit the local partners and beneficiaries) and

    c. Direct observation of project activities at the central level and during field visits in the selected project target areas through field visits.

The MTR Inception Report, to be produced by the MTR Team, will provide additional details on the methodology to be applied for the review.

Roles and responsibilities

35. The **Budget Holder** (BH) is accountable for the MTR process and report and is responsible for the initiation, management and finalization of the MTR process. The BH has designated an **MTR manager** (RM) to act on its behalf.

36. With the assistance of the project's **Lead Technical Officer (LTO)**, the **GEF Coordination Unit (GCU),** the **Funding Liaison Officer (FLO)** and the **MTR focal point,** with guidance from this document, the BH/RM is responsible for the drafting and finalization of the TOR, including providing input to the description of the background and context section. The TOR were based on document review ct. The BH/RM is also responsible for the identification, in consultation with the GCU and the LTO, and recruitment of the MTR Team members. In collaboration with the GCU, the BH/RM also briefs the MTR Team on the MTR methodology and process, and takes the lead in organizing the MTR missions. The BH/RM along with the GCU's MTR focal point reviews the draft and final MTR reports for quality assurance purposes in terms of presentation, compliance with the TOR and timely delivery, quality, clarity and soundness of evidence provided and the analysis supporting conclusions and recommendations in the MTR report. The BH is also responsible for leading and coordinating the preparation of the FAO Management Response and the associated Follow-up Report to the MTR, supported in this task by the LTO and other members of the Project Task Force (PTF). Further details on the Management Response are provided in the MTR Guide.

37. The **GCU** has appointed a focal point to provide technical backstopping through the MTR process, including guidance and punctual support to the BH/RM and MTR Team on technical issues related to the GEF and the MTR. This can also include support in identifying potential MTR team members,[15] reviewing CVs and participating in the selection of consultants, and briefing the MTR team on the MTR process, relevant methodology and tools. The GCU also follows up with the BH to ensure the timely preparation of the Management Response.

[15] The BH/RM should be responsible for the administrative procedures related to the recruitment of the MTR consultants.

38. The **MTR Team** is responsible for further developing and applying the MTR methodology, producing a brief MTR inception report, conducting the MTR, producing the full MTR report, which may not reflect the views of the government or of FAO and a summary of 2-3 pages. All team members will participate in briefing and debriefing meetings, discussions, field visits (national consultant), and will contribute to the MTR with written inputs to both the draft and final versions of the MTR report. The MTR Team Leader guides and coordinates the MTR Team members in their specific work, and takes the lead on the preparation of the draft and the final report, consolidating the inputs from the team members with his/her own, and has overall responsibility for delivering the MTR report. The MTR Team will agree with the GCU MTR focal point on the outline of the report early in the MTR process, based on the template provided in Annex 12 of the MTR Guide. The MTR Team is free to expand the scope, criteria, questions and issues listed above, as well as develop its own MTR tools and framework, within the time and resources available and based on discussions with the BH/RM, and the PTF where necessary. Although an MTR report is not subject to technical clearance by FAO, the BH/RM and GCU do provide quality assurance of all MTR reports.

39. PTF members, including the BH, are required to participate in meetings with the MTR team, make all necessary information and documentation available and comment on the terms of reference and MTR report. However, their level of involvement will depend on team members' individual roles and level of participation in the project.

40. The **GEF Operational Focal Point (OFP)**. The GEF Evaluation Policy (2019) requires that the GEF agencies involve the relevant GEF OFP in any GEF project or programme evaluation process. The FAO-GEF project BH should inform the project's GEF OFP of the MTR process, and the MTR/MTE team is encouraged to consult the GEF OFP during the review process, and keep the OFP informed of progress, including sending him/her a copy of the draft and final MTR report.

MTR team composition and profile

41. The MTR will be carried out by two international consultants and one national consultant who together will comprise the MTR Team. Given the project focus on decision making for present and future climate change scenarios, it has been necessary to expand the technical capacities of the team beyond standard composition. The team will include a Team Leader with expertise in evaluation of FAO–GEF projects, climate services as well as agriculture and climate change aspects in Lao PDR. The Modelling expert will be able to assess the scientific and technical validity of the project climate modelling activities. Given the need to work remotely, the team include members who are familiar with the national political and agro-environmental conditions. In addition, the national consultant is experienced with GEF mid-term review process.

42. The MTR team should have the following skills and competencies:
    - Demonstrated experience in project management, with technical understanding of biodiversity and agro-ecosystem management;
    - Demonstrated experience in information and data management, or data system knowledge management at the national level;
    - Demonstrated experience in weather, climate and agro-climate modelling at short and long term temporal scales;
    - Demonstrated experience in project and programme evaluation, with previous experience in the review of GEF projects will be considered an asset;
    - A university degree and a minimum of 15 years of relevant professional experience; and
    - Fluency in English.

43. The MTR Team members must be independent from both the policy-making process and the delivery and management of assistance, and ideally gender balances because there is a high number of women participating in the activities. Therefore, applications will not be considered from evaluators who have had any direct involvement with the design or implementation of the project. Any previous association with the project, the executing partners, FAO–Lao PDR or other partners/stakeholders must be disclosed in the application.

44. Minimum requirements for the position of Lead Consultant Evaluation Specialist:
    - Advanced degree in the field of agriculture and climate change in connection with modelling and IT tool development;
    - Proven international experience (with actual experience in Asia, specifically Lao PDR);
    - Proven mid-term review and evaluation experience in developing or least-developed countries in the evaluation or review of projects related to climate change and climate resilience of agricultural systems

will be considered an advantage;
- Recent experience with results-based management evaluation methodologies;
- Experience applying SMART targets and reconstructing or validating baseline scenarios and in elaborating and/or reconstructing a project's Theory of Change;
- Competence in adaptive management, as applied to climate change adaptation; and
- Experience in gender-sensitive evaluation and analysis.

45. Minimum requirements for the position of Modelling Expert:
    - Advanced degree in the field of phisics, climate change, computation, information systems or closely related fields ;
    - Competence in climate risk, agro-climate applications, and development of real time agro-advisories as applied to climate change adaptation in agriculture; and
    - Proven international experience (with actual experience in Asia, specifically Lao PDR).

46. Given the Covid pandemic, the team will not be able to travel to Lao PDR. However, given the technical specifications of the project, it has not been possible to identify a team with the above characteristic in-country, So the two international consultants will work remotely with the support of a well experienced national consultant.

47. Minimum requirements for the position of National Evaluation Expert:
    - Advanced degree in natural resource management, forestry, rural development, watershed management or environmental science and relevant field experience;
    - Experience of evaluations or project reviews is essential, and experience related to evaluation of agriculture projects will be considered an advantage;
    - Significant computer and IT skills, potentially having been exposed to activities related to modelling or data dissemination ;
    - Excellent communication skills (proficiency in English and Lao); and
    - Knowledge of work being done by relevant national institutions such as MONRE and MAF, and international agencies such as FAO, including capacity development.

MTR products (deliverables)

48. This section describes the key MTR products the MTR Team will be accountable for producing. At the minimum, these products should include:

    a. The MTR inception report. The MTR team should prepare an inception report before beginning the fully-fledged data collection exercise. The inception report details the GEF evaluation criteria/questions that the MTR seeks to answer (in the form of an MTR matrix), data sources and data collection methods, analysis tools or methods appropriate for each data source and data collection method, and the standard or measure by which each question will be evaluated. The inception report should include a proposed schedule of tasks, activities and deliverables, designating a team member with the lead responsibility for each task or product (as appropriate). The Inception report must receive quality assurance and approval from the GCU prior to the interviews.

    b. A draft MTR report. The review report will set out the evidence collected by the MTR team that responds to the review issues, questions and criteria listed in the TOR. It will include an executive summary. Supporting data and analysis should be annexed to the report when considered important to complement the main report. The project team, BH/RM, GCU and key stakeholders in the MTR should review the draft MTR report to ensure accuracy and that it meets the required quality criteria through two rounds of review: i) the first review (approximately ten days) by the project team and FAO (BH, LTO, FLO and GCU MTR focal point), followed by ii) review (additional ten days, approximately) by a government counterpart, key external partners and stakeholders. Before the submission of the MTR Report, the RMT Team will organize a briefing session with the main stakeholders to discuss the main findings.

    c. The final MTR report. This should include an executive summary and the draft report written in English. The executive summary is presented in two versions – Lao and English. Supporting data and analysis should be annexed to the report when considered important to complementing the main report. The executive summary should include the following paragraphs, in order to update the GEF portal: i) information on progress, challenges and outcomes on stakeholder engagement; ii) information on progress on gender-responsive measures; iii) information on knowledge activities/products.

d. **A two-page summary** of key findings, lessons, recommendations and messages from the MTR report, produced by the RM and PMU, in consultation with the MTR team, that can be disseminated to the wider public for general information on the project's results and performance to date. This can be posted as a briefing paper on the project's website but more creative and innovative multimedia approaches, such as video, photos, sound recordings, social media, short stories (for suitable cases or country studies), infographics or even comic or cartoon format, may be more effective depending on the circumstances.

e. Participation in knowledge-sharing events, e.g., stakeholder debriefings, as relevant.

MTR time frame

49. This section lists the due date or time frame and describes all tasks and deliverables (e.g. briefings, draft report, final report), as well as associated roles and responsibilities of the key MTR individuals and groups.

Task	When (recommended)	Responsibility
TOR preparation	August 2020	BH/RM, LTO, FLO and GCU MTR focal point
TOR finalization	February 2020	BH/RM
Team identification	August/September 2020	BH/RM, LTO, FLO and GCU MTR focal point
Team recruitment	February 2021	BH with input from the GCU for international consultants
Travel arrangements and organization of the agenda/travel itinerary in the country for the field mission	February 2021	BH/RM, Project Team and MTR Team
Reading background documentation	February 2021	MTR Team for preparation of the MTR
Briefing of the MTR Team	February September 2021	BH/RM, when necessary supported by the PTF and GCU
MTR inception report	February 2021	MTR Team
Clearance of the MTR inception report	March 2021	BH/RM and the GCU MTR focal point
MTR ongoing (no travel) – confirmation of interviews, meetings and visits	October February – March 2021	MTR Team with support of the PMU
Production of first draft for circulation	March 2021	MTR team
Circulation and review of first (zero) draft	March2021	BH/RM, PMU, GCU MTR focal point, LTO for comments and quality control (organized by the BH/RM)
Production of second draft	April 2021	MTR Team
Circulation of second draft	End April 2021	BH/RM and key external stakeholders (organized by the BH/RM)
Production of final report	May 2021	MTR Team
Management Response (MR)	May 2021	BH
Follow-up report in the project progress report or project inception report	June 2021 project progress report	BH

APPENDIX 2: PROJECT LOG-FRAME / RESULTS FRAMEWORK

Given below is the results framework/ Log-frame of the project as per the 'Project Document'. Some minor changes were made in the results framework at the time of project inception. The changes made at the time of inception are highlighted in the following Tables. A couple of Indicators from AMAT were introduced in the 'results framework' at the time of 'project inception'. Such AMAT indicators are also included in the Tables below and are *marked in italics*.

Component 1: Strengthening agro-climatic monitoring, analysis, communication and use of data and information for decision making in agriculture and food security.

Expected Outputs	Indicators[16]	Baseline	Annual milestones				End of the project target
			Year 1	Year 2	Year 3	Year 4	
Outcome 1.1: Improved agro-meteorological monitoring, communication and analysis facilities established at national and provincial level	A fully renewed CAgMD within DMH functioning with clear roles and responsibility *AMAT Indicator 2.1.1 Relevant threat information disseminated to stakeholders on a timely basis (Yes/No)*	Very old systems and no climate and agromet services to meet the needs of farmers *0.No*	Preparation and planning for establishment of systems	Delivery of facilities and instruments	Capacity development and testing	Fully functional unit *2.Yes*	A fully renewed CAgMD connected with all AWS and database *2.Yes*
Output 1.1.1: Agro-meteorological station networks improved/ re-habilitated with both conventional and automatic weather stations to increase coverage in the major agricultural production areas	Number of new automated agro-meteorological stations and rehabilitated manual stations *Indicator 2.1.2.1 Type and no. of monitoring systems in place (Type and No.)*	0	-	15 new 15 rehab *15 new* *15 rehab*	-	-	30 systems (15 new 15 rehab) (a total of 51 stations overall in combination with other baseline projects) *30 local systems* (15 new 15 rehab)
Output 1.1.2: Improved data coding and communication facilities upgraded to enhance connectivity of national Department of Meteorology and Hydrology (DMH) with provincial level sub-units in major agricultural products areas	Number of AWS stations connected with Early Warning System Unit Formal collaboration with Ministry of Post and Tele-communications	All manual stations and no real-time data transfer and use for weather forecasts No formal collaboration with the Ministry of telecom and private communication service providers	- -	15 2	- -	- -	All 15 (total 51) stations connected to EWS center and receive real-time data At least 2 MOUs signed by DMH to facilitate communications
Output 1.1.3: Laboratory for agro-meteorological analysis, instrument calibration and geospatial climate data access, monitoring, processing facilities established and functioned at DMH, Vientiane.	Rehabilitated facility (building) for CAgMD with laboratory for calibration tools in working condition, spare parts for sensor maintenance A climate data analysis access	Very old building and no instrumentation or calibration laboratory in DMH 0	1 -	- 15 local agromet stations and	- 5 nodes for the data entry	- -	New office facility running within DMH (Climate and Agro-meteorological Division) and availability of calibration tools and procedures for all essential sensors

[16] . Some modifications in the log-frame were done at the time of Project Inception, these are highlighted. At the time of project inception some of the indicators were added from AMAT, these are marked in italics.

Expected Outputs	Indicators[16]	Baseline	Annual milestones				End of the project target
			Year 1	Year 2	Year 3	Year 4	
	and analysis facility with necessary hardware and software	(only 1 pc available with the climate and agro-meteorological division for storing all data, 6 desktops for data entry)		10 CAgMD work location in use	personnel and connection to EWS		High performance computing systems for data archival and analysis established with at least 5 nodes for the data entry personnel and connected to EWS and also equipped to receive data from AWS
			-	3 new products	-	-	
	Number of near-real time NWP products accessible	4 weather forecast system, no agro-meteo forecast	-	3	-	-	3 new (7 total) 1 seasonal, 1 month (including frost), and 1 decadal forecast
	AMAT Indicator 2.1.2.1 Type and No. of monitoring systems in place	4	-	-	1	-	*3 new (7 total) 1 seasonal, 1 month (including frost), and 1 decadal forecast*
	Comprehensive climate-atlas prepared using available data	No climate atlas available					A climate atlas available
Outcome 1.2: Institutional and technical capacity strengthened to facilitate data sharing, archiving, analysis and interpretation of agro-meteorological information products to users at all levels	Improved and new climate and agromet products available with users	No system in place to communicate and receive feedback from users	Roles and responsibilities defined & staff training (Phase 1)	Staff training (Phase 2)	Staff training (Phase 2)	Staff training (Phase 2)	Endorsed SOPs, guidebooks (at least 7)
	AMAT Indicator 2.2.1. No. of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability (*Number*) [to be summed up with outcomes *2.2 and 3.1]*	*0*	-	-	*4*	-	*1 Agriculture 1 Environment 1 Meteorology 1 Telecommunication (Staff trained and capacity improved*)
Output 1.2.1: Standard Operating Procedures **(**SOPs**)** for climatology and agro-meteorology division of DMH and guidelines for installation of instruments and observation, data coding and maintenance developed and staff trained **(**at least 65 technical staff trained**)**	Standard Operating Procedure for CAgMD	No SOP for CAgMD	-	1	-	-	A SOP for Climatology and Agrometeorology Division endorsed and approved by DMH
	Number of guidelines	4 existing guidelines (agronomic data collection, synoptic observation manual, weather observation data input, and weather observation data handbook)	-	1 new 1 updated	1 new 2 updated	1 new 1 updated	At least 4 guidelines updated and 3 new guidelines (seasonal forecast, monthly forecast, and crop season decadal agrometeo bulletins) developed and printed
	Number of staff trained	No regular trainings within DMH, some project training	-	20	45	-	At least 65 technical staff

Expected Outputs	Indicators[16]	Baseline	Annual milestones				End of the project target
			Year 1	Year 2	Year 3	Year 4	
		on hydrometeo or meteorology but not in agrometeo					trained (at least 25 women)
	AMAT Indicator 2.2.1.1 No. of staff trained on technical adaptation themes (disaggregated by gender) [to be summed up with outcomes *2.2 and 3.1]*		-	*20*	*45*	-	*65*
Output 1.2.2: Development and delivery of training packages relevant to climatology and agrometeorology, communication and application of climate and agrometeorological information by users	Training need assessment		1	-	-	-	1 needs assessment undertaken
	Number of trainings organized and integrated into DMH's regular activities	No formal training programmes, 1 university Msc in agro-meteo ongoing, but no DMH staff participating	1	3	2	2	At least 4 formal training programmes organized
	Number of staff trained in each of the training programmes	About 50 staff trained through national and international sponsored events every year	20	40	20	20	At least 100 technical staff out of 205 trained (at least 30/40% women)
	Number of training manuals prepared and printed	No Lao specific training manuals available	0	3	1	0	At least 4 Lao specific training manuals
	Number of print and media staff trained	No training to print and media staff	-	25	25	-	At least 50 print and media reporters trained
	Number of staff at inter-ministerial level trained	No training on use of climate information for policy integration No of staff trained	-	25	25	-	At least 50 national personnel trained
	Number of MAF staff trained on forecast application	No application trainings	-	3	3	2	8 staff trained
	For the entire output 1.1.2. : AMAT Indicator 2.2.1.1 No. of staff trained on technical adaptation themes (disaggregated by gender) [to be summed up with outcomes *2.2 and 3.1]*		-	*80*	*80*	*40*	*In total, at least 200 MAF staff trained on forecast application (50 ToT at national, 150 provincial, and district; at least 80 women*)

Component 2: Strengthening institutional and technical capacity for monitoring and analysis of Agriculture production systems and development of Land Resources Information Management Systems (LRIMS) and Agro-Ecological Zoning (AEZ)

Expected Outputs	Indicators	Baseline	Annual milestones				End project target
			Year 1	Year 2	Year 3	Year 4	
Outcome 2.1: Integrated Land Resources Information Management System (LRIMS) and High resolution Agro-Ecological Zones (AEZ) and agriculture production Systems At Risk (SAR) developed based on agricultural resources (climate, land, soil, water and crops)	Number of information systems available *Indicator 2.1.1 Relevant threat information disseminated to stakeholders on a timely basis (Yes/No)* *Indicator 3.2.1 Policy environment and regulatory framework for adaptation-related technology transfer established or strengthened (Score)*	Several scattered information system based on partners activities, no dedicated information systems for the comprehensive structure of the MAF and for agriculture MAF ICT Strategy in place *0 = No* *1 = No policy*	Assessment and scoping	Design and development phase	Implementation phase	Evaluation phase *1 = Yes* *2= Discussed and formally proposed*	At least 2 new systems developed and delivered *1 = Yes* *2= Discussed and formally proposed*
Output 2.1.1: Land Resources Information Management System **(**LRIMS**)** and customized applications designed, developed, tested and delivered with computing facilities for monitoring and assessment of land suitability	Number of dedicated systems available for LRIMS Number of customized application software delivered	No dedicated system available with DALAM No customized application software available	Feasibility -	Data collection and synthesis -	Analysis and development At least 2 customized software	Evaluation of LRIMS system Testing of the software packages	LRIMS for Lao PDR available At least 2 customized applications / software delivered
Output 2.1.2: Available data and information on land, soil, water, crops and socio-economics	Number of categories of data available in the database National AEZ developed and	Data available in paper form and fragmented within MAF	Digitization of data sets (*if required*) 0 (model parameterizatio	Integration of data into the information systems 0 (analysis)	Testing and evaluative 1	Refining 0 (evaluation)	At least 5 major categories of data integrated into the database

Expected Outputs	Indicators	Baseline	Annual milestones				End project target
			Year 1	Year 2	Year 3	Year 4	
synthesized and National-Agro-Ecological Zoning **(**NAEZ**)** and Information Portal developed, tested and delivered	available for use	No AEZ methodology adopted at national level for multiple cropping systems, only small area are covered, or main crops only are covered (multiple rice systems, maize, rubber, cassava, sugarcane), or low resolution is used.	n through local and national level activities)		(model synthesis & integra-tion)		National AEZ methodology adopted and used
	Data and information portal hosted by relevant institution	GIS unit exists but online spatial information system is not available with DALaM	-	1 exists and is online	-	1 is hosted by relevant institution	1 spatial information system functioning and accessible
Output 2.1.3: Impact scenarios of water availability, crop yield and socio-economics for all major agro-ecological zones assessed and adaptation strategies developed	Number of agro-ecological zones having scenarios of physical, biophysical and socioeconomics	Agro-ecological zoning did not consider a comprehensive national assessment using national data	Analysis for development of agro-ecological zones	Development of impact scenarios	Validation of agro-ecological zones data and information	Delivery of information products	Impact scenarios available for at least 7 major production zones prioritized by MAF
	Number of policy/planning processes used the climate change impact scenarios	Low resolution scenarios are being used for NAPA, National Communication and relevant land suitability classifications Some project is producing high resolution datasets	-	2	1	1	4 new scenarios used for 3rd national communication or other relevant national and local documents
	AMAT Indicator 3.2.2.1 No. of policies developed or strengthened	Currently available risk and vulnerability products are with low resolution, not updated, too generalized or not harmonized with the full set of agricultural data available. One national vulnerability assessment produced by international partners might serve as input	-	*2* Models and scenarios developed	*1*	*1*	*Scenarios included in Policies/Plans/By laws and proposed to competent authority*

Expected Outputs	Indicators	Baseline	Annual milestones				End project target
			Year 1	Year 2	Year 3	Year 4	
	Number of vulnerability and risk analysis and reports that use LRIMS and NAEZ information *AMAT Indicator 2.1.1.1 Updated risk and vulnerability assessment* *AMAT Indicator 2.1.1.2 Risk and vulnerability assessment conducted*		Information collected		Vulnerability and risk analysis	Maps, databases, reports produced 1 1	New vulnerability and risk profiles available with high resolution 1 V*ulnerability assessment* 1 *Risk and vulnerability assessment*
Outcome 2.2: Technical capacity developed for sustained operation and use of LRIMS, SAVA, AEZ and agriculture production Systems at Risk for policy formulation and adaptation planning in agriculture sector	MAF/ DALaM staff trained to maintain and provide or apply LRIMS/ NAEZ information (gender disaggregated) *AMAT Indicator 2.2.1 No. and type of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability [*to be summed up with outcomes 1*.2 and 3.1]*	0 female 0 male Some DALaM senior staff know the AEZ theoretical concepts 0	-	15 female 35 male *4*	15 female 35 male	-	100 staff (30 female; 70 male) trained *2 Agriculture* *1 Environment* *1 Planning* *(Staff trained and capacity improved)*
Output 2.2.1: Training resources on LRIMS, Agro-Ecological Zoning, SAVA scenario development and selection of main indicator developed and training programme conducted	Number of training programmes organized Number of staff from MAF/ MONRE trained Number of training manuals available for further use *AMAT Indicator 2.2.1.1 No. of staff trained on technical adaptation themes (disaggregated by gender) [*to be summed up	No training organized on the topics relevant to the component Very few staff from NAFRI trained and undertaking on crop modelling No standard training packages available	- - - -	5 25 1 *25*	8 25 1 *25*	4 - - -	At least 17 trainings organized two each for LRIMS&NAEZ At least 50 core staff from MAF/MONRE trained At least two standard manuals available for further use *50*

Expected Outputs	Indicators	Baseline	Annual milestones				End project target
			Year 1	Year 2	Year 3	Year 4	
	with outcomes 1.2 and 3.1]						
Output 2.2.2: Capacity development resources on assessment of impact scenarios and adaptation strategies developed based on revised LRIMS, SAVA, NAEZ and integrated into the major agriculture development policies and plans	Number of relevant adaptation strategies identified and documented	Individual adaptation practices are identified and demonstrated	-	10	10	5	25
	Number of MAF staff trained on new/innovative adaptation strategies	Staff trained depending on their role in projects (project based training)	-	25	25	-	At least 50 national level MAF staff trained to integrate new information into at least 4 major agricultural policies and plans (at least 40% of participants are women)
	Number of policies and plans prioritized the new adaptation strategies	Matrix of adaptation strategies aligned with national agriculture policies are not available	-	2	2	-	4
	*AMAT Indicator 2.2.1.1 No. of staff trained on technical adaptation themes (disaggregated by gender) [*to be summed up with outcomes 1.2 and 3.1]		-	*25*	*25*	-	*50*

Component 3: Knowledge management and dissemination of information and lessons learned for local application, planning, monitoring and evaluation

Expected Outcomes/outputs	Indicators	Baseline	Annual milestones				End project target
			Year 1	Year 2	Year 3	Year 4	
Outcome 3.1: Knowledge and information sharing for local application, agriculture and food security planning and programming and project outcomes/outputs monitored and evaluated to ensure sustainability	*Indicator 3.2.2 Strengthened capacity to transfer appropriate adaptation technologies, disaggregated by gender (Score)*	*1 = No capacity*	-	-	-	*2*	*2 = Moderate capacity (50-75%)*
	AMAT Indicator 2.2.1 No. and type of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability	0	-	-	-	2	*1 Planning 1 Research (Staff trained and capacity improved)*

Expected Outcomes/outputs	Indicators	Baseline	Annual milestones				End project target
			Year 1	Year 2	Year 3	Year 4	
	*[*to be summed up with outcomes 1.*2 and 2.2]*						
	Framework for knowledge-sharing and packaging of lessons learned and experiences developed/ improved	Obsolete or no sharing and dissemination of knowledge and information platform available	-	-	-	1	1
	AMAT Indicator 2.1.1 Relevant threat information disseminated to stakeholders on a timely basis (Yes/No)	*0 = No*	-	-	-	*1 = Yes*	*1 = Yes*
Output 3.1.1: Local application of climate information and location specific adaptation strategies facilitated through Farmer Field Schools (FFS) in close coordination with climate adaptation in wetland areas (CAWA) project activities	Number of FFS organized and implemented	No FFS in relation to climate change adaptation ongoing, NAFRI works with dynamic crop calendars in 7 villages	-	6	7	7	20 FFS with climate component implemented
	At local level, number of people that has increased knowledge of CC at local level through the piloting of information	Number of farmers adware of climate change adaptation technologies and information system (to be assessed with CAWA)	0	400	480	400	1280
	AMAT Indicator 3.2.1.1 No. of individuals trained in adaptation-related technologies	0	0	400	480	400	1280
	Number of facilitators trained (gender disaggregated)	0	-	20 total 50% female 50% male	20 total 50% female 50% male	-	40 total 50% female 50% male
	AMAT Indicator 2.2.1.1 No. of staff trained on technical adaptation themes		-	*20*	*20*	-	*40*

Expected Outcomes/outputs	Indicators	Baseline	Annual milestones				End project target
			Year 1	Year 2	Year 3	Year 4	
	(*disaggregated by gender*) [to be summed up with outcomes 1.*2 and 2.2*]						
	Number of FFS climate forecast curricula available for up-scaling	No FFS curriculum following regularly the entire cropping season and providing climate information available. 1 Save & Grow curricula available for rice	-	1	-	-	One FFS curriculum with climate forecast information and relevant adaptation practices developed and tested
	Package of lessons learned	0	-	-	*1*		1 Package
	Output 2.1.2.1: Systems in place to disseminate timely risk information	0			*10*		*10*
Output 3.1.2: Knowledge and information sharing workshops conducted and best practices, key lessons disseminated via publications, project websites and others to facilitate wider awareness and utilization in other climate sensitive sectors	Number of knowledge and information-sharing workshops organized	Some on-going/past project already capture the linkage of climate info services and land resources information systems, but there is no harmonization on the results up taking to the planning There are limited products and publications available. Previous GEF project has produced training materials that are available online	4	6	6	3	At least 19 knowledge sharing workshops organized and information sharing meetings conducted
	Number of training materials, products, publications, guidelines, books, handbooks, flyers, web-sites, phone		-	6 training and other material website	5 training and other materials, public-actions, maps, app	5 training and other materials, publica-tions, maps, guide-lines	At least 16 publications printed and available for distribution

Expected Outcomes/outputs	Indicators	Baseline	Annual milestones				End project target
			Year 1	Year 2	Year 3	Year 4	
	application, radio, T.V, awareness raising event/activities with community						
Output 3.1.3: Project M&E system established to monitor activities and outputs systematically at all levels (national, provincial and local) and outcomes evaluated	M&E plans established for on-going use within each partner institution (DALaM & DMH)	Departments of Planning and Cooperation, Inspection, Finance monitors MONRE activities	1	2	2	1	At least 6 events organized
	Number of national, provincial and local level monitoring carried out by PMU and CMUs	-	2	2	2	2	At least twice in a year monitoring visits organized and feedback provided

APPENDIX 3: MTR ITINERARY AND FIELD MISSION

Date	Time (Laos)	Activity	Persons Met
09 Mar 2021	09.00	Meeting with the FAO Lao PDR officials	Mr. Nasar, FAOR Ms. Oanh, MTR Manager Dr. Monica Petri, SAMIS Project Coordinator Mr. Sone, SAMIS Project Administrator
	10.30	Meeting with the project team	Dr. Monica Petri, SAMIS Project Coordinator Mr. Phommachanh Phothichanh, IM and M&E Expert Mr. Oloth Sengtaheunghong, Agromomist Ms. Vandy, Training Manager Mr. Khambane Mr. Jayyang
	15.00	Meeting with MONRE Meeting with GEF Focal Point and DDG of DOP	Dr. Saynakhone Inthavong, Vice Minister Mr. Virana Sonnasinh, DDG and GEF OFP Dr. Syamphone, DG Ms. Outhone Phetluangsy, DG
10 Mar 2021	08.30	Meeting with DMH	Ms. Outhone Phetluangsy, DG Dr. Maiphoy, Head of Division
	10.00	Meeting with Climate and Agro-Meteorology Division Meeting with Weather Forecast Division Meeting with Network Division	Mr. Bounteum, Head of Division Dr. Maiphoy, Head of Division Mr. Saleamsack, Deputy Head of Division Mr. Bounthavee, Deputy Head of Division Mr. Khambane
	13.00	Meeting with DALaM	Mr. Saysongkham Sayavong, Head of C2 Mr. Solaty Mr. Vikham Mr. Viensun
	15.00	Meeting with NAFRI, Socio-economic unit and Climate Change Research Center	Ms. Latsamy Phouvisouk, Head of Unit Dr. Thavone Inthavong, Head of Center
	16.30	Meeting with DMH, National Project Director	Mr. Viengxay Manivong, NPD
11 Mar 2021	08.45	Meeting with MAF, DOA, Plant Protection Division	Mr. Sithiphone Phommasack
	16.30	Meeting with WFP	Mr. Dale Wilson
12 Mar 2021	08.00	Meeting with Asian Institute of Technology (AIT)	Dr. Kavinda Gunasekara
	10.30	Meeting with CCAFS	Ms. Rathana Peou
	12.00	Meeting with SAMIS LTO	Mr. Damen Beau
	13.30	Meeting with Lao National Radio	Mr. Phongtai Chaleunsouk, Head of News Division
	15.00	Meeting with University of Laos, Faculty of Water Resource	Dr. Keoduangchai Keokhamphui, Vice Dean
13 Mar 2021		Weekend	
14 Mar 2021		Weekend	
15 Mar 2021	11.00		TB travel to LNT (QV603)
	11.00	Meeting with Consultant supervision C1 modelling	Mr. Kim Kwang Hyung
	14.00	Meeting with PONRE Meeting with Namtha Automatic Weather Station	Mr. Souksun Phonpadith, Deputy Head of PONRE Mr. Khamphou, Head of Namtha AWS
	18.00	Meeting with Consultant supervision C2	Dr. Gianluca Franceschini
16 Mar 2021	08.30	Meeting LNT PAFO	Mr. Phun Souvannaphonxay, Head of PALaM Division Mrs. Phetsavanh Siphandone, SAMIS Provincial Coordinator Mr. Vilaboud Phanavanh, Technical Officer
	10.30	Meeting with Namtha DAFO	Mr. Mone Sisavath, Technical Officer Ms. Tae, Technical Officer
	13.00	Meeting with village 1 in Namtha District	Villagers using LaCSA in Thoung village
	13.00	Meeting with World Bank	Dr. Keiko Saito, Senior Disaster Risk Management Specialist, East Asia and Pacific DRM, GPURL
	15.00	Meeting with village 2 in Namtha District	Villagers using LaCSA in Mai village
	18.00	Meeting with Adpc/ Servir Mekong	Ekapol
17 Mar 2021	09.00	Meeting with CIAT	Mr. Palao, Leo Kris
	10.00	Meeting with Sing DAFO	Deputy Head of DAFO Mr. Sengsai Saipanya, Technical Officer

			Mr. Indala Khounlor, Technical Officer
	11.00	Meeting with Sing DONRE	Mr. Sisoukmang Lorkhamla, Head of DONRE Mr. Keo Sengaloun, Head of Sing AWS Mr. Jaychoo, Technical Officer Mr. Atoo, Technical Officer
	13.00	Meeting with village 1 in Sing District	Villagers using LaCSA in Patoy village
	15.00	Meeting with village 2 in Sing District	Villagers using LaCSA in Silimoun village
18 Mar 2021			
19 Mar 2021	09.00	Meeting with DMH, SAMIS NPD	Mr. Viengxay Manivong, SAMIS NPD
	13.00	Meeting with Department of Disaster Management, Ministry of Labour and Social Welfare	Director General Head of Disaster Management Division
21 Mar 2021			
22 Mar 2021	08.30	Meeting with Salavan PAFO	Mr. Anousack Champakham, Head of PAFO
	10.00	Meeting with Salavan PALaM	Mr. Bounmee, Head of PALaM Mr. Sompong, Technical staff
	14.00	Meeting with Laognam DAFO	Mr. Khamphun, Deputy Head of DAFO Mr. Kaophong, Technical staff
	15.00	Meeting with Laognam DONRE	Mr. Bounthum Chanthamat, Head of DONRE Ms. Kham Duangkeo, Technical staff
23 Mar 2021	08.30	Meeting with village 1 in Laognam District	Villagers using LaCSA (Phakkood Yai village)
	10.30	Meeting with village 2 in Laognam District	Villagers using LaCSA (Dong village)
	11.15	Meeting with WFP school	Ms. Nokda, Teacher at Saneumna primary school
24 Mar	08:30	Meeting with Savannakhet PONRE	Mr. Vetsouvan, Head of Environment and Climate Change Adaptation Division
	10.30	Meeting with Champhone DAFO	Ms. Phommaly Sengdalasack, Deputy Head of DAFO Mr. Kuan, Technical staff
	11.30	Meeting with Champhone DONRE	Mr. Thongsa, Head of DONRE Ms. Keooudone, Deputy Head of DONRE
	14.30	Meeting with village 1 in Champhone	Villagers using LaCSA (Phaleng village)
	15.30	Meeting with village 2 in Champhone	Villagers using LaCSA (Kadan village)
25 Mar 2021	09.30	Meeting with Savannakhet PAFO, PALaM	Mr. Baisy Inthavilay, Head of PALaM Mr. Douangta, Deputy Head of PALaM
	10.30		TB travel from Savannakhet to Pasun
	18.00	Meeting with FAO GEF Technical Focal Point	Mr. Sameer Karki
26 Mar 2021			
	10.00	Meeting with SAMIS Project Coordinator	Dr. Monica Petri
	11.00	Meeting with Mobile Phone Service Provider	Mr. Ken Streutker

APPENDIX 4: STAKEHOLDERS INTERVIEWED DURING MTR

Persons Met	Designation/Position	Organization
Mr. Nasar Hayat	FAO Representative to Lao PDR	FAO Lao PDR
Dr. Monica Petri	SAMIS Project Coordinator	FAO Lao PDR
Mr. Sone Mosky	SAMIS Project Administration	FAO Lao PDR
Mr. Phommachanh Phothichanh	SAMIS Project M&E Specialist	FAO Lao PDR
Mr. Oloth Sengtaheunghong	SAMIS Project Agronomist	FAO Lao PDR
Mr. Khambane	SAMIS Project IT	FAO Lao PDR
Dr. Saynakhone Inthavong	VICE Minister	Ministry of Natural Resource and Environment (MONRE)
Mr. Virana Sonnasinh	Deputy Director General, GEF OFP	Department of Planning, MONRE
Dr. Syamphone	Director General	Department of Climate Change Management, MONRE
Ms. Outhone Phetluangsy	Director General	Department of Meteorology and Hydrology, MONRE
Dr. Maiphoy	Head of Division	Department of Meteorology and Hydrology, MONRE
Mr. Bounteum	Head of Agro-Meteorology Division	Department of Meteorology and Hydrology, MONRE
Mr. Saleamsack	Deputy Head of Weather Forecast Division	Department of Meteorology and Hydrology, MONRE
Mr. Bounthavee	Deputy Head of Network Division	Department of Meteorology and Hydrology, MONRE
Mr. Saysongkham Sayavong	Head of GIS Division, Head of SAMIS Component 2	Department of Agricultural Land Management, Ministry of Agriculture and Forestry (MAF)
Ms. Lolaty Mr. Vikham Mr. Viensun	Technical Officer	DALaM, MAF
Dr. Latsamy Phouvisouk	Head of Social-economic Unit, Policy Research Center	National Agriculture, Forestry and Rural Research Institute (NAFRI), MAF
Dr. Thavone Inthavong	Head of Climate Change Research Institute	NAFRI, MAF
Mr. Viengxay Manivong	Deputy Head of DMH, SAMIS National Project Director	DMH, MONRE
Mr. Sithiphone Phommasack	Deputy Head of Plant Protection Center	Department of Agriculture (DOA), MAF
Mr. Dale Wilson		World Food Programme
Dr. Kavinda Gunasekara		Asian Institute of Technology (AIT)
Dr. Rathana Peou	Political Advisor	CCAFS
Mr. Damen Beau	SAMIS Lead Technical Official	FAO Asia Pacific Regional Office
Mr. Phongtai Chaleunsouk	Head of News Division	Lao National Radio
Dr. Keoduangchai Keokhamphui	Vice Dean	Faculty of Water Resource, MONRE
Mr. Kim Kwang Hyung	Consultant supervision C1 modelling	
Dr. Gianluca Franceschini	Meeting with Consultant supervision C2	
Dr. Keiko Saito	Senoir Disaster Risk Management Specialist	East Asia and Pacific DRM, GPURL, World Bank
Dr. Ekapol		Adpc/ Servir Mekong
Mr. Palao, Leo Kris		CIAT
Mr. Vilaiypong	Director General	Department of Disaster Management, Ministry of Labour and Social Welfare
Mr. Sameer Karki	FAO GEF Technical Focal Point	FAO
Mr. Ken Streutker	Manager -Investor Relations & Marketing	Lao Telecommunications
Mr. Souksun Phonpadith	Deputy Head of PONRE	Luang Namtha Provincial Natural Resource and Environment Office (PONRE)
Mr. Khamphou	Head of Namtha Station	Namtha Automatic Weather Station
Mr. Phun Souvannaphonxay Mrs. Phetsavanh Siphandone Mr. Vilaboud Phanavanh,	Head of PALaM Division SAMIS Provincial Coordinator Technical Officer	Luang Namtha Provincial Agriculture and Forestry Office (PAFO)

Mr. Mone Sisavath, Ms. Tae	Technical Officer	Namtha District Agriculture and DAFO
Villagers using LaCSA	Village Committee and Bulletin Readers, FFS member	Thoung village and Mai villages in Namtha District
Mr. Sengsai Saipanya Mr. Indala Khounlor	Deputy Head of DAFO Technical Officer	Sing DAFO in Luang Namtha province
Mr. Sisoukmang Lorkhamla Mr. Keo Sengaloun Mr. Jaychoo Mr. Atoo	Head of DONRE Head of Sing AWS Technical Officer Technical Officer	Sing DONRE in Luang Namtha province
Mr. Anousack Champakham,	Head of PAFO	Salavan PAFO
Mr. Bounmee Mr. Sompong	Head of PALaM Technical staff	Salavan PALaM
Mr. Khamphun Mr. Kaophong	Deputy Head of DAFO Technical staff	Laognam DAFO in Salavan province
Mr. Bounthum Chanthamat, Ms. Kham Duangkeo	Head of DONRE Technical staff	Laognam DONRE in Salavan province
Villagers using LaCSA (Phakkood Yai village)	Village Committee and Bulletin Readers	Phakkood Yaa and Dong villages in Laognam District
Ms. Nokda	Teacher at Saneumna primary school	WFP target school in Laongam District
Mr. Vetsouvan	Head of Environment and Climate Change Adaptation Division	Savannakhet PONRE
Ms. Phommaly Sengdalasack Mr. Kuan	Deputy Head of DAFO Technical staff	Champhone DAFO in Savannakhet province
Mr. Thongsa Ms. Keooudone	Head of DONRE Deputy Head of DONRE	Champhone DONRE
Villagers using LaCSA (Phaleng village)	Village Committee and Bulletin Readers, FFS member	Phaleng and Kadan villages in Champhone district
Mr. Baisy Inthavilay Mr. Douangta	Head of PALaM Deputy Head of PALaM	Savannakhet PAFO, PALaM

APPENDIX 5: LIST OF DOCUMENTS CONSULTED

1. Project Document Package	
	GEF Secretariat Review for Full/Medium-sized Project The GEF/LDCF/SCCF/NPIF TRUST Funds
	ID5462 PIF_PPG Approval letter
	Project Identification Form (PIF)
	Project Preparation Grant (PPG)
	Project Concept Note version 30Nov 2012
	Project Concept Note version 26May 2016
	Funding Agreement CEO Endorsement Letter from GEF Secretariat
	Monitoring and Evaluation Plan
	Project Document
	Project Inception Workshop Report
2. Minutes and reports of PSC Meetings	
	Inception Report
	Report of the First Project Steering Committee of the Project
	Report of the Second Project Steering Committee of the Project
	Report of the Third Project Steering Committee of the Project
	Report of the Fourth Project Steering Committee of the Project
	Report of the Fifth Project Steering Committee of the Project
	Approved Work Plan June 2019-December 2020
	Concept Note for the Scaling-up local and national level decision making for climate resilience in the agricultural sector of Lao PDR. Version 28th September 2020
	Clearance Letter from DMH - Scaling-up local and national level decision making for climate resilience in the agricultural sector of Lao PDR
	Confirmation Letter from DCC – Scaling-up local and national level decision making for climate resilience in the agricultural sector of Lao PDR
3. Project Implementation Reports (PIR)	
	PIR 2018
	PIR 2019
	PIR 2020
4. Project Progress Report (PPR)	
	PPR for July-Dec 2018
	PPR for Jan-June 2019
	PPR for July-Dec 2019
	PPR for Jan-June 2020
	PPR for July-Dec 2020
5. GEF Tracking Tool	
6. Back to Office Reports (BTOR)	
7. Project Component 1	

	• List of Trainings provided
	• Technical reports:
	  • LaCSA Technical Specification
	  • LaCSA Functional Specification
	  • LaCSA Database Structure
	  • LaCSA Modelling System for Each Output Page
	  • LaCSA User Guide
	  • LaCSA DMH User Guide
	  • LaCSA Administrator Guide
	• Monthly Bulletin since May 2019
	• Wet Season Weekly Bulletin
	• Dry Season Weekly Bulletin
	• PPT on Pests and Diseases Data Collection in Case if Lao PDR by PPC, DOA

	• Spreadsheet report from PPC
	• PPT on Agrometeorological Service in the Countries in the region (Lao PDR) by DMH
	• Draft Agro-meteorology Standard Operating Procedures for Lao PDR
	• Technical Specification H7710 3G/4G DTU
	• LaCSA chart – Database & Connection
	• Weather dependent climate smart recommendations [draft] by NAFRI and CIAT
	• PPT on Agrometeorological Service in the Countries in the Region (LAO P.D.R) presented by CAgMD of DMH
	Training needs assessment and proposed capacity development programme foragro-meteorological applications
	• LaCSA Input by CIAT: climate risk advisories for target crops, cropping calendar at district and province level, decision-making table for target crops
	• Other documents contributed by CIAT:
	• Monitoring climate services use: loudspeaker and FFS effectiveness to distribute LaCSA to farmers (Draft report and infographic)
	• Livelihood maps (jpg files under finalization and one explanatory ppt)
	• LaCSA input advisory (Decision tables by NAFRI/DALAM, crop calendars and climate risk advisory)
	• Agronomical questionnaire for weather stations
	  • Access tool
	  • Ppt with explanation
	  • Instruction manual (in Lao)
	  • DG order (this is an internal order to the weather station staff working in 22 stations). The order is establishing that 22 stations have to collect crop data every month about rice, corn and cassava (in Lao).
	• Technical Recommendations for banana, cabbage, cassava, coffee, irrigated rice, livestock, maize, pumpkin, rainfed rice and upland rice

8. Project Component 2	

	• List of Trainings provided:
	• Technical Reports:
	  • PPT on Development of capacity and implementation of modelling for the preparation of data for a climate atlas by AIT
	  • Research Article on Evaluating the performance of a WRF physics ensemble in simulating rainfall over Lao PFR during wet and dry seasons by Hindawi
	  • Advanced training course from foresight to policy recommendations: scenarios and SAMIS related decision support by CCAFS
	  • PPT on Crop-land mapping case study in Lao
	  • Official Agriculture cover permission from DALaM
	  • Practical handbook for agricultural land cover mapping in the Lao People's Democratic Republic by SAMIS
	  • Technical Specifications for Land Resources Information Management System (LRIMS)
	  • Land Resource Information Management System (LRIMS) functional and technical specification of the demonstration version
	  • Spreadsheets for LUT in Bokeo province (Capital invests, crop calendars and factors)
	  • Soil mapping reports, dated February 2019
	  • Manual on Participatory Forest and agriculture land use planning, allocation and management at village level (with integration of vulnerability assessment and adaptation planning), Revised version on February 2021
	  • Draft of recommendations leaflet from NAFRI CIAT on Weather dependent climate smart recommendations (part of LaCSA)
	  • Training manual on Agrometeorology for agriculture extension officers in Lao People's Democratic Republic (Revised version)
	  • Advanced Course's Final Report by Utrecht University Training Team from October to December 2020 (co-financing)
	• Training needs assessment and proposed capacity development programme for agro-ecological zoning applications
	• Report on Demonstrated capacity and ability to use available data to produce policy brief related to one issue or more issues for agriculture sector, SAMIS Project

	• Performance evaluation of the combined drought index (CDI) over Laos context by ADPC (co-financing) • PPT on Assessing the Adaptive Capacity of Farmers to Climate Change in Lao PDR by CIAT (co-financing) • Leaflet on Livelihood Zones and Adaptive Capacity Assessment at Landscape-Level in Laos by CIAT(co-financing) • Livelihood maps by CIAT(co-financing) • Introduction on Data Collecting Technic on Agro-Meteorology by Using the Online Kobo System by CIAT(co-financing) • KOBO monitoring workflow and questionnaire by CIAT(co-financing) • KOBO toolbox for crop data collection (in Lao) by CIAT(co-financing)
9. Project Component 3	

	• List of Trainings provided:
	• Technical Reports:
	  • Training manual on Agrometeorology for agriculture extension officers in Lao PDR
	  • PPT on First look at the M&E data
	  • SAMIS baseline survey in 2018
	  • Draft PPT on Providing climate agro-meteorology service to schools in Lao PDR – Results from the survey
	  • Draft report on Providing climate agro-meteorology services to schools in Lao PDR, Dated 4th March, 2021
	  • Report on Adoption of climate services in Lao PDR by SAMIS and– Applying seasonal climate forecasting and innovative insurance solutions to climate risk management in Southeast Asia (DeRISK Southeast Asia), Dated July, 2020

10. Letter of Agreement	
	AIT – Report C & D and Final Report. Capacity building in support of Strengthening Agro-climatic Monitoring and Information System (SAMIS) Component 1: Agroclimatic monitoring and analysis
	AIT - Development of Capacity and Implementation of Modelling for the Preparation of Data for a Climate Atlas. Report/ Deliverables A, B, C
	DALaM - Report on Support to the preparation climate, soil and livelihood maps for the Land Resources Information Management Systems (LRIMS), SAMIS Project Ref.: No LOA/LAO/2019-037
	DALaM - Report on Support to Farmer Field Schools and Loudspeaker System, SAMIS Project Ref.: LOA/LAO/2019-040
	DALaM – Report on Support to the preparation of the Land Cover Mapping and the Field Level Activities, SAMIS Project Ref.: No LOA/LAO/2018-029
	DALaM – Report on Support to the preparation of the Land Resources Information Management System (LRIMS), SAMIS Project Ref.: No LOA/LAO/2018-007
	DALaM – Report on Demonstrated capacity and ability to use available data to produce policy brief related to one issue or more issues for agricultural sector, SAMIS Project Ref. No LOA/LAO/2019-029
	DALaM – Policy Brief (Draft) – Agriculture Land Conservation in Irrigation Scheme for Commercial Production of Hatsayfong District, Vientiane Capital
	DMH – Final Report on Provision of Management and supervision of installation of 15 agro-meteorological stations (Final Report/Deliverable D) based on the LOA/LAO/2018-019
	DMH – Final Report on Preparation of climate data and support modelling for SAMIS project. Ref.: No LOA/LAO/2019-001
	DMH – Final Report on Preparation of climate data and support modelling for the preparation of Climate Atlas of Lao PDR
	DOPF – Official Letter – Report on the Implementation of the SAMIS project by the MAF
	IFPRI - Progress Report*:* Tasks 1-5 Technical Assistance to the Land Resource Information Management System (LRIMS) and National Agro-Ecological Zoning (NAEZ) in Lao PDR
	University of Utrecht – for provision of capacity development on decision support scenarios design and uses to apply future of Agro-Ecological Zoning *(*AEZ*)* suitability and yield maps to agricultural planning in Lao PDR
	LNT PAFO – Progress report on Implementing the SAMIS project in Luang Namtha province
	LNT PAFO – Progress report. Dated on 11th December, 2020

	SVNK PAFO – LOA Final report for provision of support to the implementation the Farmer Field School (FFS) and Awareness Raising Activities of the SAMIS project in Savannakhet province. Reporting period: April 2019-January 2020
	SVNK PAFO – LOA Final report for provision of support to the implementation the Farmer Field School (FFS) and Awareness Raising Activities of the SAMIS project in Savannakhet province. Reporting period: January-December, 2020
	PPC, DOA – Final report on Support to the data collection for crop modelling and to the training activities of the SAMIS project
	PPC, DOA – Diseases and Insect Pest Management Book (Draft)
	LoA between FAO and University of Southampton (co-financing) LoA between FAO and University of Utrecht (co-financing)
11. Procurement contract	
	P S ENGINEERING SOLE CO., LTD Contract in GRMS No. 5101877 for the Construction of "Additional Civil Works of Agro-Meteorological Stations (Component 1)
	P S ENGINEERING SOLE CO., LTD Contract No. 002/2019 for the Construction of "Additional Civil Works of Agro-Meteorological Stations (Component 1)
	P S ENGINEERING SOLE CO., LTD Contract No. 5101834 for the Construction of "Services and Installation of 15 Towers for Agromet Stations (Component 1)
	RITTIPHOL SURVEY DESIGN CONSULTANT AND CONSTRUCTION CO., LTD Contract No. 005/2018 for The Construction of Renovation Facilities for Climate and Agro-Meteorology Division of DMH and Supervision
	OTT Hydromet GmbH Long Term Agreement No. 2018/FALAO/FAOLAO/CPA5101594 for the provision of Agrometeorological Observation System and Installation services
12. Risk assessment report	
	• Project environmental and social screening (ESS) checklist – for risk classification use during project identification • Risk classification certification form
13. Other Documents	
	• Official Clearance Letter from DMH to GEF OFP Dated 10th February, 2021 • Official Project Extension Letter from DALaM to GEF OFP • TOR for all consultants and staff • Concept Note for Scaling-up local and national level decision making for climate resilience in the agricultural sector of Lao PDR • 5th_Draft_of 9th_NSEDP_Part_II_ENG_8_Dec_2020 • Draft of the LETTER OF AGREEMENT Between FAO and Department of Planning and Finance (DOPF) for provision of Testing foresight methods for monitoring of the agricultural sector development • List of International events and national media visibility of the SAMIS project – List prepared by the project team at MTR • Monthly Bulletin for JUL-SEP • Sustainability Study for the SAMIS project- Short Note submitted by the project team

APPENDIX 6: MTR MATRIX

Midterm Review Evaluative Matrix

Evaluative Questions	Indicators	Sources	Methodology
Project Strategy: To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards expected results?			
• Do the project's purpose and objectives remain valid and relevant, or are there items or components in the project design that need to be reviewed and updated?	• Coherence of the project objectives with the national policies and development plans • Coherence of the project objectives with UNDAF/Partnership Framework for Sustainable Development for the country	• Project Document • Relevant National development plan documents • UNDAF/Partnership Framework for Sustainable Development for the country	• Review/analysis of documents • Interview/ discussions with the project team, officials of FAO Lao PDR, Project team, National Counterparts and Stakeholders • Discussions with the stakeholders
• Is the project logical framework and design still relevant in the light of project experience to date?	• Relation between the activities carried out/ being carried out and the achievement of the desired output/outcomes as provided in the logical framework of the project	• Project Document • Project Results Framework • PIR/APR • SC meeting reports • BOF reports	• Review/analysis of documents • Interview/ discussions with the project team, officials of FAO PDR, Project team, National Counterparts and Stakeholders • Discussions with the stakeholders
• **Progress Towards Results: To what extent have the expected outcomes and objectives of the project been achieved thus far?**			
• How does, the progress made compare with the end of the project targets in terms of the indicators of the log-frame for each of the component and outcome of the project.	• Degree of achievement of the outputs and outcomes of the project as compared to the Mid Term and End of the project targets	• Project Document • Project Results Framework • PIR/APR • SC meeting reports • BOF reports • Training reports • Capacity building reports • Reports of the consulting assignments • Modelling documents • Documents providing details of the activities carried out and achievements for different components of the project • Standard operating procedures	• Review/analysis of documents • Interview/ discussions with the project team, consultants
• How does the GEF Tracking Tool at the Baseline compare with the one completed right before the Midterm Review.	• Coherence between the expected Climate Change Adaptation benefits as provided in the Baseline Tracking Tool and that prepared before the MTR	• Baseline GEF tracking tool • GEF tracking tool prepared before the MTR • PIR for the third year of operation (Year 2020)	• Review/analysis of documents
• **Project Implementation and Management: Has the project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions thus far? To what extent are project-level monitoring and evaluation systems, reporting, and project communications supporting the project's implementation?**			

Evaluative Questions	Indicators	Sources	Methodology
• How effective is the project managed at all levels? Is it results-based and innovative?	• Visibility regarding lack of effectiveness of the project management arrangements	• PIRs / APRs • Workplans • SC meeting reports • Project Document	• Review/analysis of documents • Interview/ discussions with the project team, officials of FAO Lao PDR, Project team, National Counterparts and Stakeholders • Discussions with the stakeholders
• How about the changes made to project implementation arrangement during the project implementation, if applicable? Have they impacted the project in a positive way?	• Changes made in the project implementation arrangements	• PIRs / APRs • Workplans • SC meeting reports • Project Document	• Review/analysis of documents • Interview/ discussions with the project team, officials of FAO Lao PDR, Project team, National Counterparts and Stakeholders • Discussions with the stakeholders
• How does the APR/PIR process helped in monitoring and evaluating the project implementation and achievement of results?	• Preparation of the monitoring and evaluation documents in a timely manner and as per the required format provided in the M&E plan provided in the Project Document	• Project Document • PIRs / APRs • Workplans • Quarterly reports	• Review/analysis of documents •
Sustainability: To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?			
• Whether the risks originally identified in the project document and, currently in the APR/PIRs are reasonable?	• Existence of the additional risks (additional to the risks identified in the project design, risk logs and PIRs) to achievement of the results and sustainability of the project results	• Project Document • Risk Log • PIRs/APRs • Concept note for extension phase under GCF • Standard Operating Procedures	• Review/analysis of documents • Interview/ discussions with the project team, officials of FAO Lao PDR, Project team, National Counterparts and Stakeholders • Discussions with the stakeholders

APPENDIX 7: MID TERM REVIEW REPORT FORMAT AND REVIEW QUESTIONS

	Chapter Heading		Sub-Heading			Main Review Questions
	EXECUTIVE SUMMARY					
		INTRODUCTION				
		MAIN FINDINGS				
		CONCLUSIONS				
		RECOMMENDATIONS				
		GEF RATING TABLE				
1.	INTRODUCTION					
		1.1	PURPOSE AND SCOPE OF THE MID TERM REVIEW			
		1.2	OBJECTIVE OF THE MID TERM REVIEW			
		1.3	INDENTED USERS			
		1.4	METHODOLOGY			
		1.5	LIMITATIONS			
2.	PROJECT BACKGROUND AND CONTEXT					
		2.1	PROJECT BRIEF			
		2.2	DEVELOPMENT CONTEXT			
		2.3	THREATS AND BARRIERS BEING ADDRESSED			
		2.4	DESCRIPTION OF THE PROJECT: OBJECTIVE, OUTCOMES AND OUTPUTS			
		2.5	THEORY OF CHANGE			
		2.6	PROJECT IMPLEMENTATION ARRANGEMENT			
		2.7	MAIN STAKEHOLDERS			
3.	KEY FINDINGS: ISSUES OF THE REVIEW					
		3.1	RELEVANCE			
				3.1.1	Alignment with GEF and FAO strategic priorities	• Are the project outcomes congruent with GEF focal areas/operational programme strategies? • Are the project outcomes congruent with FAO Country Programming Framework
				3.1.2	Relevance to national, regional and global priorities and beneficiary needs	• Are the project outcomes congruent with country priorities? • Has there been any change in the relevance of the project since its formulation, such as the adoption of new national policies, plans or programmes that affect the relevance of the project's objectives and goals? If so, are there any changes that need to be made to the project to make it more relevant? • Are the project outcomes congruent with GEF focal areas/operational programme strategies?
				3.1.3	Complementarity with existing interventions	• Are the project outcomes congruent with the needs and priorities of targeted beneficiaries (local communities, men and women, and indigenous peoples, if relevant)?
		3.2	EFFECTIVENESS			
				3.2.1	Progress towards results	• To what extent has the project delivered on its outputs, outcomes and objectives? • What broader results (if any) has the project had at regional and global level to date? • Were there any unintended consequences? • Is there any evidence of environmental stress reduction (for example, indirect threats to biodiversity) or environmental status change (such as an improvement in the populations of target species), reflecting global environmental

	Chapter Heading		Sub-Heading			Main Review Questions
						benefits or any change in policy, legal or regulatory frameworks? • To what extent can the achievement of results be attributed to the GEF-funded component?
				3.2.2	Likelihood of impacts	• Are there any barriers or other risks that may prevent future progress towards and the achievement of the project's longer-term objectives? • What can be done to increase the likelihood of positive impacts from the project? • To what extent can the progress towards long-term impacts be attributed to the project?
		3.3	EFFICIENCY			• To what extent has the project been implemented efficiently and cost-effectively? • To what extent has project management been able to adapt to any changing conditions to improve the efficiency of project implementation? • To what extent has the project built on existing agreements, initiatives, data sources, synergies and complementarities with other projects, partnerships, etc. and avoided duplication of similar activities by other groups and initiatives?
		3.4	FACTORS AFFECTING PERFORMANCE			
				3.4.1	Project design and readiness	• Is the project design suited to delivering the expected outcomes? • Is the project's causal logic (per its theory of change) coherent and clear? • To what extent are the project's objectives and components clear, practical and feasible within the timeframe allowed? • To what extent was gender integrated into the project's objectives and results framework? • Were other actors – civil society, indigenous peoples or private sector – involved in project design or implementation and what was the effect on project results?
				3.4.2	Quality of project implementation	• To what extent did the executing agency effectively discharge its role and responsibilities in managing and administering the project? • What have been the main challenges in terms of project management and administration? • How well have risks been identified and managed? • What changes are needed to improve delivery in the latter half of the project?
				3.4.2.1	Quality of project implementation by FAO (BH, LTO, PTF, etc.)	
				3.4.2.2	Project oversight (PSC, project working group, etc.)	• To what extent has FAO delivered oversight and supervision and backstopping (technical, administrative and operational) during project identification, formulation, approval, start-up and execution?
				3.4.3	Quality of project execution	

	Chapter Heading		Sub-Heading			Main Review Questions
				3.4.4	Financial management and co-financing	• What have been the financial-management challenges of the project? • To what extent has pledged co-financing been delivered? • Has any additional leveraged co-financing been provided since implementation? • How has any shortfall in co-financing or unexpected additional funding affected
				3.4.5	Project partnerships and stakeholder engagement	• To what extent have stakeholders, such as government agencies, civil society, indigenous populations, disadvantaged and vulnerable groups, people with disabilities and the private sector, been involved in project formulation and implementation? • What has been the effect of their involvement or non-involvement on project results? • How do the various stakeholder groups see their own engagement with the project? • What are the mechanisms of their involvement and how could these be improved? • What are the strengths and challenges of the project's partnerships? • Has the stakeholder engagement plan been adhered to and documented? • Have all stakeholders been made aware of the ESS plan and the grievance complaint mechanism?
				3.4.6	Communication, knowledge management and knowledge products	• How effective has the project been in communicating and promoting its key messages and results to partners, stakeholders and a general audience? • How can this be improved? • How is the project assessing, documenting and sharing its results and lessons learned and experiences? • To what extent are communication products and activities likely to support the sustainability and scaling up of project results?
				3.4.7	Quality of M&E	
				3.4.7.1	M&E design	• Is the project's M&E system practical and sufficient? • How has stakeholder engagement and gender assessment been integrated into the M&E system? • How could this be improved?
				3.4.7.2	M&E implementation	• Does the M&E system operate per the M&E plan? • Has information been gathered in a systematic manner, using appropriate methodologies? • To what extent has information generated by the M&E system during project implementation been used to adapt and improve project planning and execution, achieve outcomes and ensure sustainability? • Are there gender-disaggregated targets and indicators? • How can the M&E system be improved?
		3.5	CROSS CUTTING CONCERNS			

	Chapter Heading		Sub-Heading			Main Review Questions
				3.5.1	Gender and other equity dimensions	• To what extent were gender considerations taken into account in designing and implementing the project? Has the project been designed and implemented in a manner that ensures gender-equitable participation and benefits? • Was a gender analysis done? • Sex disaggregated and gender-sensitive indicators and results
				3.5.2	Environmental and social safeguards	• To what extent were environmental and social concerns taken into consideration in the design and implementation of the project? • Has the project been implemented in a manner that ensures the ESS Mitigation Plan (if one exists) has been adhered to?
4.	FINDINGS: SUSTAINABILITY AND REPLICATION					
		4.1	SUSTAINABILITY			• What is the likelihood that the project results will be useful or persist after the end of the project? • What are the key risks that may affect the sustainability of the project results and its benefits (consider financial, socioeconomic, institutional and governance, and environmental aspects)?
		4.2	REPLICATION AND CATALYSIS			• What project results, lessons or experiences have been replicated (in different geographic areas) or scaled up (in the same geographic area, but on a much larger scale and funded by other sources)? • What results, lessons or experiences are likely to be replicated or scaled up in the near future?
5.	CONCLUSIONS AND RECOMMENDATIONS					
		5.1	CONCLUSIONS			
				5.1.1	Summary of main findings and of ratings	
				5.1.2	Conclusions	
		5.2	RECOMMENDATIONS			
	Appendixes					
	Appendix 1	TERMS OF REFERENCE				
	Appendix 2	PROJECT LOG-FRAME / RESULTS FRAMEWORK				
	Appendix 3	MTR ITINERARY AND FIELD MISSION				
	Appendix 4	STAKEHOLDERS INTERVIEWED DURING MTR				
	Appendix 5	LIST OF DOCUMENTS CONSULTED				
	Appendix 6	MTR MATRIX				
	Appendix 7	MIDTERM REVIEW QUESTIONS				
	Appendix 8	PROGRESS TOWARDS RESULTS				
			PROGRESS TOWARDS RESULTS – COMPONENT 1			
				Progress towards results - Outcome 1.1		
				Progress towards results - Outcome 1.2		
			PROGRESS TOWARDS RESULTS – COMPONENT 2			
				Progress towards results - Outcome 2.1		
			PROGRESS TOWARDS RESULTS – COMPONENT 3			
				Progress towards results - Outcome 3.1		
			SUMMARY OF PROGRESS TOWARDS RESULTS			
	Appendix 9		CO-FINANCING TABLE			
	Appendix 10		RATING SCALE /DEFINATION			

APPENDIX 8: RESULTS MATRIX SHOWING ACHIEVEMENTS AT MID-TERM AND MTR OBSERVATIONS

This Appendix of the report provides the findings of the Mid-Term Review regarding progress made towards the achievement of the results of the project in terms of different outcomes and outputs. In accordance with the guidelines for MTR the rating for the progress towards achievements has been done for each of the Outcomes of the project, in terms of the achievement of the targets for the Indicators provided in the 'Project Document. For the purpose the results framework of the proejct as given in the project document has been used as the key. The changes carried out in the project document at the time of 'Project Inception' have also been taken into consideration. The changes made at the time of project inception, includes introduction of a couple of additional 'AMAT indicators' from the 'tracking tool' for the GEF funded projects in the focal area of 'climate change adaptation'.

In the Tables below, the column with 'Level at PIR' is based on the third PIR (for the year 2020). Although the Guidance for Conducting Mid-term Reviews of FAO-Supported, GEF-Financed Projects specifies that the level at first PIR be reported, the MTR team have chosen to provide the values of the third PIR. This is considering that the MTR of the project is much delayed. It is considered that it would not be right, to compare the achievement of the targets at the time of MTR with the PIR at the end of year 1 of the implementation of the project, in a transparent manner. Many of the AMAT indicators introduced at the time of 'project incepetion', have not been covered in the PIR. In such cases the self-assessment by the project team is based on the figures provided in the 'Tracking Tool', prepared by the project team at the time of MTR.

The progress towards results has been assessed for different Outputs first, followed by the assessment of progress towards results for the 'Project Outcomes'. This is because for the 'project outcomes' the progress towards results have been assessed both in terms of the indicators provided in the results frame-work, and in terms of the progress towards achievement of results the Outputs of the respective Outcome.

Progress towards results – Component 1, Outcome 1.1

Component 1: Strengthening agro-climatic monitoring, analysis, communication and use of data and information for decision making in agriculture and food security y. Outcome 1.1: Improved agro-meteorological monitoring, communication and analysis facilities established at national and provincial level

Table 8: Progress towards results: Component 1, Outcome 1.1

Expected Outcomes and outputs	Indicators[17]	Baseline	Target	Status and Rating[18] at PIR-2020	Status at MTR and Rating[19]
Outcome 1.1: Improved agro-meteorological monitoring, communication and analysis facilities established at	**Indicator 1.1** A fully renewed CAgMD within DMH functioning with clear roles and responsibility	Very old systems and no climate and agromet services to meet the	Yr. 1: Preparation and planning for establishment of systems Yr. 2: Delivery of facilities and instruments Yr. 3: Capacity development and testing	**S** The installation of automatic agrometeorological station has been realized entirely by government officials.	**S** (Please see description at the end of the Table)

[17] Numbering of indicators has been done at MTR for easy reference. Some modifications in the log-frame were done at the time of Project Inception, these are highlighted in the Table for 'Progress towards achievement of results. At the time of project inception some of the indicators were added from AMAT, *these are marked in italics.*

[18] Self-Assessment by the project team. For the AMAT indicators the status is based on the assessment by the project team as provided in the Tracking Tool completed at the time of MTR.

[19] Indicator assessment key

Green = Achieved	Yellow = On target to be achieved	Red = Not on target to be achieved

Expected Outcomes and outputs	Indicators[17]	Baseline	Target	Status and Rating[18] at PIR-2020	Status at MTR and Rating[19]
national and provincial level		needs of farmers	Yr. 4: A fully functional unit EOP: A fully renewed CAgMD connected with all AWS and database	The manual station installation is starting.	
	AMAT Indicator 2.1.1: Relevant threat information disseminated to stakeholders on a timely basis (Yes/No)	0 = No	*Yr. 1: -* *Yr. 2: -* *Yr. 3: -* *Yr. 4: 1 = Yes* *EOP: 1 = Yes*	Not reported in PIR *Reported in tracking tool* *1 = Yes*	National level system functioning and updated continuously
Output 1.1.1: Agro-meteorological station networks improved/ re-habilitated with both conventional and automatic weather stations to increase coverage in the major agricultural production areas	**Indicator 1.1.1** Number of new automated stations and rehabilitated manual stations	0	:1 .Yr- :2 .Yr1, 15 new, (15) rehabilitated Yr. 3: - Yr. 4: - EOP: 30 (15 new + 15 rehabilitated) (total of 51 (increased to 101) stations overall in combination with other baseline projects)	85% Civil work is continuing, finalized automatic stations installed and connected to db	Automatic weather stations have been completed. Procurement for rehabilitation of manual weather stations is completed and delivery is awaited
Output 1.1.2: Improved data coding and communication facilities upgraded to enhance connectivity of Department of Meteorology and Hydrology (DMH) with provincial level sub-units in major agriculture products areas	**Indicator 1.1.2a** Number of AWS stations connected with Early Warning System Unit	All manual stations and no real-time data transfer and use for weather forecasts	Yr1: - Yr. 2: 15 Yr. 3: - Yr. 4: - (EoP): All 15 (total 51) stations connected to EWS centre and receive real-time data (second year)	Not reported separately in PIR	15 newly installed AWS are connected with Early Warning Systems and are sending real-time data
	Indicator 1.1.2b Formal collaboration with Ministry of tele-communications	No formal collaboration with the Ministry of telecom and private communication service providers	Yr. 1 Yr. 2 Yr. 3 Yr. 4 (EoP): At least 2 MOUs signed by DMH to facilitate communications	Not reported separately in PIR	MOU with Mobile service provider for data transmission
Output 1.1.2[20]: Development and delivery of training packages relevant to climatology and agro-meteorology, communication and application of climate and agrometeorological information by users				*This Output is not there in the Project Document.* *It seems that it has been added in PIR* 95% LaCSA is ready, functioning and producing: - 140+ district bulletins produced automatically weekly - 19 province bulletins produced monthly	95% Agro-met bulletin product (Including seasonal forecast, rice disease, pest, monthly and weekly bulletins) (100%)
Output 1.1.3: Laboratory for agro-meteorological analysis, instrument	**Indicator 1.1.3a** Rehabilitated facility (Building) for CAgMD with	Very old building and no instrumenta	Yr.1: 1 Yr. 2: - Yr. 3: - Yr. 4: -	Laboratory equipment for calibration under procurement	Rehabilitation of the building is completed

[20] This indicator is not there in the original log-frame (project document) and has been introduced in the PIR. MTR is following the log-frame given in the project document/inception report the order of numbering for this Output is not matching with the rest of the Outputs.

Expected Outcomes and outputs	Indicators[17]	Baseline	Target	Status and Rating[18] at PIR-2020	Status at MTR and Rating[19]
calibration and geospatial climate data access, monitoring, processing facilities established and functioned at DMH, Vientiane.	laboratory for calibration tools in working condition, spare parts for sensor maintenance	tion or calibration laboratory in DMH	EOP: New office facility running within DMH (Climate and agro-meteorological Division) and availability of calibration tools and procedures for all essential sensors		Following issues, the procurement process for manual sensors and laboratory equipment is delayed. As per project team, the procurement process has now been completed and delivery is expected by August 2021 The implication of delay in the establishment of laboratory/calibration centre is that there may not be sufficient time for the staff to get on the job training before the closure of the SAMIS project.
	Indicator 1.1.3b A climate data analysis access and analysis facility with necessary hardware and software.	0 (Only 1 pc available with the climate and agro-meteorological division for storing all data, 6 desktops for data entry)	Yr. 1: - Yr. 2: 15 systems for local met stations and 10 for CAgMD Yr. 3: - 5 nodes for the data entry personnel and connection to EWS Yr. 4: - (EoP): High performance computing systems for data archival and analysis established with at least 5 nodes for the data entry personnel and connected to EWS and also equipped to receive data from AWS	95% LaCSA is ready, functioning and producing: - 140+ district bulletins produced automatically weekly - 19 province bulletins produced monthly	The IT system of the laboratory is completed. PC was delivered on 22 Jan 2019
	Indicator 1.1.3c Number of near-real time NWP products accessible	4 weather forecast system, no agro-meteo forecast	Yr. 1 Yr. 2: 5 new Yr. 3 Yr. 4(EoP): 5 new (9 total)	Agro-met bulletin product (including seasonal forecast, rice disease, pest, monthly and weekly bulletins)	1 seasonal, 1 month and 1 week forecast is ready since mid of May 2019 and improved in May 2020
	AMAT Indicator 2.1.2.1 Type and No. of monitoring systems in place	4	*Yr. 1: -* *Yr. 2: -* *Yr. 3: 1* *Yr. 4: -* *(EoP): 3 new (7 total), 1 seasonal, 1 month (including forcast) and 1 decadal forcast*	Not reported in PIR *As reported in Tracking tool* • *15 New meteorological stations for real-time data receiving and connected to EWS centre* • *30 Systems for local met data analysis* • *LRIMS* • *3 = 1 seasonal, 1 monthly, and 1 weekly*	New AWS has been installed and working Upgradation of the old manual weather stations is underway
	Indicator 1.1.3d Comprehensive climate-atlas prepared using available data	No climate atlas available	Yr. 1: Yr. 2: Yr. 3: 1 Yr. 4: EOP: A climate atlas available		• AIT was contracted for the work • Training has been provided by AIT, DMH shared data with DALAM, • DALAM calibrated the model

Expected Outcomes and outputs	Indicators[17]	Baseline	Target	Status and Rating[18] at PIR-2020	Status at MTR and Rating[19]
					• Dynamical Downscaling ongoing • Climate Atlas graphs and maps under preparation by DMH

Barring the activity of 'up-gradation of manual weather stations' and 'establishment of the laboratory' for calibration of the sensors of the AWS, all activities are on schedule. Upgradation of the manual weather stations and establishment of the calibration laboratory is likely to be completed before the closure of the project. **The progress towards results for Outcome 1.1 is rated as Satisfactory.**

Progress towards results – Component 1, Outcome 1.2

Table 9: Progress towards results: Component 1, Outcome 1.2

Expected Outcomes and outputs	Indicators[21]	Baseline	Target	Status and Rating[22] at PIR-2020	Status at MTR and Rating
Outcome 1.2: Institutional and technical capacity strengthened to facilitate data sharing, archiving, analysis and interpretation of agro-meteorological information products to users at all levels	**Indicator 1.2** Improved and new climate and agromet products available with users	No system in place to communicate and receive feedback from users	Yr. 1: Preparation and planning for establishment of systems Yr. 2: Delivery of facilities and instruments Yr. 3: Capacity development and testing Yr. 4 (EoP): A fully renewed CAgMD connected with all AWS and database	S SOP has been endorsed by MONRE and MAF Weekly and monthly bulletins are been produced and distributed since May 2019 >300 technical staff trained in SOP. > 200 staff trained in bulletins, agro-meteorology and stations management	**S** (Please see description at the end of the Table)
	AMAT Indicator 2.2.1. No. of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability (*Number*) [to be summed up with outcomes *2.2 and 3.1]*	0	*Yr. 1: -* *Yr. 2: -* *Yr. 3: 4* *Yr. 4 : -* *(EoP): -1 Agriculture* *1 Environment* *1 Meteorology* *1 Telecommunication* *(Staff trained and capacity improved)*	Not reported in PIR *As reported in the Tracking tool* • *4 DALaM, PPC, PALaM, DAFO* • *1 DCC* • *1DMH* • *2DoPC of MAF and MONRE* • *1 NAFRI* • *1 Lao telecom*	Officials of these targeted four institutions were imparted training and were part of the awareness creation efforts under the project.
Output 1.2.1: Standard Operating Procedures (SOPs) for climatology and agro-meteorology division of DMH and guidelines for installation of instruments and observation, data coding and maintenance developed and staff trained (at least 65 technical staff trained)	**Indicator 1.2.1a** Standard Operating Procedure for CAgMD	No SOP for CAgMD	Yr. 1: - Yr. 2: 1 Yr. 3: - Yr. 4 (EoP): -	75% SOPs high level endorsement is proceeding well.	SOP submitted to Ministry level for revision SOP revised **This activity is delayed and is ongoing**

[21] Numbering of indicators has been done at MTR for easy reference. . Some modifications in the log-frame were done at the time of Project Inception, these are highlighted in the Table for 'Progress towards results. At the time of project inception some of the indicators were added from AMAT, *these are marked in italics.*

[22] Self-Assessment by the project team. For the AMAT indicators the status is based on the assessment by the project team as provided in the Tracking Tool completed at the time of MTR

Expected Outcomes and outputs	Indicators[21]	Baseline	Target	Status and Rating[22] at PIR-2020	Status at MTR and Rating
	Indicator 1.2.1b Number of guidelines	4 existing guidelines	Yr. 1: - Yr. 2: 1 new 1 updated Yr. 3: 1 new 1 updated Yr. 4 / (EoP): 1 new 1 updated	Bulletins were printed and send to PONRE and PAFO online	Various booklets under preparation
	Indicator 1.2.1c Number of staff trained	No regular trainings within DMH	Yr. 1: - Yr. 2: 20 Yr. 3: 45 Yr. 4: - (EoP): - At least 65 technical staff trained (at least 25 women)	Technical staff trained	210 technical staff trained (55 women)
	AMAT Indicator 2.2.1.1 No. of staff trained on technical adaptation themes (disaggregated by gender) [to be summed up with outcomes *2.2 and 3.1]*	*No regular trainings within DMH, some project training on hydrometeo or meteorology but not in agrometeo*	*Yr. 1: -* *Yr. 2: 20* *Yr. 3: 45* *Yr. 4* *(EoP): 65*	Not reported in the PIR *Reported in the tracking tool, number of persons trained as follows:* • *monitoring/forecast capacity;23F, 56M* • *capacity development:162F, 562M* • *improved resilience of agricultural systems: 5480F, 5404M* • *community-based adaptation: 61F, 301M* • *livelihoods: 16418F, 16264M* • *ICT and information dissemination:3F, 9M*	Targets achieved
Output 1.2.2: Development and delivery of training packages relevant to climatology and agrometeorology, communication and application of climate and agrometeorological information by users	**Indicator 1.2.2a** Training need assessment		Yr. 1: 1 Yr. 2: - Yr. 3: - Yr. 4: - (EoP): 1 needs assessment undertaken	The activity of training is over-performing. Low number of women trained is due to the low number of women employed in government institutions. Also, the choice of staff being trained in decentralized offices is not managed by SAMIS. However, the team implementing the daily LaCSA work is composed at 90% by women and planned abroad training (delayed by covid) are in the vast majority focusing on women team)	Completed
	Indicator 1.2.2b Number of trainings organized and integrated into DMH's regular activities	No formal training programmes, 1 university M Sc in agro-meteo ongoing, but no DMH staff participating	Yr. 1: 1 Yr. 2: 3 Yr. 3: 2 Yr. 4: 2 (EoP): At least 4 formal training programmes organized	Not reported separately	
	Indicator 1.2.2c Number of staff trained in each of the training programmes	About 50 staff trained through national and international sponsored events every year	Yr. 1: 20 Yr. 2: 40 Yr. 3: 20 Yr. 4: 20 (EoP): At least 100 technical staff out of 205 trained (at least 30-40% women)	Not reported separately	
	Indicator 1.2.2d Number of training manuals prepared and printed	No Lao specific training manuals available	Yr. 1: 0 Yr. 2: 3 Yr. 3: 1 Yr. 4	Not reported separately	

Expected Outcomes and outputs	Indicators[21]	Baseline	Target	Status and Rating[22] at PIR-2020	Status at MTR and Rating
			(EoP): At least 4 Lao specific training manuals		
	Indicator 1.2.2e Number of print and media staff trained	No training to print and media staff	Yr. 1:- Yr. 2: 25 Yr. 3: 25 Yr. 4 (EoP): At least 50 print and media reporters trained	Not reported separately	
	Indicator 1.2.2f Number of staff at inter-ministerial level trained	No training on use of climate information for policy integration No of staff trained	Yr. 1: - Yr. 2: 25 Yr. 3: 25 Yr. 4; - (EoP): At least 50 national personnel trained	Not reported separately	
	Indicator 1.2.2g Number of MAF staff trained on forecast application	No application trainings	Yr. 1: - Yr. 2: 3 Yr. 3: 3 Yr. 4: - (EoP): 2	Not reported separately	
	For the entire output 1.1.2.: AMAT Indicator 2.2.1.1 No. of staff trained on technical adaptation themes (disaggregated by gender) [to be summed up with outcomes *2.2 and 3.1]*		*Yr. 1: - Yr. 2: 80 Yr. 3: 80 Yr. 4: 40 (EoP): In total, at least 200 MAF staff trained on forecast application (50 ToT at national, 150 provincial, and district; at least 80 women)*		It is a repeat. This indicator has already been covered above in this Table

Output 1.2.1

Most of the activities of output 1.2.1 have been completed successfully and the target value for the indicators achieved, except for Indicator 1.2.1a (Standard Operating Procedure for CAgMD) and Indicator 1.2.1b (Number of guidelines). At the time of MTR, SOP has already been submitted to the Ministry level for revision and approval. Although achievement of the target for Indicator 1.2.1a is delayed, achievement of the target by the end of the project is likely. Regarding Indicator 1.2.1b (Number of guidelines), against the EOP target of 4, at the time of MTR, various booklets/guidelines were under preparation. Achievement of the target for Indicator 1.2.1b is also likely by the end of the project.

Output 1.2.2:

A number of trainings were provided by the SAMIS project. However, the training abroad could not be accomplished due to travel restrictions (due to COVID-19). The trainings imparted includes the following;

- Fundamental GIS analysis
- Basic Python and R
- Advanced Python and R
- Advanced climate modeling
- English course
- Graphic designing
- Climate Downscaling Training
- How to use and install the station's equipment
- Training on LaCSA, Questionnaire, AWS cleaning and maintenance
- Training on climate change management in agriculture
- Training Programme for using of ADCON Instruments to DMH

- Training on Agro-meteorology and Questionnaire 1
- Training on Agro-meteorology and Questionnaire 2

In total 267 males and 91 females participated in these trainings. Lower participation by females in the trainings is due to lower number of women employed in the government institutions.

Based on the progress for Output 1.2.1 and Output 1.2.2, the **progress towards results for Outcome 1.2 is rated as Satisfactory.**

Progress towards results – Component 2, Outcome 2.1

Component 2: Strengthening institutional and technical capacity for monitoring and analysis of agriculture production systems and development of Land Resources Information Management Systems (LRIMS) and Agro-Ecological Zoning (AEZ).

Outcome 2.1: Integrated Land Resources Information Management System (LRIMS) and high-resolution Agro-Ecological Zones (AEZ) and agriculture production Systems at Risk (SAR) developed based on agricultural resources (climate, land, soil, water and crops)

Table 10: Progress towards results: Component 2, Outcome 2.1

Expected Outcomes and outputs	Indicators[23]	Baseline	Target	Status and Rating[24] at PIR-2020	Status at MTR and Rating
Outcome 2.1: Integrated Land Resources Information Management System (LRIMS) and High resolution Agro-Ecological Zones (AEZ) and agriculture production Systems at Risk (SAR) developed based on agricultural resources (climate, land, soil, water and crops)	**Indicator 2.1** Number of information systems available	Several scattered information systems based on partners activities, no dedicated information systems for the comprehensive structure of the MAF and for agriculture MAF ICT Strategy in place	Yr.1: Assessment and scoping Yr. 2: Design and development Phase Yr. 3: Implementation phase Yr. 4: Evaluation phase (EoP): At least 2 new systems developed and delivered	S The LRIMS information system is available since the first year of project implementation and is about to be improved A multiplicity of spatial and tabular datasets is made available to the project and to upload in LRMIS The preparation of soil and climate scenarios maps was delayed, but is now proceeding well. The land cover map is finalized. The AEZ calculation is starting. The AEZ GIS software is finalized.	S (Please see the description at the end of the Table
	ATAM Indicator 2.1.1 Relevant threat information disseminated to stakeholders on a timely basis (Yes/No)	*0 = No*	*Yr.1: -* *Yr. 2:* *Yr. 3:* *Yr. 4: 1= Yes* *(EoP): 1= Yes*	Not reported in the PIR R*eported in tracking tool* *1= Yes*	

[23] Numbering of indicators has been done at MTR for easy reference. . Some modifications in the log-frame were done at the time of Project Inception, these are highlighted. At the time of project inception some of the indicators were added from AMAT, *these are marked in italics.*

[24] Self-Assessment by the project team. For the AMAT indicators the status is based on the assessment by the project team as provided in the Tracking Tool completed at the time of MTR

Expected Outcomes and outputs	Indicators[23]	Baseline	Target	Status and Rating[24] at PIR-2020	Status at MTR and Rating
	ATAM Indicator 3.2.1 Policy environment and regulatory framework for adaptation-related technology transfer established or strengthened (Score)	*1 = No policy*	Yr.1: - Yr. 2: Yr. 3: Yr. 4: 2= *Discussed and formally proposed* (EoP): *2= Discussed and formally proposed*	Not reported in the PIR R*eported in tracking tool* *3= Proposed, but not yet adopted*	
Output 2.1.1: Land Resources Information Management System (LRIMS) and customized applications designed, developed, tested and delivered with computing facilities for monitoring and assessment of land suitability	**Indicator 2.1.1a** Number of dedicated systems available for LRIMS	No dedicated system available with DALAM	Yr.1: Feasibility Yr. 2: Data collection and synthesis Yr. 3: Analysis and development Yr. 4: Evaluation of LRIMS system (EoP): LRIMS for Lao PDR available	80% 2 new systems developed, one under refinement	LRMIS system is available at the URL: http://52.77.158.217/ and has two main tabs for AEZ and SAVA.
	Indicator 2.1.1b Number of customized application software delivered	No customized application software available	Yr.1: - Yr. 2: - Yr. 3: At least 2 customized software Yr. 4: Testing of the software packages EoP: At least 2 customized applications / software delivered	80% 2 new systems developed, one under refinement	1) A Python Package tool for AEZ (PyAEZ) providing a standard framework for land resource inventory and appraisal adhering to the established FAO Land Evaluation Framework was developed 2) A set of scripts in python and NCL languages for climate Downscaling were provided by AIT
Output 2.1.2: Available data and information on land, soil, water, crops and socio-economics synthesized and National-Agro-Ecological Zoning (NAEZ) and Information Portal developed, tested and delivered	**Indicator 2.1.2a** Number of categories of data available in the database	Data available in paper form and fragmented within MAF	Yr.1: Digitization of data sets (if required) Yr. 2:Integration of data into the information systems Yr. 3: Testing and evaluative Yr. 4: Refining EoP: major categories of data integrated into the database	70% New data under preparation: -Soil map under finalization -Land cover map ready -Climate downscaling map under finalization -AEZ calculations starting	Collection and synthesis of available data, including soil, crop/land cover map, climate downscaled maps, and national vulnerability dataset was done.
	Indicator 2.1.2b National AEZ developed and available for use	No AEZ methodology adopted at national level for multiple cropping systems, only small area are covered, or main crops only are covered (multiple rice systems, maize, rubber, cassava, sugarcane), or low resolution is used.	Yr.1: 0 (model parameterization through local and national level activities) Yr. 2: 1 exsists and is online Yr. 3: 1 (model synthesis & integration) Yr. 4: 0 (evaluation) EoP: National AEZ methodology adopted and used		Development of national AEZ has been delayed mainly due to the delay in climate and AEZ part as described in June-Dec 2019 PPR. Future CC scenarios and downscaling are finalizing at the time of MTR.
	Indicator 2.1.2c Data and information	GIS unit exists but online spatial	Yr.1: - Yr. 2: 1 exists and is online		Output 2.1.1 LRIMS can serve as the on-line information portal.

Expected Outcomes and outputs	Indicators[23]	Baseline	Target	Status and Rating[24] at PIR-2020	Status at MTR and Rating
	portal hosted by relevant institution	information system is not available with DALaM	Yr. 3: - Yr. 4: 1 is hosted by relevant institution EoP: 1 spatial information system functioning and accessible		
Output 2.1.3: Impact scenarios of water availability, crop yield and socio-economics for all major agro-ecological zones assessed and adaptation strategies developed	**Indicator 2.1.3a** Number of agro-ecological zones having scenarios of physical, biophysical and socioeconomics	Agro-ecological zoning did not consider a comprehensive national assessment using national data	Yr.1: Analysis for development of agro-ecological zones Yr. 2: Development of impact scenarios Yr. 3: Validation of agro-ecological zones data and information Yr. 4: Delivery of information products EoP: scenarios available for at least 7 major production zones prioritized by MAF	60% Models and systems developed Calculation starting Expected completion date: Q1 Y5 (significant delay might require no cost extension)	Achievement of this Output is delayed, mainly due to delay in NAEZ. Since March, 2021, DALAM has started producing the AEZ maps and thus the requested no-cost extension would allow the accomplishment of this activity, if DALAM puts more efforts on this activity.
	Indicator 2.1.3b Number of policy/planning processes used the climate change impact scenarios	Low resolution scenarios are being used for NAPA, National Communication and relevant land suitability classifications Some project is producing high resolution datasets	Yr.1: - Yr. 2: 2 Yr. 3: 1 Yr. 4: 1 EoP: 4 new scenarios used for 3rd national communication or other relevant national and local documents	0	Achievement of this Output is delayed, mainly due to delay in NAEZ.
	AMAT Indicator 3.2.2.1 No. of policies developed or strengthened		Yr.1: - Yr. 2: 2 Yr. 3: - Yr. 4: - EoP: *Scenarios included in Policies/Plans/By laws and proposed to competent authority*	Not reported in the PIR R*eported in tracking tool* *0*	
	Indicator 2.1.3c Number of vulnerability and risk analysis and reports that use LRIMS and NAEZ information	Currently available risk and vulnerability products are with low resolution, not updated, too generalized or not harmonized with the full set of agricultural data available. One national vulnerability assessment produced by international partners might serve as input	Yr.1: Information collected Yr. 2: Models and scenarios developed Yr. 3: Vulnerability and risk analysis Yr. 4: Maps, databases, reports produced EoP: New vulnerability and risk profiles available with high resolution	90% vulnerability analysis 1 national level vulnerability assessment under finalization 1 national level risk and vulnerability assessment under finalization	One national level risk and vulnerability assessment are ongoing. This activity is mainly being done by CIAT. The livelihood maps by CIAT, corresponds to SAVA. The project is producing a national data base on rural livelihoods.
	AMAT Indicator 2.1.1.1 Updated risk and vulnerability assessment		*Yr.1: -* *Yr. 2: -* *Yr. 3: -* *Yr. 4: 1* *EOP: 1 Vulnerability assessment*	Not reported in the PIR R*eported in tracking tool* *1= Yes*	Achieved

Expected Outcomes and outputs	Indicators[23]	Baseline	Target	Status and Rating[24] at PIR-2020	Status at MTR and Rating
	AMAT Indicator 2.1.1.2 Risk and vulnerability assessment conducted		*Yr.1: -* *Yr. 2: -* *Yr. 3: -* *Yr. 4: 1* *EOP: 1 Risk and vulnerability assessment*	Not reported in the PIR R*eported in tracking tool* *1= Yes*	Achieved

Most of the outputs and activities for Outcome 2.1 have been carried out as originally planned. LRIMS and software were developed successfully and running. Relevant activities for refining the system are going on. **The progress towards achievement of output 2.1 is rated as Satisfactory.**

Progress towards results – Component 2, Outcome 2.2

Component 2: Strengthening institutional and technical capacity for monitoring and analysis of agriculture production systems and development of Land Resources Information Management Systems (LRIMS) and Agro-Ecological Zoning (AEZ).

Outcome 2.2: Technical capacity developed for sustained operation and use of LRIMS, SAVA, AEZ and agriculture production Systems at Risk for policy formulation and adaptation planning in agriculture sector

Table 11: Progress towards results: Component 2, Outcome 2.2

Expected Outcomes and outputs	Indicators[25]	Baseline	Target	Status and Rating[26] at PIR-2020	Status at MTR and Rating
Outcome 2.2: Technical capacity developed for sustained operation and use of LRIMS, SAVA, AEZ and agriculture production Systems at Risk for policy formulation and adaptation planning in agriculture sector	**Indicator 2.2** MAF/ DALaM staff trained to maintain and provide or apply LRIMS/ NAEZ information (gender disaggregated)	0 female 0 male Some DALaM senior staff know the AEZ theoretical concepts	Yr.1: - Yr. 2: 15 female, 35 males Yr. 3: 15 female, 35 males Yr. 4 (EoP): -	HS > 180 staff trained in a multiplicity of advanced GIS systems including LRMIS, and AEZ and initial training in SAVA including vulnerability assessment and participatory mapping. Additional trainings on SAVA and anticipatory governance are ongoing.	S (Please see description at the end of the Table
Output 2.2.1: Training resources on LRIMS, Agro-Ecological Zoning, SAVA scenario development and selection of main indicator developed and training programme conducted	**Indicator 2.2.1a** Number of training programmes organized	No training organized on the topics relevant to the component	Yr.1: - Yr. 2: 5 Yr. 3: 8 Yr. 4 (EoP): 4	100% (67 females and 237 males) • Participatory Mapping of Agricultural Livelihoods and Identification of Climate Risks for Establishing Priorities for Climate Services in Lao PDR (31 females, 164 males) • Presentation of The SAMIS status report for DALAM staff (34 females and 51 males). • Training Advance use of ArcGIS (Network analysis and 3D analysis (11 females and 18 males). • Training Crop Area Mapping and Production Modelling using Satellite and ArcPy and Biomass Estimation by AIT C2 (9 females and 23 males).	Various trainings for LRIMS and NAEZ were organized both on-line and off-line.

[25] Numbering of indicators has been done at MTR for easy reference. . Some modifications in the log-frame were done at the time of Project Inception, these are highlighted. At the time of project inception some of the indicators were added from AMAT, *these are marked in italics.*

[26] Self-Assessment by the project team. For the AMAT indicators the status is based on the assessment by the project team as provided in the Tracking Tool completed at the time of MTR

Expected Outcomes and outputs	Indicators[25]	Baseline	Target	Status and Rating[26] at PIR-2020	Status at MTR and Rating
				• Training spatial Analyst and Geospatial databases in ArcGIS with AIT (10 females and 23 males).	
	Indicator 2.2.1b Number of staff from MAF/ MONRE trained	Very few staff from NAFRI trained and undertaking on crop modelling	Yr.1: - Yr. 2: 25 Yr. 3: 25 Yr. 4 (EoP): -		Core staff of DMH, DALaM and NAFRI including 64 females and 120 males participated in the trainings.
	Indicator 2.2.1c Number of training manuals available for further use	No standard training packages available	Yr.1: - Yr. 2: 1 Yr. 3: 1 Yr. 4 (EoP): -		Training materials and reports are available
Output 2.2.2: Capacity development resources on assessment of impact scenarios and adaptation strategies developed based on revised LRIMS, SAVA, NAEZ and integrated into the major agriculture development policies and plans	**Indicator 2.2.2a** Number of relevant adaptation strategies identified and documented	Individual adaptation practices are identified and demonstrated	Yr.1: - Yr. 2: 10 Yr. 3: 10 Yr. 4 (EoP): 5	25% Initial discussion ongoing in MAF at multiple level and promising co-financing activities under development ***Expected completion date: Q2 Y5 (significant delay might require no cost extension)***	Delayed. National policy expert was hired to identify relevant policies and plans to integrate newly developed information.
	Indicator 2.2.2b Number of MAF staff trained on new/innovative adaptation strategies	Staff trained depending on their role in projects (project-based training)	Yr.1: - Yr. 2: 25 Yr. 3: 25 Yr. 4 (EoP): -		Trainings were conducted for 8 weeks with 20 hours online trainings with 25 participants from MAF
	Indicator 2.2.2c Number of policies and plans prioritized the new adaptation strategies	Matrix of adaptation strategies aligned with national agriculture policies are not available	Yr.1: - Yr. 2: 2 Yr. 3: 2 Yr. 4 (EoP): -		Delayed. Through the D4P initiative, SAMIS has started discussing with the Department of Policy and Planning about innovative policy schemes at national and local level.

Most of the activities were performed as scheduled and the numbers of training programs, trained staff and training manuals for the output 2.2.1 over-performed the project target. Different trainings provided under this Output include the following:

- Training on Fundamental GIS Analysis
- Training on Python and R Programming for Geoprocessing (Raster & Vector)
- Training on Crop Area Mapping and Production Modelling Using Satellite Data
- ArcPy and Biomass Estimation
- Spatial Analyst and Geospatial Databases in ArcGIS
- Advance use of ArcGIS (Network Analysis and 3D analysis)
- Weather Research and Forecast (WRF) model for Downscaling Climate data by AIT
- Foresight methods and SAMIS related decision support scenarios development by UU
- AEZ conceptional methodology
- Participatory Mapping of Agricultural Livelihoods and Identification of Climate Risks for Establishing Priorities for Climate Services in Lao PDR

The effectiveness of the training could not be ascertained during the MTR, except for a casual question during the interaction to some of the trainees about the effectiveness of the training. It is important to note that some of the trainings (particularly those by the international faculty/trainers) which were to be conducted either in the form of actual demonstration/hands-on mode had to be organized in the online format, due to COVID-19 pandemic.

During the mission some of the participants in the trainings shared the difficulties faced by them during the training. In some of the cases the language issues (trainings were conducted in English language) further complicated the situation. Although in most of such cases expert translators were on board to help, it helped only to a limited extent. It was pointed out that it would have helped, in case the training material would have been provided in the Laos language.

Number of training manuals have been produced by the project (Indicator 2.2.1c), which are available for further use. However, these are in the English language. It is recommended that wherever possible the versions of these manuals in Laos language be produced, this will increase the useability of these manuals.

Output 2.2.2 has been delayed as a consequence of the delay of the output 2.1.3. **At an aggregate level the progress towards achievement of results for Outcome 2.2 is rated as Satisfactory.**

Progress towards results – Component 3, Outcome 3.1

Component 3: Knowledge management and dissemination of information and lessons learned for local application, planning, monitoring and evaluation

Outcome 3.1: Knowledge and information sharing for local application, agriculture and food security planning and programming and project outcomes/outputs monitored and evaluated to ensure sustainability

Table 12: Progress towards results: Component 3, Outcome 3.1

Expected Outputs	Indicators[27]	Baseline	Target	Status and Rating[28] at PIR-2020	Status at MTR and Rating
Outcome 3.1: Knowledge and information sharing for local application, agriculture and food security planning and programming and project outcomes/outputs monitored and evaluated to ensure sustainability	*Indicator 3.2.2 Strengthened capacity to transfer appropriate adaptation technologies, disaggregated by gender (Score)*	*1 = No capacity*	Yr. 1: - Yr. 2: - Yr. 3: - Yr. 4: 2 EOP: 2= *Moderate capacity (50-75%)*	Not reported in the PIR *Reported in tracking tool* *0= No*	Progress is Satisfactory Level of capacity achieved could not be ascertained
	*AMAT Indicator 2.2.1 No. and type of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability [*to be summed up with outcomes 1.*2 and 2.2]*	0	Yr. 1: - Yr. 2: - Yr. 3: - Yr. 4: 2 EOP: 2= *1 Planning 1 Research (Staff trained and capacity improved*)	Not reported in PIR *Reported in Tracking Tool as follows:* • *monitoring/forecast capacity:23F, 56M* • *capacity development: 162F, 562M* • *improved resilience of agricultural systems: 5480F, 5404M* • *community based adaptation: 61F, 301M* • *livelihoods 16418F, 16264M*	• DALaM, PPC, DPI - agriculture and forestry - 3 • DCC - Env Disaster and Climate Change - 1 • DMH - Meteorology and Hydrology - 1 • DoPC - Planning and Development -1 • NAFRI – Research - 1 • Lao telecom – Telecommunication - 1

[27] Some of the modifications in the log-frame were done at the time of Project Inception, these are highlighted. At the time of project inception some of the indicators were added from AMAT, *these are marked in italics.*

[28] Self-Assessment by the project team. For the AMAT indicators the status is based on the assessment by the project team as provided in the Tracking Tool completed at the time of MTR

Expected Outputs	Indicators[27]	Baseline	Target	Status and Rating[28] at PIR-2020	Status at MTR and Rating
				• *ICT and information dissemination: 3F,9M*	
	Indicator 3.1a Framework for knowledge-sharing and packaging of lessons learned and experiences developed/ improved	Obsolete or no sharing and dissemination of knowledge and information platform available	Yr.1: - Yr. 2: - Yr. 3: - Yr. 4: 1 EOP: 1	HS Result = 1= Yes M&E plan was done KI is satisfactory 2019, 4 FFS rainy season + 2 villages FFS dry season in Savannakhet and 2 villages FFS rainy season in LuangNamtha 2020, 2 villages FFS rainy season in Savannakhet and 2 villages in LuangNamtha 2019, 20 Loudspeaker sets for awareness raising activity distributed to 20 villages, 29 tablets and 9 projectors to 20 villages + 2 PALaM and 7 DAFO 2020, 10 Loudspeaker sets for awareness raising activity, distributed 10 tablets	The main platform being used for knowledge sharing and sharing of lessons learned is the website of FAO (http://www.fao.org/in-action/samis/en/) At local level, the weather, climate, land resources, and climate-change impact information is being disseminated to farmer groups through established farmer field schools (FFS). This is complemented by the development of interactive communication channels such as mobile application, loudspeaker, TV and radio programming etc.
	AMAT Indicator 2.1.1 Relevant threat information disseminated to stakeholders on a timely basis (Yes/No)	*0 = No*	Yr.1: - Yr. 2: - Yr. 3: - Yr. 4: 1 = Yes EOP: 1 = Yes	Not reported in PIR *It is a repeat*	Threat information pertaining to agro climatic conditions is disseminated to farmers at select pilot locations.
	Indicator 3.1 b Trainings and workshops delivered	No relevant Workshops on climate change adaption	Yr.1: 4 Yr. 2: 6 Yr. 3: 3 Yr. 4: 3 EOP: 19	Not reported in PIR	The main media used for training of the farmers is the FFS, which is being piloted at two districts (Champhone and Sing) Please also see Indicator 3.1.1a in this Table)
	Indicator 3.1 c Number of training materials, products, publications, guidelines, books, handbooks, flyers, web-sites, etc.	Limited products, guidelines, publication and information related to climate change adaption issues.	Yr. 1: 1 web-site Yr. 2: 5 training materials Yr. 3: 5 training materials, publications, maps Yr. 4: 5 training materials, publications, maps, guidelines EOP: 16	Not reported in PIR	As reported in the PPR for June 2020, these activities have been impacted by issues linked to FAO OCC approval and the complexity of FAO rules on publications. Few booklets and training programmes have reached the final stage of publication. One video has been finalized is awaiting approved by OCC. Some of the best practices, key lessons, knowledge products have been disseminated through project website (created on the FAO website). Some of the events organised by the project did get coverage in newspaper articles, radio and

Expected Outputs	Indicators[27]	Baseline	Target	Status and Rating[28] at PIR-2020	Status at MTR and Rating
					newspapers. Apart from this the national counterpart (officials of MoNRE and MAF) have been disseminating lessons learned from the project at region and international forums **Considering that the project is almost at completion of its implementation, this activity needs prioritisation**
	Indicator 3.1 d Framework for knowledge-sharing and packaging of lessons learned and experiences developed/ improved	Obsolete or no sharing and dissemination of knowledge and information platform available	Yr. 1: - Yr. 2: - Yr. 3: - Yr. 4: 1 EOP: 1	Not reported in PIR	The main platform being used for knowledge sharing and sharing of lessons learned is the website of FAO (http://www.fao.org/in-action/samis/en/)
Output 3.1.1: Local application of climate information and location specific adaptation strategies facilitated through Farmer Field Schools (FFS) in close coordination with climate adaptation in wetland areas (CAWA) project activities	**Indicator 3.1.1 a** Number of FFS organized and implemented	No FFS in relation to climate change adaptation ongoing, , NAFRI works with dynamic crop calendars in 7 villages	Yr. 1: - Yr. 2: 10 (6) Yr. 3: 10 (7) Yr. 4: - (7) EOP: 20 FFS with climate component implemented	85% *PIR 2018* • Joint CAWA meeting and mission in Savannakhet • Multiple field visits to define collaborations and field level data sharing *PIR 2019* • 6 working farmer field schools in progress (4 FFS joint with CAWA) • Awareness raising activity in 20 villages (includes 6 villages of FFS), 5 provinces *PIR 2020* • 4 new FFS in progress • Continuing awareness raising activity in 20 villages and support new 6 villages	6 FFS have been carried out along with 7 FFS is the NAFRI villages Under the SAMIS project FFS is being piloted at two locations (Savannakhet and Luangnamtha(As informed by the project team, FFS is not a formal method accepted by MAF. Due to this reason the project team is largely using loudspeakers at five pilot locations. (Savannakhet ,Luangnamtha, Vientiane P., Saravan Champasak)
,	At local level, number of people that has increased knowledge of CC at local level through the piloting of information	Number of farmers adware of climate change adaptation technologies and information system (to be assessed with CAWA)	Yr. 1: 0 Yr. 2: 400 Yr. 3: 480 Yr. 4: 400 EOP: 1280	Not reported in PIR	Piloting of the climate information is being done through FFS and through dissemination of the LaCSA bulletin Total 5817 Households have benefited thus far.
	AMAT Indicator 3.2.1.1 No. of individuals trained in adaptation-related technologies		Yr. 1: 0 Yr. 2: 400 Yr. 3: 480 Yr. 4: 400 EOP: 1280	Not reported in PIR	Same as above
	Indicator 3.1.1 b Number of facilitators trained (gender disaggregated)	0	Yr. 1: 10 total Yr. 2: 10 (3 female); 20 (50% female) Yr. 3: 10 (3 female); 20 (50% female) Yr. 4: -	Not reported in PIR	43 facilitators (8 females) Although the target has been achieved, the participation by females has lacked

Expected Outputs	Indicators[27]	Baseline	Target	Status and Rating[28] at PIR-2020	Status at MTR and Rating
			EOP: 20 (6 female); 40 (50% female)		
	AMAT Indicator 2.2.1.1 No. of staff trained on technical adaptation themes (disaggregated by gender) [to be summed up with outcomes 1.*2 and 2.2*]	0	Yr. 1: - Yr. 2: 20 Yr. 3: 20 Yr. 4: - EOP: 40	Not reported in PIR *It is a repeat*	
	Indicator 3.1.1 c Number of FFS climate forecast curricula available for up-scaling	No FFS curriculum with climate information available 1 Save & Grow curricula available for rice	Yr. 1: - Yr 2: 1 Yr 3: - Yr 4: - EOP: One FFS curriculum with climate forecast information and relevant adaptation practices developed and tested	• 2 FFS curriculum for Champhone and Sing district developed	One FFS agromet curriculum for rice prepared, booklet under finalization
	Package of lessons learned	0	Yr. 1: - Yr. 2: - Yr. 3: 1 Yr. 4: - EOP: 1 Package	Not reported in PIR	As reported in the PPR for June 2020, these activities have been impacted by issues linked to FAO OCC approval and the complexity of FAO rules on publications.
	Output 2.1.2.1: Systems in place to disseminate timely risk information	0	Yr. 1: - Yr. 2: - Yr. 3: 10 Yr. 4: - EOP: 10	Not reported in PIR *It is a repeat*	
Output 3.1.2: Knowledge and information sharing workshops conducted and best practices, key lessons disseminated via publications, project websites and others to facilitate wider awareness and utilization in other climate sensitive sectors	**Indicator 3.1.2 a** Number of knowledge and information-sharing workshops organized	Some on-going/past project already capture the linkage of climate info services and land resources information systems, but there is no harmonization on the results up taking to the planning There are limited products and publications available. Previous GEF project has produced training materials that are available online	Yr. 1: 4 Yr. 2: 6 Yr. 3: 6 Yr. 4: 3 EOP: At least 5 (19) knowledge sharing workshops organized and information sharing meetings conducted	100% ***Knowledge sharing workshops organized:*** 1. Focus group discussion at 6 villages (9 females and 46 males), 3 districts in Luangnamtha province 2. Drafting and continuous revision of an KM strategy 3. Production of multiple awareness assessment products (leaflet, video, web page, publications) 4. Consultation workshop in Saravan 5. Internal Workshop LRIMS 6. PSC2 7. Use of historical meteo data 8. PSC3 9. SOP meeting 1 10. Co-publishing agreement signature event, FFS trainers master by Indonesian and Nepalese expert 11. FFS curricula in Champhone 12. FFS curricula in Sing 13. SOP in Vientiane province 14. SOP in Bokeo province 15. Agro-meteorology news	Most of the events, mentioned in the PIR against this indicator are not truly knowledge-sharing workshops. However, the project used the available opportunity in these events to disseminate the information by increasing the number of participants. For example, the participation in the PSC was also there by the stakeholders other than the members of the PSC The project supported participation and presentations at the global conferences/events **A bit of catching up is needed for this activity.**

Expected Outputs	Indicators[27]	Baseline	Target	Status and Rating[28] at PIR-2020	Status at MTR and Rating
				16. PSC 4 17. Using LaCSA for Agro-Meteorology Services 18. Training on Agro-met and questionnaire 19. The training on Lacsa, questionnaire, AWS cleaning and maintenance	
	Indicator 3.1.2 b Number (training materials, products, publications, guidelines, books, handbooks, flyers, web-sites, phone application, radio, T.V, awareness raising event/activities with community) of awareness raising and information sharing publications produced and disseminated	There are limited products and publications available	Yr. 1: 1, - Yr. 2: 3, 6 Yr. 3: 4, 5 Yr. 4: 2, 5 EOP: At least 10 (16) publications printed and available for distribution	***Publications printed and posted on project websites***: 1. M&E Plan 2. Leaflet of SAMIS 3. Leaflet of C1 4. Leaflet of C2 5. Leaflet of C3 6. Assessment book 7. Training need assessment book 8. Land cover mapping poster 9. Soil Mapping poster 10. LaCSA poster 11. SAMIS concept 12. SAMIS video 1 13. SAMIS Video 2 (not yet approved by OCC) 14. Land cover mapping book 15. LaCSA booklet 16. LRIMS poster 17. Agro-met News School Poster 18. ArcGIS training materials 19. Training need assessment book of C2	Some of the best practices, key lessons, knowledge products have been disseminated through project website (created on the FAO website). Some of the events organised by the project did get coverage in newspaper articles, radio and newspapers
Output 3.1.3: Project M&E system established to monitor activities and outputs systematically at all levels (national, provincial and local) and outcomes evaluated	**Indicator 3.1.3 a** M&E plans established for on-going use within each partner institution (DALaM & DMH)	Departments of Planning and Cooperation, Inspection, Finance monitors MONRE activities	Yr. 1: 1 Yr. 2: 2 Yr. 3: 2 Yr. 4: 1 EOP: At least 6 events organised	75% • LOA of DOF and DoPC • Design tablet application and excel to monitor activities finalized • M&E plan finalized.	LOAs contract was signed with DOF and DoPC of MONRE to monitor progress of project activities and log frame and feedback provided. As mentioned in the project document, this Output was more or less to follow the detailed M&E plan of the project as specified in the M&E section of the project document (section 4.6) The project has continued undertaking the M&E as mentioned in the project document
	Indicator 3.1.3 b Number of national, provincial and local level monitoring carried out by PMU and CMUs		Yr. 1: 2 Yr. 2: 2 Yr. 3: 2 Yr. 4: 2 EOP: At least twice in a year monitoring visits organized and feedback provided	• 2 monitoring visits but they are not report on time • 5 PSC events organized	The Project Steering Committee (PCS) meetings are not truly the monitoring visits Monitoring visit to the pilot sites are being undertaken regularly

Most of the activities were performed as scheduled. The area which requires incremental efforts is the organisation of workshops for dissemination (Indicator 3.1.2a). One of the other areas of concern is the

publication of lessons learned, knowledge products, training materials etc. (Indicator 3.1c). This needs expedition of the approval process at the level of FAO.

At an aggregate level the progress towards results for Outcome 3.1 is rated as Satisfactory.

The progress towards results for the project at an aggregate level is rated as Satisfactory.

APPENDIX 9: AUDIT TRAIL

Following comments and suggestions were received on 21 May 2021 on the first draft of the mid-term review report for the project 'Strengthening Agro-climatic Monitoring and Information Systems (SAMIS) to improve adaptation to climate change and food security in Lao People's Democratic Republic' (GCP /LAO/021/LDF), GEF ID 5462. First draft report submitted on 27th April 2021. The following table also provides details of the response/action for each comment and suggestions received.

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
FAO Laos	1	Executive Summary	The executive summary is usually the part that is most read, so it's important that it is a good, credible review of the MTR's findings, conclusions and recommendations. At present, it needs more work to bring it up to standard	There is no disagreement that the executive summary should be a credible review of the MTR's findings. It is a challenge to include everything in the executive summary due to the restrictions on the length of the executive summary. Thus, all the important aspects need to be covered in brief. In this regard, it is important to note that, as per the guide for MTR of FAO-GEF projects, the 'Executive Summary should be approximately 10–15 percent of the length of the main Report. The guide also mentions that the main MTR report should be brief (no longer than 40 pages, excluding summary and annexes) (please see para 90 of the guide). This put the restriction on the length of the 'Executive Summary to 4-6 pages. The 'Executive Summary' in the present case is already more than this limit. Still, based on this comment and other comments, more text has been added now, and text modified to improve the readability and understanding of the MTR report.
Programme Officer at FAO	2	Executive Summary Para ES1, on the wordings "is being implemented by FAO in Lao PDR"	Replace being implemented by 'being executed'	It is an individual choice of words. It may be noted that the "Guide for planning and conducting mid-term reviews of FAO-GEF projects and programs' uses the word 'implemented' (please see para 1 of the guide)

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
				Clarified as above, no changes were made in the MTR report
FAO Laos	3	Executive Summary	Acronyms should be avoided in the Executive Summary and the first mention should give the full text.	Agree with the suggestion to mention the full expanded form of an acronym when first used. Not in agreement with the suggestion of not using acronyms in the Executive Summary. Changes in the MTR report made.
Programme Officer at FAO	4	Executive Summary Para ES1, on the wordings "As per the requirements for all full size the GEF supported projects, a Mid Term Review (MTR) of the project has been carried out"	Replace 'supported' by 'funded'	Suggestion accepted Required change done
FAO Laos	5	Executive Summary Para ES1	The English in this report needs a good edit as there are errors or text is unclear or ambiguous in many places.	Changes had been made to correct the typo errors and improve readability.
Programme Officer at FAO		Executive Summary Para ES1 On the statement "With an extension of six months the operation closure of the project is now scheduled at November 2021"	NTE in FPMIS is now 30 June 2022. Was there an extension processed?	During interaction with the project team, it was gathered that an extension to the project has been requested. As per the information shared with the MTR team an extension of one year has been requested beyond 30 June 2021. With this extension, the project will be able to work up to Dec 2021, thereafter a period of six months will be available for the official closure of the project. This information, which was shared by the project team in now included in the report. In case there is any further update on this, please share the same, further changes will be made accordingly.
Programme Officer at FAO	6	Executive Summary Para ES1 On the statement 'The target audience for the MTR are the funding agencies, GEF Operational Focal Point, project partners and beneficiaries, FAO Country Office (FAO CO)'	How about the PMU, PSC, national stakeholders?	More target audience is added to the list
Programme Officer at FAO	7	Executive Summary Para ES3 On the text "The project is being implemented by FAO (as	Change to 'The project is being executed by FAO (as GEF agency) under the Direct Execution (DEX) Modality'	Accepted Changes made

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
		GEF agency) under the Direct Implementation Modality (DIM),		
FAO Laos	8	Executive Summary, Main Findings Section	This section needs to be restructured according to the criteria the MTR uses to assess the project, namely: relevance, effectiveness, efficiency, factors affecting performance, sustainability and cross-cutting issues. What is presented here is almost entirely a cut and paste of a table of progress on outcome achievement from the main text. This is not sufficient.	In the present version of the report, this section is focused on progress towards achievements of results and the impacts. Whereas, within the 'Executive Summary' the Section on 'GEF Summary Table' was used for providing the summary of finding on the GEF criteria like relevance, effectiveness, efficiency, factors affecting performance, sustainability and cross-cutting issues. This approach was taken purely to limit the length of the 'Executive Summary' and to avoid repetition of text within the 'Executive Summary'. Not repeating the text within the report is one of the guidance provided in the Guide of MTR for FAO-GEF projects. There are no restrictions regarding repeating the contents from the main report in the 'Executive Summary'. Although, not convinced of repeating the text within the 'Executive Summary', based on this comment more text is added on the MTR criteria. Please also see the reply to comment number 1.
FAO Laos	9	Executive Summary Table 1	The information in this table needs to be presented as a narrative, not a table copied from the main report. Also, importantly, the summary of the 'effectiveness' of the project should be a summary of the project's delivery of its activities, outputs, outcomes and objectives, not just the outcomes.	It may be appreciated that this Table, apart from the progress towards results, provides information regarding the results framework of the project. The guide for MTR for FAO-GEF projects don't specify that the information here should be presented in narrative. The reason for using the Table for presentation of information is that Tables are good in presenting he information in a concise, and structured manner. This becomes important when lot of information needs to be packed within limited space. Still based on the comment the some of the relevant text

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
				is now moved just after the Table. There are no restrictions regarding reproduction on the information from the main body of the report to the 'Executive Summary.' In the table, while discussing the status at MTR, due consideration is given to the outputs as well, as the assessment of Outputs forms the basis for assessment of Outcomes.
Programme Officer at FAO	10	Executive Summary Table 1 For the rating and assessment for Outcome 1.2 (Indicator 1.2) on the statement 'Most of the activities has been completed successfully and target value for the indicators achieved, except for the Standard Operating Procedure for CAgMD and guidelines for installation of instruments, data coding and maintenance. Number of training sessions were organised for the government officials'	Does this mean that the institutional and technical capacity been strengthened as intended?	As per the procedure, assessment has been done purely based on the target value of the indicators for different Outputs of Outcome 1.2. What is being said here is that the target value of the indicators has been achieved. Please appreciate that achievement of the target value of the indicators, does not necessarily mean that the objectives have been achieved. E.g., attending a capacity building /training session do not necessarily mean that there is an increase in the capacity. Determination of the increase in the technical capacity needs to be ascertained by carrying out a systematic assessment.
Project Coordinator	11	Executive Summary Table 1 For the rating and assessment for Outcome 2.1 (Indicator 2.1) on the statement 'LRIMS and software were developed successfully and running'	LRMIS is not yet ready as of today	This statement is deleted
Project Coordinator	12	Executive Summary Table 1 For the rating and assessment for Outcome 2.2 (Indicator 2.2) on the statement 'However, the effectiveness of the training could not be ascertained during the MTR.	Why where not ascertain? There were many meetings with DALAM?	No assessment regarding the effectiveness of the trainings provided has been carried out by the project. It is not possible to assess the effectiveness of the training by talking to an official during meetings. It is not possible for the MTR team to carry out a systematic examination of the technical skills actually acquired by the trainees.

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
				The impression of the MTR team is that the trainings were not very effective. The basis for this assessment is as follows: • The training need assessment carried out by the project, has identified a number of issues for the trainings to be effective. Such issues include education qualifications of the trainees, lack of understanding of the English language, lack of computer skills, lack of basic understanding of the subject matter. These issues did not get addressed either before the training or in the overall plan for the training. • Consultations with the stakeholders during the MTR clearly pointed out the lack of effectiveness of the trainings e.g., ○ Consultation with AIT (trainers) pointed out that there were limitations on capacity of local staff to understand the issues. Due to this reason topics were sometime changed, and up and down discussions rounds happened many times. For the online training sessions translators were hired by AIT ○ Discussions with DALaM officials said that there were difficulties for the team regarding how to use the program Python and R model ○ Discussions with the officials of DMH pointed out that some trainings were organized in English particularly the online ones, and it was difficult for local staff to understand the contents. It was pointed out that the local staff need more capacity building compared to the national level

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
				○ Discussions with the officials of NAFRI revealed that Long-term training for junior officials is needed through linking to university
Project Coordinator	13	Executive Summary Table 1 For the rating and assessment for Outcome 3.1 (Indicator 3.1a) on the statement 'The main platform being used for knowledge sharing and sharing of lessons learned is the website FAO'	Not true, there is LACSA, the laofab mailing list, and Facebook page	In view of the reviewers, the idea here is knowledge sharing platform for dissemination of knowledge products, lessons learned. The Laofab is a google group whose contents could not be assessed during MTR, also who all have the access to this group could not be confirmed. For the LACSA, the reviewers are of the opinion that LACSA is a product of the project and not a knowledge product/ lessons learnt. The project is using Facebook as one of the methods to disseminate LACSA.
Project Coordinator	14	Executive Summary Table 1 For the rating and assessment for Outcome 3.1 (Indicator 3.1a) on the statement 'At local level, the weather, climate, land resources, and climate-change impact information will be is being disseminated to farmer groups through established farmer field schools (FFS). This is complemented by the development of interactive communication channels such as mobile application, loudspeaker, TV and radio programming etc.	No, the FFS are not targeting a sufficient number of people, so the project steering committee expanded the scope of the project to loudspeakers in Y1. The FFS are not the main scope of the project.	As per the Project Steering Committee (PSC) reports. PCS approved reduction in the number of FFS in the Savannakhet and Champasakh provinces so that it will be possible to work in additional locations. It did not expand the scope of the project to loudspeakers. However, this is not the point of discussion here. Please read the complete sentence, use of loudspeakers is already mentioned.
Project Coordinator	15	Executive Summary Table 1 For the rating and assessment for Outcome 3.1 (Indicator 3.1b)	The following does not look to be properly considered: Tv shows Tv appearances Newspaper articles Presence in the international conferences All this was available in the reports.	Please see Outcome 3.1, it's Outputs and the corresponding activities, in the Project Document. It relates to the training of the farmers and stakeholders at the local level. TV shows, TV appearances, Newspaper articles and presence in international conferences does not relates to it.
Project Coordinator	16	Executive Summary Table 1	The video cannot be finalized due to FAO rules. It will not be finalized	This additional information is now included in the report.

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
		For the rating and assessment for Outcome 3.1 (Indicator 3.1c) On the statement "One video has been finalized and is awaiting approved by OCC"	because the FAO is not available to approve a video covering the needs of the project	
FAO Laos	17	Executive Summary Para ES 5	There needs to be greater presentation in the executive summary of the achievements and failures. Only one is mentioned here	More information about the results of the project is provided in other paragraphs of the executive summary.
Programme Officer at FAO	18	Executive Summary Para ES 5	A summary of relevance, efficiency, factors affecting performance and cross-cutting issues is needed here, and more on sustainability of project results.	It is a repeat comment Please see the response to comment number 8
FAO Laos	19	Executive Summary Para ES 6 On the statement "The results of the project are largely sustainable except for the need to further strengthen the organizational and institutional arrangements"	What needs strengthening exactly?	It is already mentioned that there is a need to strengthen the organization and institutional arrangements. More text provided to clarify this
Programme Officer at FAO	20	Executive Summary On the heading Conclusions	Please include in the ES summary paragraphs on stakeholder's engagement (progress/challenges), Gender-responsive measures and knowledge activities	There is a limitation regarding the length of the Executive Summary. Information regarding stakeholder's engagement (progress / challenges), etc has now been included. Though, this leads to repetition of information and leads to increase in the size of the text.
FAO Laos	20	Executive Summary On the heading Conclusions	Recommendations should follow on from conclusions, although not all conclusions need a recommendation. However, there doesn't appear to be a tight link in this executive summary between the conclusions and the recommendations listed below. What might help is if the conclusions could be numbered (with a separate paragraph for each) and then referenced by the specific recommendations.	
Project Coordinator	21	Executive Summary Para ES 10 (now Para 19) On the statement "Positive impacts due to component 2 will be realized over a period of time"	DALAM has become an authority in spatial studies at national level, and the activities are known internationally. I am not sure about this comment. Positive impacts are demonstrable by the great number of activities DALAM is now implementing with multiple donors.	The term impact is being used in the context of the development objectives of the project (please see the definition of the term 'Impact' in the guide for MTR for FAO-GEF project). Considering that the project is aimed at negating the impacts of climate change on the agriculture sector

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
				these impacts due to component 2 will be realised only over a period of time, when the increased capacity of the government officials/departments would lead to identify the threats of climate change to the agriculture sector and would lead to policy level decisions towards adaptation to the effects of climate change. More text added to provide more clarity.
Project Coordinator	22	Executive Summary Para ES 11	please also mention C2 or the collaboration MONRE/MAF might not be noticed	The comment/suggestion is not clear enough
FAO Laos	23	Executive Summary GEF Rating Table Table 2	This should come after the recommendations section	Yes, in the format provided in the Guide for MTR FAO-GEF projects, GEF Rating Table is placed after the conclusions. However, MTR team considered that a read of the contents of this Table prior to the reading of the conclusions would improve the understanding of the conclusions a bit. In case you have very strong views about it, the Table will be moved after the conclusions section
FAO Laos	24	Executive Summary, Table 2 On Satisfactory Rating for A1. Overall strategic relevance	No, it is not enough just to quote the section. The table needs to present a summary (a few words), especially as no or very little text is presented on most of these criteria above. Please ask the FAO-GEF Coordination Unit for an example of a competed ratings table to help update this one.	The rating for overall strategic relevance is based on the relevance for parameter A1.1, A1.2 and A1.3, thus, it doesn't require a separate text. The section is quoted in accordance with the requirements in the Guide for FAO-GEF projects (please see footnote 9 to Annex 11 of the Guide). Thanks for you're the advice to ask FAO-GEF Coordination Unit for an example of a completed ratings table, it would have been better if you would have organised and shared the best example completed summary table it along with this comment. The Project team did share an 'example MTR' report in your mail. Thanks once again for this. I would like to restrain myself from commenting on the work of a fellow professional, as I am

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
				not sure under what conditions (including the kind of comments from you or others) he or she worked. But just one observation which I would like to share and put on record. The length of the main MTR report is about 40 pages and the Executive Summary of the same is running in 21 pages. I think it is not a good idea to have the Executive Summary running in 21 pages for a report of about 40 pages. The guide for MTR of FAO-GEF projects very clearly mentions the length of the main report to be maximum 40 pages and the Executive Summary to be 10-15% of the Main Report (please also see response to Comment 1).
Project Coordinator	25	Executive Summary, Table 2 On Satisfactory Rating for A1.3. Complementarity with existing interventions	This appears low, see co-financing and collaboration with university, NGO etc	Relevance is not relating to the performance of the project, but its relevance across different attributes like national priorities, existing intervention etc. (please see the MYR Guide for FAO-GEF projects
Programme Officer at FAO	26	Executive Summary, Table 2 On Satisfactory Rating for B1.1. and the statement "The project is on track to achieve its objectives this most of the targets for the Outcome of the project"	kindly rephrase	Correction done
Project Coordinator	27	Executive Summary, Table 2 For the Rating for B1.2. Outcome 3.1 on the statement "The activities are ongoing and are on track except for the activities like organizing the workshops/conferences for dissemination of project results"	I don't understand why the workshops should be missing. What is the reference and the meaning of that? List of workshops held is available in the reports.	Whatever information is available in the reports have been taken into consideration while doing the MTR. Please see Appendix 8, Table 13, Output 3.1.2, Indicator 3.1.2a. The PIR 2020 has considered focus group discussions, drafting and revision of KM strategy, awareness creation products, internal LRIMS, SC meetings, etc as knowledge management workshops. MTR team is of the view that most of the events, mentioned in the PIR against this indicator are not truly knowledge sharing workshops. This is based on

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
				the reading of the text of Output 3.1.2 and the corresponding sections of the 'Project Document"
FAO Laos	28	Executive Summary, Table 2 For the Rating for B1.3	This is not required at the MTR point (I know the MTR was undertaken close to the end of the project but I would suggest this analysis is still left to the Final Evaluation, and just deal with what has actually be achieved to date.	Agreed Correction done
FAO Laos	29	Executive Summary, Table 2 Sustainability of Project Outcomes	No, sustainability uses a different GEF ratings scheme – Likely, Moderately Likely, Moderately Unlikely, Unlikely, and Unable to assess. Please re-rate risks to sustainability using the standard GEF scheme	Agreed Correction Done
FAO Laos	30	Executive Summary, Table 2 Sustainability of Project Outcomes, Rating for D1.3 On the text "Although, the institutional framework for the coordination of the activities would, as such there are not much risk to sustainability"	? Not clear in English – is some text missing?	Correction Done
FAO Laos	31	Executive Summary, Table 2 Rating for E2.2 on the statement "The Project Steering Committee is the key decision-making body at a project strategic planning level"	Yes, but did it function as intended? Any issues? This is just a statement that the PSC was established as proposed in the ProDoc	More text added to clarify this
FAO Laos	32	Executive Summary, Table 2 Rating for E3.1	E3 and E3.1 - Again, this is just a statement that the project is following what was proposed in the ProDoc, not whether it worked or not, and what the challenges were, and it does not say anything about the 'quality of project execution. There is no assessment of their performance	There were no adverse observations, thus there is no mention of it. There is no systematic method for assessment of quality of execution. Thus, MTR team is of the view that specific mentioning needs to be done only in case of any adverse observation. The rating it as provided at MTR is an indicator of the quality for this parameter.
Project Coordinator	33	Executive Summary, Table 2 Rating for E5	This is low compared to reality due to the lack of understanding of collaborations ongoing between C1 and C2	The comment is not clear. Does the comment mean that the rating should be lower, due to lack of collaboration between the government departments responsible for implementation of Component 1 and Component 2 respectively? Or

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
				Does the comment mean that the rating of Satisfactory is lower and should be increased? However, as this relates to "Factors Affecting Performance" (please see the heading for E), the rating of 'Satisfactory' has been provided as no adverse effect due to this parameter was observed.
Project Coordinator	34	Executive Summary, Table 2, on the Moderately Satisfactory rating for E6	This is surprising and not clear Is the list of workshops, publications, articles, tv shows, Facebook been consulted? If this depends on OCC not approving booklets, why SAMIS should be responsible when no help came in many requests of help over the years (can share emails)?	Please also see the response for the comment number 27. Whatever information is available in the reports, have been taken into consideration, which includes TV shows, news items Facebook etc. Please see Appendix 8, Table 13, Output 3.1.2, Indicator 3.1.2a. The PIR 2020 has considered focus group discussions, drafting and revision of KM strategy, awareness creation products, internal LRIMS, SC meetings, etc as knowledge management workshops. MTR team is of the view that most of the events, mentioned in the PIR to some extent qualify to be considered under the category of communication. But can't be considered as knowledge products and workshops. The idea of the MTR is not to held SAMIS of FAO, or for that matter, anyone else, but to rate based on the situation at the time of MTR. The issue of approval by OCC is also mentioned in the report (Please see Table 13 in Appendix 8 of the report)
Project Coordinator	35	Executive Summary, Table 2, on the Rating for E6, on the statement "The project is yet to organise the workshops/conferences for dissemination of the information"	I don't have this clear. Why the conferences done where not sufficient? Why Facebook, media presence, tv shows booths are not reported anywhere? All this was available in the reports.	Please see the reply to the comment number 27 and 34.
Programme Officer at FAO	36	Executive Summary, Table 2, on the Rating for E6, on the statement "The periodic monitoring documents are produced	This is insufficient. Please elaborate	More details are provided in the main report. This is the rating summary Table within the Executive Summary.

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		and submitted regularly. The only shortfall is the delay in the MTR of the project"		Thus, it is difficult to include more details here
FAO Laos	37	Executive Summary, Recommendations	This recommendation, like the others, needs to be made SMARTer. So, for instance, this recommendation talks about the need for a capacity needs (gap) analysis but doesn't say who should undertake this, when, and who will be responsible for organizing it? At a minimum, each recommendation needs to identify who will be responsible and a timeframe for its implementation.	Agreed Additional Columns added to the recommendations Table
Project Coordinator	38	Executive Summary Recommendation 1 On the text "Considering that some of the technical training was imparted by the international specialists in English language, the receptibility of the training imparted was low"	No even one single training was not translated. Please remove	The comment is not clear. Where the recommendation says about translation. Does the comment say trainings were not imparted in English Language? The feedback about the low receptibility is based on consultations with the stakeholders.
Project Coordinator	39	Executive Summary Recommendation 1 On the text "The situation got further complicated as some of the training has to be imparted using online platforms ."	Gov agreed that the training in zoom is better because can be done one day at the time and exercises can be done over time. This is not clear where it came from and should probably be revised	The point of discussion is not, who suggested and who agreed for online training, but the fact that there are issues.
FAO Laos	40	Executive Summary Recommendation 1 On the text "The situation got further complicated as some of the training has to be imparted using online platforms ."	Yet, the ratings for those elements of the project dealing with capacity building (in Outcomes table above – Outcome 1.2 and 2.2) is Satisfactory and seems, from the text later in this report, to have been delivered OK	Delivery of training and getting the desired results from the trainings and capacity building exercises are to different aspects. Delivery of training don't necessarily mean that it has been successful and the participants got trained adequately. The rating has been done purely based on the indicator (number of training sessions/number of participants in the training etc.) and the target for the indicators.
Project Coordinator	41	Executive Summary Recommendation 1 On the text "It is recommended that a rapid assessment be carried out to identify the training gaps and further training and capacity building sessions be organized."	This is a recommendation that might come from local level maybe? There is no such a request from no central level gov. It should be clarified or removed. (Except training for policy making in C2 that is ongoing)	The source of the recommendation is not important. It is important to assess, if the suggested recommendation will benefit or not.

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Project Coordinator	42	Executive Summary Recommendation 1 On the text "To the extent possible local language be used for training, in case it is not possible as least the training material be prepared in the local language."	There has been no training held with no translation, pls remove	Yes, for the online trainings, translators were used and this is dully acknowledged at appropriate places in the report. However, the recommendation here is to translate some of the training materials (like PPT, handouts etc. used in the trainings) in the local language.
Programme Officer at FAO	43	Executive Summary Recommendation 1 On the text "During the mission it was emphasized by the stakeholders that more technical training is needed particularly on agro-met."	This is a finding, please remove from the recommendations and present in a substantiated manner in the findings	The recommendations are required to be supported by rational. This is to provide the rational for the recommendation.
Project Coordinator	44	Executive Summary Recommendation 1 On the text "During the mission, it was emphasized by the stakeholders that more technical training is needed particularly on agro-met."	Which stakeholders?	Please see response to comment number 12
Project Coordinator	45	Executive Summary Recommendation 2 On the phrase "Larger audiences"	Why Facebook and tv show are not considered in this comment?	Existence of Facebook page and TV shows has been considered, wherever appropriate. The delivery platform and target audience for the Knowledge products are different than those which are approached by Facebook Page and TV shows (please see Appendix 8, Table 13
Project Coordinator	46	Executive Summary Recommendation 3 Initiate the process for preparation of end of project report and Terminal Evaluation of the Project	This does not require a recommendation as the TE is built into the M&E framework and already identified in work plans. I suggest this recommendation is deleted.	Agreed, this recommendation is deleted
Project Coordinator	47	Executive Summary Recommendation 4 (now Recommendation 3) On the statement "The project is using the loudspeaker system for dissemination of the agroclimatic information/bulletin to the farmers in the villages where pilot activities are being carried out.	SAMIS was supposed to cover two districts in two provinces, we covered 5 provinces	The point of discussion is not the level of achievement or achievement by the project, but how benefits can be further increase from the present level. The recommendation is not for addressing a shortfall in the performance by the project.

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Project Coordinator	48	Executive Summary Recommendation 4 (now Recommendation 3)	SAMIS has stopped working in SAMIS villages in isolation and is now working with other NGOs working at large scale. SAMIS is experimental in the field and the test was done over 30.000 farmers. There is no reason to continue to work in a "SAMIS only" environment and this is why field activities are focusing on NGO field work instead.	The recommendation is not saying that the project should work in "SAMIS only" environment
FAO Laos	49	Executive Summary Recommendation 4 (Now Recommendation 3)	This would tie with the development of a sustainability and replication plan which is mentioned later (recommendation 7/8). I suggest merging the recommendations.	MTR team is of the view that sustainability and replication plans are different from "Expending the initial benefits/results/impacts of the project"
Project Coordinator	50	Executive Summary Recommendation 4 (Now Recommendation 3) On the statement "Wherever possible and practical, take signals from the amplification systems working the pilot villages and feed it to the loudspeaker system of the neighbouring villages .	Can be taken into consideration by NGO? We are not paying them	This is not a comment, but a sort of management response, and may be decided by FAO/SC/Project team.
Project Coordinator	51	Executive Summary Recommendation 4 (Now Recommendation 3) On the statement " Wherever required, the location and orientation of the loudspeakers in the villages be optimized to maximize the geographical coverage by the agroclimatic bulletin".	Will need to be taken into consideration in NGO work or in future projects	This is not a comment, but a sort of a management response, and may be decided by FAO/SC/Project team.
Project Coordinator	52	Executive Summary Recommendation 4 (Now Recommendation 3) On the statement "Explore the possibilities of using 'Community Radio' for broadcasting the agroclimatic bulletin.	Agreed it will be recommended by NGOs but this is their choice, not SAMIS	This is not a comment, but a sort of a management response, and may be decided by FAO/SC/Project team.
Project Coordinator	53	Executive Summary Recommendation 4 (Now Recommendation 3) On the statement " Toll free call back service provided by the mobile phone service providers, wherein a farmer can call a phone number and listen to the recording of the agro-climatic information/bulletin".	Technically, reading a bulletin do takes 10+ minutes so the line cost for the company might be excessive and difficult to implement. Also, the bulletin are 144 per week, just the recording would take time (they are ready in Monday) This recommendation looks unpractical. Anyway, it could be discussed in a future project, because it is not to	This is not a comment, but a sort of a management response, and may be decided by FAO/SC/Project team.

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			be done with the partners but with a private company The SAMIS follow up project that was submitted by DMH in September 2020 had already put budget in a collaboration with tele companies, but it was not submitted by FAO. The idea was to have tool free use of the app.	
FAO Laos	54	Executive Summary Recommendation 5 (Now Recommendation 4)	Again, this would be covered under sustainability and replication plan.	Yes, it relates to the sustainability plan, but this recommendation may be taken care while preparing such a plan
Project Coordinator	55	Executive Summary Recommendation 6 (Now Recommendation 5)	It would be good to have more clear what is the vision of the gov on this. Has the team discussed this with the gov? At the beginning of SAMIS, DMH was against any insurance option and so this could not be pursued.	This recommendation is not for creation of insurance products as part of SAMIS project. What is being recommended is that the SAMIS project may initiate the process of creating awareness of the government officials and other stakeholders regarding the potential and benefits of the index-based crop insurance products.
Project Coordinator	56	Executive Summary Recommendation 7 (Now Recommendation 6)	No SAMIS is national, it cannot be expanded geographically. However, the WB station will increase the quality of the forecast.	Where does the recommendation asks to go beyond the national boundaries? Geographical areas don't mean outside the country.
Project Coordinator	57	Executive Summary Recommendation 8 (Now Recommendation 7) on the statement "Capitalize lessons learnt from Farmer Field School (FFS) through simple extension manual which could be used by local extension workers with clear cost-benefit analysis"	A manual is under preparation and should be published shortly However, it is not clear why a cost benefit analysis would be useful to extension workers	This is more of a Management Response and not a comment. Cost-benefit analysis will help prioritize the actions.
Project Coordinator	58	Executive Summary Recommendation 9 (Now Recommendation 8)	NAFRI has a centre of this kind that has a contract with SAMIS and has been interviewed by the team. The centre should be integrated c1 and c2 not only c2	This recommendation is largely for ensuring the sustainability and continuation of work after the project. The present arrangement with NAFRI won't continue after the SAMIS project.
Programme Officer at FAO	59	Para 1 On the statement "MTR of the SAMIS project got delayed due to number of reasons which include the pandemic due to COVID 19"	The project's MTR was due well before the pandemic	Yes, MTR was due much before the pandemic. As have been mentioned in this sentence. Apart from the pandemic there are other reasons as well for the delay in the MTR.

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Programme Officer at FAO	60	Para 1 Refer to comments made above	Refer to comments made above	This info is repeated in para 2. Thus, it is being deleted from here
FAO Laos	61	Para 3	So who are the other main stakeholders who were involved in the MTR? Only a couple are mentioned here.	More names added
Programme Officer at FAO	62	Para 4	As previously indicated the IR was supposed to have been shared with FAO-GCU for review and clearance before missions are undertaken.	This is a matter between PMU/FAO CO and FAO-GCU and MTR is not a party to it. IR was dully submitted to the project team and mission was undertaken after getting the go-ahead from the team.
Project Coordinator	63	Para 5	Parts of the results of this MTR include the fact that the documents have not been properly consulted Workshops, materials, tv shows, Facebooks, journal articles are not mentioned anywhere because the team did not read the reports	It is a very irresponsible comment. Maybe it would have been better if the entire report (including the Appendixes) would have been read before making such a comment. Please be specific. Which are the documents which you think were not consulted and what are the implications. Regarding mentioning of Workshops, materials, tv shows, Facebooks, journal articles, please note that they have been dully considered, wherever, appropriate and required (please see, Para 77; Appendix 8, Table 13, achievement for indicators 3.1a and indicator 3.1.2b; para 78)
Programme Officer at FAO	64	Para 5 First bullet On the statement "Baseline GEF Tracking Tool"	Only baseline? How about the AMAT updated at MTR stage? Has the project team provided the updated tool? Has the MTR team reviewed and analysed it?	More text added
FAO Laos	65	Para 6 On the statement "The national consultant facilitated remote participation by the International Consultant and the Modelling Expert in the meetings using online meeting platforms (Zoom, Skype"	It would be helpful to give a bit more detail on the areas covered by each of the consultants, in terms of outcomes/outputs/components, and whether each consultant focused on specific issues.	It is not appropriate to ask for the details of the contribution by individual MTR team members (please also see guidance in this regard in the Guide for MTR of FAO/GEF projects) . The good work has been carried out collectively by the team. The team leader is responsible for whatever shortcomings and deficiencies are there.
Project Coordinator	66	Para 6 On the___14 statement	The mission was help in 5 provinces, but the results mentioned in the	It is not clear, which table of contents is being referred here.

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		"The mission was carried out during the period 09 March 2021 to 26 March 2021 and included visits by the national consultant to Namtha, Sing, Laognam, Champhone districts, where pilot activities under the project are being undertaken"	tables of contents are about two districts	
Project Coordinator	67	Para 7	The interviews were done before reading the materials, I have written evidence on that. This should be revised to respond to reality on the ground. I suppose this has been the cause of the superficial quality of the assessment For example the first meeting with DALAM, there were not questions about C2 nor C3. The DALAM team requested a second meeting to be able to talk about their work The NPD requested a second meeting also because he was not satisfied about the assessment of the WB collaboration. The int cons. C2 referred that he had to explain all the modelling process of the component, but the modelling is public in the web page documents (the one that are missing based on this review) After a number of mails by the CTA about this problem, the situation started to improve. After the team realised that the C2 was not about agrometeo but policy (after the meeting with Utrecht and C2 int cons) the situation improved, but it was already beyond 50% of the mission	This is a highly irresponsible comment. Please be specific which were the documents which were not read/referred what are the implications in terms of the findings presented in the MTR report. While on the subject, it is important to put on record that MTR is an independent exercise. Any of the project team member is not supposed to know what all has been discussed with the stakeholders, or cross check with the stakeholders to get the feedback on the discussions with the stakeholders during mission. (Please see Guide for MTR of FAO-GEF projects, Annexure 1, Para 2, Independence). The role of the PMU in the MTR is quite limited (please see Annex 2, Heading 6 of the Guide for MTR of FAO-GEF projects for the role of PMU in MTR). In the case of MTR of the SAMIS project, there were constant attempts by the project team to influence the overall process of MTR, attempt to take control of the work by different members of the MTR team, bullying the members of the MTR team from time to time, misleading the MTR by providing false information. The reasons for doing all this is known to the project team only. The project coordinator had to be told on a number of occasions, verbally and in writing to leave the

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				management of the MTR to the MTR team. The view of the MTR team is that this kind of comments is a further attempt to bully the MTR team and influence the overall process.
Programme Officer at FAO		Section 2.3: Description of the project: objective, outcomes and outputs	Please include a description of the geographic location and target / pilot sites, the group and beneficiaries the project is targeting to reach, any significant political / socio-economic & environmental changes that may have affected the project.	Agreed, suggested addition done by adding a sub-section for project location. Other suggested inclusions are already there in the report in other sections/ sub-sections of the report.
FAO Laos	68	Table 3: Components and Outcomes of the SAMIS project	This is covered by the annex presenting the log frame. I would suggest just list the components and outcomes to save space, but also list the outputs. Detail of the indicators, baselines, and EoP targets are not needed here.	The Appendix/Annex presents the entire log-frame. This Table is an abridged log-frame covering only the Outcome level details. The MTR team is of the view that this provides a good idea to a reader before he/she reads other parts of the MTR report. However, if you have strong views, then this Table will be removed.
FAO Laos	69	Table 3 Component 3	This component contains KM and dissemination of results, as well as project M&E. It's a 'mixed bag' in that M&E relates to project management and is not really an outcome in the sense of the other outcomes (it doesn't lead to changes/impact). Consequently, you could say something about this in project design section discussed later in the text.	MTR team is in agreement with your observation, However, as per the standard practise during GEF 4 and GEF 5, there use to be a project management (including M&E) component in the log-frame. As suggested mention is being made in section 3.4.1.
	70	Table 3 Indicator 3.1b: Trainings and workshops delivered	These could have been better presented under Components 1 and 2, as they can be seen as capacity building elements. Again, this would illustrate a confused project design.	This is based on the results framework of the project as given in the project document. Thus, it is not possible to change at the time of MTR. Further. Suggesting any change at the time when MTR is being carried out will be beneficial, as the project is already very close to the end of its implementation period.
FAO Laos	71	Para 20 on Theory of Change	This ToC needs a stronger narrative section (para 20) with greater discussion on the intermediate and longer-term impacts of the project, and where assumptions have an effect (they are only listed in the graphic, not at which level and on which project element they operate on). Interestingly, for a CCA project,	The project team has put in great efforts to prepare the ToC at the time of inception of MTR. In view of the MTR team, the only very minor issue is using the term Goal instead of Impacts. The Goals mentioned in the ToC do mention climate

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			there is no assumption relating to CC mentioned…	change adaptation. Climate change adaptation is also mentioned at the Outcome level
FAO Laos	72	Para 20 on Theory of Change	I would argue that some of the outcomes listed here are not immediate project outcomes, but longer-term impacts, such as 'village level – more climate resilient farmers', as whether this is achieved depends on many additional non-project factors.	As such there is no requirement that the language of the Outcomes in the ToC should exactly match with the Outcomes mentioned in the results framework.
FAO Laos		Para 21	This seems to be a different formulation of the project objective to that given in para 18 above.	It is just a different language for mentioning the same thing.
FAO Laos	73	Para 21	English not clear.	Editing done to improve readability
FAO Laos	74	Para 22	All acronyms should be explained when first mentioned in the text.	They have already been explained in the earlier parts of the report.
FAO Laos	75	Para 26 Table 4: Stakeholders of the project	This list is taken from the project document. Did this change by the MTR point – which were the most important at the MTR point, which dropped out, any new ones not on the list that came into the project?	As per the suggested format of the MTR report this sub-section deals with the provisions in the project design. Actual stakeholder interactions have been dealt with in other sections of the report (please see 3.4.4) However, some of the inputs provided as comments are now included in the Table
Project Coordinator	76	Table 3 NAFRI On the text "The project design provided for cooperation and collaboration with the project on "Improving Resilience of the Agriculture Sector to Lao PDR to Climate Change Impacts "	Sorry it ended before SAMIS started. Collaboration based on LoA	Text added to clarify this
Project Coordinator	77	Table 3 DTEAP On the text "Cooperation and collaboration in the development of the farmer field schools program	Did not happened because DTAEP has few local offices so the test occurred with DAFO instead.	Text added to clarify this
FAO Laos	78	Para 31, on the statement "With the 9th NSEDP (2021-2025), FAO Laos has contributed to the sectoral development plan (10-years strategy) in agriculture sector such as Forestry and Fishery, etc. at sub-national level, the	How is this relevant to the project? Has the project contributed to the 9th NSEDP?	This demonstrates continued commitment of the government towards development of the agriculture sector. This to some extent confirms the continuation of the Relevance of the project.

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		contribution to support on how to translate these strategies into action plan"		
FAO Laos	79	Para 33 On the text "The SAMIS project links to national development goals, plans, policies and legislation including the following:"	This list is all in the past (taken from the ProDoc I guess). So, is the project more or less relevant than when it was designed? Give evidence.	The comment is not clear. The evidence of the relevance of the project at the time of project design is in terms of the programs/ policies etc. as mentioned below.
FAO Laos	80	Para 33	Not clear in English.	Editing done
FAO Laos	81	Para 33 On the text "The 9th Plan of the country (2021-2025), under Outcome 4 (Environmental protection and natural disaster risk reduction), Output 3 (Disaster preparedness) has prioritized mainstreaming climate change adaptation and mitigation to sectoral and local development plans.; implementing natural disaster and climate change management and preventive measures (early warning system, prevention system, and emergency response) etc"	And how has the project helped with this plan?	This is to demonstrate continuation of the 'relevance of project towards climate change adaptation and mitigation and the agriculture sector. Relevance doesn't mean that the policies are helping or influencing the project activities and results
FAO Laos	82	Para 34 On the text "The project aims to support the implementation of national policies, strategies and legislation that foster sustainable agricultural production and natural resources management through identifying the appropriate policy concerns, analysis of data based on prioritized policy concerns. The project is aligned with Lao PDRs priorities for sustainable agricultural development and adaptation to climate change"	How? This is a vague – give evidence (maybe the 9th Plan mentioned above).	You agree that the evidence is already there in the above paragraph. Why to ask for the evidence again
Programme Officer at FAO	83	Para 36 On the statement "The project is complementing the existing interventions within Laos PDR"	Please explain how	The sentence before this one is the explanation. What additional explanation is needed?
Programme Officer at FAO	84	Para 37 On the statement	Aggregate ?	More text added

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		"At an aggrege level the relevance of the project is rated as Satisfactory"		
FAO Laos	85	Para 39 On the statement "As per the guidelines for MTR of GEF funded/FAO supported projects, the rating for the progress towards achievement of results has been provided for different Outcomes in the 'Results Frame work / Log-frame' of the project"	Yes, but there still needs to be a presentation on the delivery of outputs and completion of project activities in this section. Please provide as a narrative (not a summary table).	Yes, please see the discussions in six paragraphs which follows the Summary Table. There is no restrictions in presenting the information in Table formats. In fact the Guide mentions to use Tables, figures, etc. for better and concise presentation of the findings. Please see the relevant sections in the Guide.
FAO Laos	86	Para 40 On the statement "However, considering that the MTR of the project is considerably delayed and the PIR for the first year of project implementation is not the true reflection of the achievements at the time of MTR, the reviewers has chosen to use the PIR for the third year (PIR for Year 2000) in the Table"	The idea of MTR is not to do an investigation. The Guide for MTR requires to compare the results at MTR with those in the PIR (self-assessment by the project) and it has been done. Wherever there were critical observation on comparison they have been marked.	The idea of MTR is not to do an investigation. The Guide for MTR requires to compare the results at MTR with those in the PIR (self-assessment by the project) and it has been done. Wherever there were critical observation on comparison they have been marked.
FAO Laos	87	Para 41	Again, this should be given as a narrative as it needs to say which are good deliverables, what hasn't worked, etc. So, for instance, under Outcome 1.1, it is stated in the table that 'Activity of 'upgradation of manual weather stations' is delayed and is ongoing. 'Establishment of the laboratory' for calibration of the sensors of the AWS is also delayed but is underway.' But it does not explain why there were delays, which could be useful to understand in terms of improving procurement, project management, communication or partnerships.	Please see the response to earlier comment. It helps to read at least the complete section, before making such comment
Project Coordinator	88	Para 41	Comments provided above	Not clear, to which comment you are referring to. There is no comment above from you. In case you are referring to the comment by FAO Laos, it is already answered. In case you are referring to your comments in the Executive Summary, they have been responded to there.
FAO Laos	89	Table 5	Same comment as Project Coordinator's – see comments on same table given in the Exec Summ.	Seen and responded
FAO Laos	90	Para 42	What is described here (and in the paragraphs below) is really delivery of activities and outputs. The MTR	MTR team is not in agreement.

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			needs to provide an assessment of the quality of project products and whether they are being used (e.g. whether capacity built is being employed in daily activities, system, etc), not just whether they have been delivered, especially as this section is describing progress on achievement of outcomes (so changes in state or behaviour).	Please quote the relevant parts (progress towards achievement of results) of the Guide for MTR of GEF/FAO project or the evaluation questions for this section of the report. Impacts are discussed in the next section of the report
Programme Officer at FAO	91	Para 43 On the statement "there is provision for creation of following products based on agricultural resources (climate, land, soil, water and crops)"	What does this mean? Has the infrastructure and the information system been developed? Are they being utilized? Please elaborate	This paragraph provided what all was required, while the next paragraphs tell, what all has been delivered and its relation with the other Outcome within the same component of the project
Programme Officer at FAO	92	Para 44 On the statement "At the time of MTR all the activities for Outcome 2.1 have been completed except for the following which are delayed and were ongoing"	Please refer to FAO Laos's previous comment	results is done based on the activities and the indicators of the log-frame. It is agreed that performance of activities not necessarily means achievements of the objectives. For example, delivery of capacity-building sessions and training don't necessarily mean an increase in the level of skills/knowledge and the capacity to accomplish specific tasks. To ascertain the effectiveness of training etc. a systematic and unbiased assessment would be needed.
Project Coordinator	93	Para 45 On the statement "The progress towards results for Outcome 2.1 is rated as Satisfactory at the time of MTR, the capacity building and training under Outcome 2.2 has been completed"	This assessment of C2 is not sufficient and does not focus on the effectiveness of the project, linked to gov buy in and capacity acquired. Given that the MTR team did not assess capacities, this could be assessed	Please see the response to the earlier comment as well. As per the procedure rating is provided on the bases of the performance of the indicators. The assessment of effectiveness of the training is independent of the number of trainings delivered. In this case the number of training sessions were delivered as per the target value of the indicator, but the effectiveness of the training sessions is something which could not be ascertained. Please see the response to the earlier comment as well. As per the procedure rating is provided on the bases of the performance of the indicators. The assessment of effectiveness of the training is independent of

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				the number of trainings delivered. In this case the number of training sessions were delivered as per the target value of the indicator, but the effectiveness of the training sessions is something which could not be ascertained.
FAO Laos	94	Para 45 On the statement "The capacity building and training under Outcome 2.2 has been completed"	To what extent is the capacity that has been built being deployed? Do the stakeholders have the necessary tools, funding and staff time to use their new capacity? Has it led to changes in institutional practice and operations?	Please see the response to an earlier comment
Project Coordinator	95	Para 45 On the statement "However, the effectiveness of the training could not be ascertained during the MTR"	I don't understand why this happened. There was a modeller hired to provide comments to mostly c2 ad his has not been ascertain?	Please see the response to the same comment (Comment number 12) in the Executive Summary.
Project Coordinator	96	Para 45 On the statement "In some of the cases the language issues (trainings were conducted in English language) further complicated the situation"	?	Please see response to comment number 12
FAO Laos	97	Para 46	Again, this is output, not outcome, reporting.	The comment is not clear Please have a relook at the results framework of the project. Outcome 3.1 has two Outputs (output 3.1.1 and 3.1.2). This is what has been mentioned here
Project Coordinator	98	Para 46 On the text "When it comes to organizing the workshop, there is a need to do a bit of catching up	I do not understand well what is this referring to, because the list of workshops is extensive, plus other communication activities are not considered anywhere Reports are not been read	Please see Appendix 8, Table 13, Out 3.1.2. It is mentioned that the workshops mentioned in the PIR (e.g. PSC meetings etc.) are not the workshops and there is no achievement against this indicator.
FAO Laos	99	Para 48 On the text "When measured in term of the indicators for the outcomes the project, is on track to achieve its objectives"	Are there any objective-level indicators? If not, how is progress being measured by the MTR? If objective indicators were lacking then this is a weakness in project design and should be stated in the MTR report.	There are no project objective level indicators in the result framework of the project. The two components of the project more or less two different (interrelated to some extent) objectives. Thus, as such this is not a major issue with the project design. The assessment is based on the progress towards results for the indicators for different Outcomes of the project. Once again achievement of objectives doesn't mean achievement

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				of the desired impacts. Assessment of the impacts has been done separately in the next section of the report. More text added to clarify this.
FAO Laos	100	Para 48 On the text "When measured in term of the indicators for the outcomes the project, is on track to achieve its objectives"	More evidence needs to be provided why you think this. To what extent (and how) has the project: (i) to enhance at national and provincial levels, monitoring, analysis, communication, and use of agro-meteorological data and information for decision-making in relation to agriculture and food security and (ii) to improve monitoring and analysis of agricultural production systems by strengthening land resources information management systems (through LRIMS) and Agro-Ecological Zoning (AEZ) to support agricultural policies and climate-change adaptation. (these objectives are taken from paragraph 18 above).	Evidence regarding the progress towards results of results is provided in Appendix 8, the summary table in the beginning of this section and in the paragraphs before this one. It is not clear what further evidence is required.
Programme Officer at FAO	101	Para 49 On the statement "The results thus far and the progress towards results is attributable to the funding provided by GEF"	How about the effectiveness of results in contributing to the GEF Adaptation Program as captured in the AMAT? Has this been assessed?	MTR is for the SAMIS project and not for GEF adaptation program. The comment is not relating to the evaluation criteria/ evaluation questions.
FAO Laos	102	Para 50	The English is confusing. Could you clarify the meaning here?	More text added to clarify this
FAO Laos	103	Para 51 On the text "	In my opinion, the paragraphs in this section might be more relevant to discussion of movement towards the project objectives, rather than likelihood of impact (which I think should be left for the terminal Evaluation).	This section of the report is for the impacts/goals (please see the ToC prepared by the project team). Impacts is at a higher level than the objectives. The argument being presented here is that the results/achievements of the project is leading to the impacts. It is important to relate the impact with the result
Project Coordinator	104	Para 51 On the text "Although, within the implementation timelines of the project the impacts/benefits to the farming community are getting realised within the pilot areas, it will be possible for the national government to extend	should be done during the project. SAMIS was supposed to work in two districts it works in 5 provinces and have a tb show and is present on media and mailing lists. What is the point on suggesting this?	This is not about the SAMIS project. But the possibility to multiply the positive impacts by the national government beyond the implementation timelines of the SAMIS project. Please see the Impacts/Goals in the ToC prepared by the project team

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		these benefits to the farmers across the nation with minimal incremental efforts"		
Project Coordinator	105	Para 51 On the text "This is given the national coverage of the weather stations being supported by the project"	No the national forecast is given by the stations provided by DMH (more than 35) samis has installed 15 only	What is being talked about the geographical coverage across the nation by the weather stations. Where is the working 'forecast' in this paragraph either implicitly or explicitly?
Project Coordinator	106	Para 52	Likelihood	Comment is not clear
Programme Officer at FAO	107	Para 54 and 55	Are these recommendations or findings? Please clarify	This answers evaluation question number 2 (please see the evaluation question in the box at the beginning of this section). This is an assessment of the potential to increase the impact.
Project Coordinator	108	Para 54 on the statement "The impacts of the project can be expanded to other development areas like Early Warning Systems, Disaster Risk Reduction etc. even if it means installation of a couple of additional instruments/sensors at the AWS which has been installed under the SAMIS project"	? by SAMIS	This is something which can be explored by the PSC, project and the national government. MTR is not suggesting any allocation of resources.
Project Coordinator	109	Para 54 on the statement "To enhance the results of the project replication of the pilot projects for dissemination of agro-met information may be carried out in a couple of other locations, where the benefit of data collection has already been facilitated by the project."	? by SAMIS? Why should we? Anyway we are working with other NGOs that is a better learning process.	What is mentioned here is the way in which the impacts of the project can be increased. Whether SAMIS should do it or not is not suggested in the statement. Possibilities may be explored by PSC, FAO and the national counterparts.
FAO Laos	110	Para 56	Not relevant to efficiency section.	Backgrounder helps to draw the context regarding the results and the corresponding efficiency. In case you have strong view about it I will delete it.
FAO Laos	111	Para 57 On the statement "Due to the proactive approach of the project implementation team and the able guidance of the Project Board the implementation of the project could be carried out	So there were no delays (see outcome table above), no issues over procurement or communications (OCC)? Did anything make implementation of the project more efficient than expected?	Assessment is done based on the review questions. Please see the review questions in the box in the begin of this section

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		in an effective and timely manner"		
Programme Officer at FAO	112	Para 57 On the statement "Due to the proactive approach of the project implementation team and the able guidance of the Project Board the implementation of the project could be carried out in an effective and timely manner"	How about project extension? Has that been taken into consideration in assessing efficiency?	What relation you see between extension and efficiency, except for the fact that there would be some more expenses on salaries (PMU) and administrative overheads
FAO Laos	113	Para 60	What about indicators? Were all of them SMART? And were all targets realistic?	The review has been carried out in terms of review questions (please see the box in the beginning of this section. Unlike the guidelines for MTR by other GEF agencies, the guidelines by FAO does not have a review question on the SMART criteria for the indicators. Although the guide does mention consideration of SMART criteria for the indicators in one of its Annexes. Based on this comment a statement on this is added to the report.
Project Coordinator	114	Para 61 On the statement "One of the issues with the log-frame of the project is that the indicators for the capacity building and training kind of outputs are in terms of number of persons participated in the training"	This paragraph might be copy/paste from another report	It is not good to make irresponsible comments like this one. Please quote the place from where it is copied. Even if it is copied, what are the issues? Is there a; -Disclosure of some personal information -Copy right violation -Theft of some intellectual property -Leaking some confidential information -Doesn't this show the situation of this project
Project Coordinator	115	Para 61 On the statement In addition, the agrometeorological capacity in the country at all levels is rather weak; therefore, monitoring mechanism to support during and post-training is very necessary particularly at local level"	Is this referred to the scientists or to the population. If referred to gov officials, I don't agree at least compared to Myanmar and Cambodia, other LDC countries. NAFRI has produced agrometeo info since 10 years, which is quite exceptional About farmers, only after a system is available can farmers start learning	The reference to Myanmar, Cambodia or for that matter to any country is not appropriate. It is not a comparative assessment of the capacities
Project Coordinator	116	Para 61 On the statement	But this means that the fact that the gov officials use the models or write	We are talking about assessment of post training results, which is important

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		In addition, the agrometeorological capacity in the country at all levels is rather weak; therefore, monitoring mechanism to support during and post-training is very necessary particularly at local level"	the books is not a monitoring system?	
FAO Laos	117	Para 62	This text should be treated under	It is not a complete sentence. Comment is not clear
Programme Officer at FAO	118	Review question for section 3.4.2 On the question •To what extent did the executing agency effectively discharge its role and responsibilities in managing and administering the project?	paragraphs. Evidence should be provided if the MTR claims that the executing agency has played its role. Also, it seems that challenges from periodic reports are presented in this report but no observation and assessment of the situation is provided.	The GEF Executing Agency in this case is FAO. The working of FAO is provided in the first paragraph of this section. More text added to clarify this
FAO Laos	119	Para 63	This is as described in earlier background section. It doesn't say anything about the effectiveness of, or challenges to, project implementation.	More text added
FAO Laos	120	Para 64 On the text "Raising the visibility of the project with partners other than MoNRE and MAF"	Why would this be a direct result of the DEX? Explanation needed.	Agreed, it is not related to DEX Correction done
FAO Laos	121	Para 64 On the text "The role of NPD has not been fully functioning, although coordination mechanism between DMH and DaLAM has been initiated by the SAMIS project as they are under two different line ministries"	The meaning is not very clear here, and also this might be better dealt with under the partnerships/stakeholder's subsection below	As mentioned at the beginning of the paragraph this is one of the challenges identified by the project team. Project team is in a better position to answer this question
FAO Laos	122	Para 64 On the text "The process to revise the SOPs for agro-met service. The proposed new version of the SOP was submitted to the PSC in July 2020 and received general endorsement. The process presents challenges due to the need for multisector buy-in and agreement"	Why would this be a direct result of the DEX? Explanation needed.	The challenges are not due to DEX. Correction done
Project Coordinator	123	Para 65 On the text "The project team did not identify any additional risks to the project"	Yes there are and are in the reports. They have been addressed too	What were the challenges identified? They are mentioned in which reports, please specify

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FAO Laos	124	Para 66	Yes, again, this is just a statement of the arrangement. You say the 'quality of FAO execution' is satisfactory, but where is the evidence? How do you arrive at this finding?	What kind of evidence can be produced to prove that the quality of execution was Satisfactory? MTR team is of the view that the absence of any significant issue is sufficient
Programme Officer at FAO	125	Para 67 On the statement "The project inception happened in a timely manner, and the project's implementation started in a timely manner"	Yes, and have they continued to be implemented in such a manner? Why refer to "starting of activities" only?	Because normally delays happen in the start due to delays in bringing the project team on board
FAO Laos	126	Para 67 On the statement "FAO as GEF Executing Agency collaborated effectively with the National Counterparts and other stakeholders for effective implementation of the project"	This is evidence for the above comment.	Please see first paragraph, where text have been added to clarify that absence of any significant administrative or managerial issue is the evidence
FAO Laos	127	Para 68	It would be better to present the planned expenditure against the actual at the MTR point to allow comparison. A table with GEF and co-financing (lumped, not shown as individual contributions) for each component showing planned (according to the ProDoc) and actual would be helpful here.	The Table on financing and co-financing is prepared by the Project Team. It is up to them to modify the Table
FAO Laos	128	Table 7 Financing and Co-financing of the Project at MTR	See comment above. This table is confusing and difficult to interpret. I would suggest merging table 6 and 7, and giving a breakdown of the actual co-financing as a separate table as they deal with different issues.	Responded earlier
Programme Officer at FAO	129	Table 7 Funding by ADB and CDE	No co-financing materialized?	Yes, this is what was told to the MTR team
Project Coordinator	130	Section 3.4.4 Project partnerships and stakeholder engagement	The fact that this is marked satisfactory only is demonstrating that the value of the project remains to be understood by the team	This comment is addressed to whom Any particular reason for highlighting the text What is the meaning of the term 'value'? What is supposed to be done Please elaborate During the mission at a number of occasions, the project team expressed concerns regarding the working relations with DMH. There are interpersonal issues between the project team and the officials of DMH. MTR is no an

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				opportunity to settle personal issues.
FAO Laos	131	Para 71	So which partnerships worked well, which didn't and why? Were any new partners added since inception? What about relationships with other stakeholder groups (not formal partners to the project)? Could you explain? Much more analysis is needed in this subsection.	In case you think there are some of the issues which impacted the performance and which didn't get captured in the MTR, please share them. Else for further elaboration is needed.
Programme Officer at FAO	132	Para 71	I would also add that this section needs to highlight the challenges project faced in stakeholder engagement.	In case you think there are some of the issues which impacted the performance and which didn't get captured in the MTR, please share them. Else for further elaboration is needed.
Programme Officer at FAO	133	Para 72 On the statement "The project coordinated well with the local government agencies at the province, district and village level for effective implementation of the pilot project"	Please provide evidence to substantiate this claim	The evidence is that no substantial issues got identified during the mission and stakeholder consultations.
Project Coordinator	134	Para 74 On the statement "the project doesn't have a website of its own"	please remove, it is forbitten by FAO to have a separate webpage The project has : A website A lacsa site A facebook page What are we talking about?	The limitations regarding having a project website have now been added. The information regarding project having a Facebook page and a google site is included in the MTR report. Lassa is a product specific dissemination activity and not a communication channel. Although the google page has access only to a limited number of members. It is not known who all are the members.
Programme Officer at FAO	135	Para 74 On the statement "Apart from this the project also disseminates the results through the news channels (both online and print media). The FAO website is also being used for disseminating the information booklets, knowledge products and other publications."	Please clarify how this relates to the claim made on para 78.	Communication and knowledge management are slightly different. In this case, knowledge management is a specific activity mentioned in the results framework of the project wherein specific indicators and targets have been provided. Thus, the assessment as given in para being referred to by you has been done in terms of the indicators and the targets.
Project Coordinator	136	Para 76	The FFS are not complemented by other methods. These are separate methods	The complemented is not being used for the activities of FSS, but the dissemination activities. This is being made explicit by adding more text

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			Also, the project disseminates also LRMIS and C2, not only C1 This aspect of the communication of the project has been poorly understood and not properly assessed. This is a project that is continuously in different types of media and is marked unsatisfactory for communication?	This paragraph is dealing with component 1 only. Dissemination for component 2 is dealt with in the next para.
FAO Laos	137	Para 76 On the text "development of other interactive communication channels such as mobile application, loudspeaker, TV and radio programming etc.	How are loudspeakers, TV and radio programming 'interactive communication channels'? You can't interact with a loudspeaker meassage…	Agreed, text modified
Project Coordinator	138	Para 77	Maybe then OCC should be contacted and communicated with them. Why SAMIS has to have this poor rating if this assessment was put in the PPR since the beginning?	MTR is not the assessment of the project team or the project team. It in no way points out a shortcoming at the end of the project team. MTR is just identifying an issue which needs to be addressed.
FAO Laos	139	Para 79 On the text "A monitoring and evaluation plan was put in place at the time of the design of the project. There was a provision to review the plan at the time of project inception."	What about the log frame indicators - were they sufficient and SMART enough, and were associated targets realistic?	This is a repeat comment. Please see the response to the earlier comment
FAO Laos	140	Para 79 On the statement "The GEF Focal Area Tracking Tool climate change adaptation was to be prepared at the time of CEO endorsement and before the MTR and at the TE. "		This section deals with the design of M&E. Implementation is discussed in the next section. Based on this comment text is added in the next section.
Programme Officer at FAO	141	Para 81	It does not suffice to list the compliance to M&E reporting requirements but to analyse how the M&E tools and the information generated by them was used to adapt and improve project planning and execution, achieve outcomes and ensure sustainability	It is not clear how you relate M&E with sustainability. Satisfactory rating is as no adverse effects on the performance of the project due to M&E were there.
FAO Laos	142	Para 81 On the text "The meetings between the project team and the focal points at the ministry were held regularly for quick decision making and to efficiently solve any difficulties or delays."	This might be more relevant to adaptive management so covered under project execution subsection above.	MTR team don't think it to be adaptive management.

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Programme Officer at FAO	143	Section 3.5.1 On the review questions •Was a gender analysis done? •Sex disaggregated and gender-sensitive indicators and results	The section below does not respond to these questions	Text added
FAO Laos	144	Section 3.5 On the text "While examining the issue of the extent to which the SAMIS project has helped in mainstreaming other development priorities of Laos, it is important to consider that before the SAMIS project the Government of Laos PDR has supported other projects aimed at negating the impacts of climate change on the agriculture sector and means of livelihood. Support provided under the SAMIS project is part of the efforts from the government to help the farming community improve the farm productivity and also take steps towards management of disaster risks by introducing early warning systems."	What point are you making here? It is not clear in relation to gender or equity.	Apart from gender and ESS , one of the other cross cutting issues which is important, is the extent to which the project helps in mainstreaming other development priorities of FAO/GEF e.g. DRR, Climate Change Mitigation, Management of Chemicals etc.. However, it is agreed that this is not covered in the Guide for MTR of FAO-GEF project. Accordingly, this text is deleted
FAO Laos	145	Para 83 On the text "The project document mentions the intentions of strengthening and enhancing involvement of women in implementation of the project activities"	So has the project created any changes to women's lives? Are there any benefits for women, such as improved information for decision-making targeted at women farmers (who might be farming differently to men – different crops, different methods)? Or indirectly through changes in the work load of women as they have better forecasts for planting, harvesting, etc? I'm just guessing here, but it would be useful to have some thoughts on how the project might benefit (or made to benefit) women more.	Text added to clarify this
Project Coordinator	146	Para 83 On the text "However, the participation by females has fallen short of the targets, mainly due to the fact that there are less female employees in the government departments which were targeted for the training and capacity building initiatives"	However, the modelling teams are composed in majority by females	This statement could not be validated. A look at the list of participants in the training does not confirm this.

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FAO Laos	147	Para83 On the text "However, the participation by females has fallen short of the targets, mainly due to the fact that there are less female employees in the government departments which were targeted for the training and capacity building initiatives"	I think you mean less women, not that female are 'lesser'.	What is the difference
FAO Laos	148	Para 85	Was an FPIC undertaken at the design stage? Also, has the MTR team reviewed the ESS that would have been undertaken at project design phase? Is the ESS still valid or does it need revisiting?	No 'Free, Prior, Informed Consent' (FPIC) was undertaken at the time of project design. The project design has provision to involve the local communities/indigenous people at the level of FFSs. This information is now included in the report
Programme Officer at FAO	149	Section 3.5.2: Environmental and social safeguards Para 85	Pls review the ESS classification given during formulation phase and assess if it was adequate or not	At the time of project preparation, ESS assessment was under taken and the project was classified under category C (pre-approved list of projects which are excluded from detailed assessment as the project will have minimal or no adverse environmental or social impacts). This information is now included in the MTR report. Validation of ESS is not in the scope of MTR
FAO Laos	150	Section 3.5.2: Environmental and social safeguards Para 86 On the statement "As per the "Project Document' a detailed assessment has been carried out in all the 15 locations where AWS are going to be established, and no negative impacts are anticipated"	Are anticipated? This sounds like a cut-and-paste form the ProDoc. The issue is whether there have been any during the project to date	Why there is an objection to the use of the word anticipated. Please appreciate impacts (both good and bad) are realised over a long period of time, e.g. degradation of land/soil erosion due to deforestation may happen over a period of time. In case no adverse impacts has been seen till date don't necessarily mean there won't be any in future as well
Programme Officer at FAO	151	Chapter 4: Sustainability and Replication	Why is this finding presented in a separate chapter?	This is for the volume of text and ease of readability. In case you have strong views about it. It will be merged in an earlier section of the report
FAO Laos	152	Section 4.1.1 On the text "The project has following three components …."	Unnecessary as already covered in earlier background section.	Agreed, this text is now deleted

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Project Coordinator	153	Para 88 On the text "For component 1 of the project, new infrastructure will be created by way of new AWSs."	Will ?	Correction done
Programme Officer at FAO	154	Para 88 On the text "For component 1 of the project, new infrastructure will be created by way of new AWSs."	Is this a finding? It is not sufficient to make a claim. The evidence that led to this assertion needs to be indicated clearly.	What evidence is needed. Can maintenance be carried out without money/funds?
FAO Laos	155	Para 88 On the text "provision of the required financial resources for the operation and maintenance of the weather stations is already underway"	So is this certain/guaranteed? It is not clear from the text. If not, it's still a risk.	Should someone ask them to given a properly executed guarantee
FAO Laos	156	Para 89 On the statement "For Component 2 of the project, the completion of activities will lead to development of models and increased institutional capacity for operations"	But is this capacity sufficient? Is it sustainable given there is always staff turnover? How would this be addressed? What about adoption of a 'training of the trainers' approach? To what extent has the capacity built – knowledge, skills, tools, systems – been embedded in the target institutions? This is not answered clearly in sections above	This paragraph is focused on sustainability from financing point of view. The measures suggested are fine however, they would not require significant financial resources
FAO Laos	157	On the rating of 'Satisfactory' for the sustainability ratings	Rating for 'sustainability uses a different rating scale	Agreed, correction done
Project Coordinator	158	Para 89	The LRMIS requires web page maintenance	The maintenance of web page won't require significant funds
FAO Laos	159	Para 90 On the statement "The sustainability of the project results from the viewpoint of financial resources is rated as Likely"	It is not sustainability of the project that should be assessed here, but the risks to the sustainability of the project results (whether they will continue to be used and have impact after project closure). The project is just a vehicle for achieving results; it's a means to an end, not an end in itself	Thanks for explaining the theory. MTR team, is not in agreement with the theory provided by you. But that is not the point of discussion here. The focus of this sub-section is on the financial risk to sustainability.
Programme Officer at FAO	160	Para 91	Same comment as pfor para 91	Comment is already responded earlier
FAO Laos	161	Para 91 On the statement "Further, the project at the local level will lead to increase in the income levels of the farmers (by reducing the post-harvest losses and by increasing the yields of the crops"	Is there any evidence of this to date? Or is this just speculation? The project is almost complete so there should be some clear indications. If so, the evidence should be provided.	Cross reference provided
FAO Laos	162	Para 91 On the text "There is an existing level of high awareness within the	Not clear what point is being made here in relation to the rest of the paragraph.	Text added

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		national counterparts and within the general public regarding the issues with the food security in the country."		
FAO Laos	163	Para 91	See comment above about Sustainability ratings.	Responded earlier
Project Coordinator	164	Section 4.1.3	The comp2 and policy part is not assessed	This section deals with the risk to sustainability from institutional framework and governance point of view There is no policy or component 2 specific things here
FAO Laos	165	Para 92 On the text "The institutional framework for implementation of the project is embedded to the Ministry of Natural Resources and Environment (Department of Meteorology and Hydrology) and Ministry of Agriculture and Forestry (Department of Planning and Finance)."	Again, it's not the project that needs to be sustainable, but its results…	As this paragraph is for assessment of institutional framework risk to sustainability, a mention of the institutional framework has been made. Please see the rest of the paragraph, it talks about the sustainability of results
Programme Officer at FAO	166	Para 92 On the statement "In order to sustain the operations beyond the SAMIS project, it is important that the two departments have good coordination of the activities. The institutional framework for the coordination of the activities would need to be strengthened to ensure sustainability"	Is this a recommendation?	What exactly is the question? Is it necessary for every sentence to mention if it is a result, or a finding or a conclusion or a recommendation or a project design aspect?
FAO Laos	167	Para 92 On the Likely rating for sustainability from the view point of institutional framework and governance	Really? From the above sentences it sounds like Moderately Unlikely.	Please be specific, what you want to say. Saying really don't mean anything
Project Coordinator	168	Section 4.2: Replication and Catalysis	The policy part and C2 are not assessed	Policy part and Component 2 is being implemented at the National Level. Replication is related to the activities implemented as pilot activities or on selected geographical location
FAO Laos	169	Para 94	This is not replication as it's already in the project.	Please see the project document, this activity is being carried out on pilot basis at selected locations. The project has already increased the number of locations from what is

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				provided for in the project design. Replication potential is for the locations not yet covered by the pilots. Please see the review questions as well in the box above.
Programme Officer at FAO	170	Para 94 On the text "It is recommended that the geographical spread of the dissemination of the agroclimatic information/bulletin be increased"	Same as above. This is already stated in the recommendations and it is not a replication.	Please see the response to the comment above. Second part of the comment is not clear. Do you mean the actions for replication should not be recommended?
FAO Laos	171	Chapter 5: Conclusions and Recommendations	These are a repeated in the Executive Summary (expect for a few words). See comments on these section in the Exec Summ above.	Do you mean the conclusions in recommendations should be different in this chapter and the Executive Summary?
FAO Laos	172	Appendix 6	This table presents the main MTR questions, but this also seems to be repeated with similar questions in the annex 7 below. I suggest merging annexes 6 and 7.	The guidelines require the MTR Matrix as per the suggested format for it.
FAO Laos	173	Appendix 7	There are more than just review questions here. This looks like the format for the report…	Yes, this Appendix includes the format of the MTR report (as per the guidelines) and the review questions. Heading of the Appendix changes to reflect this
FAO Laos	174	Appendix 8 Table 9	Despite the number of green and yellow boxes, it seems from the text that not everything can be completed before the official end of the project, so is there a need for a recommendation for a short No Cost Extension (NCE) to finish some of the outputs which are unlikely to be fully completed by the end of this year? For instance, can all of Component 3 communications activities be completed in time? If not, then there should be an additional conclusion leading to a specific recommendation (no 10) requesting a short NCE.	During interaction with the project team, it was gathered that an extension to the project has already been requested (documents requesting extension were shared). As per the information shared with the MTR team an extension of one year has been requested beyond 30 June 2021. With this extension the project will be able to work up to Dec 2021, thereafter a period of six months will be available for the official closure of the project. Due to this reason no recommendation for extension has been made. In case there is a variation in this understanding, and a recommendation for extension would help, please let us know.
Project Coordinator	175	Appendix 8 Table 11, for Indicator 2.2.3a On the statement "extension would allow the accomplishment of this	? is this a review assessment?	It is general statement, based on the fact that to achieve anything efforts are needed. It you have objection to this statement, please say so, in

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		activity, if DALAM puts more efforts on this activity"		that case this statement will be removed.
Project Coordinator	176	Appendix 8 On the statement "The effectiveness of the training could not be ascertained during the MTR"	The comments to these paragraphs are provided below. The training capacities could have been ascertained by the team, and it is not clear by it has not happened. The trainings online have improved the training processes, because training can give the time to home-exercise to participants. The capacity of DALAM is the single most important capacity development of SAMIS and should have been assessed.	No assessment regarding the effectiveness of the trainings provided has been carried out by the project team. It was not possible for the MTR team to carry out an examination of the technical skills actually acquired by the trainees. The impression of the MTR team is that the trainings were not effective. The basis for this assessment is as follows: • The training need assessment carried out by the project, has identified a number of issues for the trainings to be effective. Such issues include education qualifications of the trainees, lack of understanding of the English language, lack of computer skills, lack of basic understanding of the subject matter. These issues did not get addressed either before the training or in the overall plan for the training. • Consultations with the stakeholders during the MTR clearly pointed out the lack of effectiveness of the trainings e.g., ○ Consultation with AIT (trainers) pointed out that there were limitations on capacity of local staff to understand the issues. Due to this reason topics were sometime changed, and up and down discussions rounds happened many times. Due to this reason for the online training translators were hired by AIT ○ Discussions with DALaM said that there were difficulties for the team regarding how to use the program Payton and R model

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				○ Discussions with the officials of DMH pointed out that some trainings were organized in English particularly the online ones, and it was difficult for local staff to understand the contents. It was pointed out that the local staff need more capacity building compared to the national level ○ Discussions with NAFRI revealed that Long-term training for junior officials is needed through linking to university In spite of the impression of the MTR team that the training was not effective, the team has not written this, due to the lack of a systematic assessment of the effectiveness of the training.
Project Coordinator	177	Appendix 8 On the statement "In some of the cases the language issues (trainings were conducted in English language) further complicated the situation."	Never happened, which one?	Please see the reply to the comment above
Project Coordinator	178	Appendix 8 On the statement "Although, in most of such cases expert translators were onboard to help, it helped only to a limited extent"	??	Comment is not clear
Project Coordinator	179	Appendix 8 On the statement "It was pointed out that it would have helped, in case the training material would have been provided in the Laos language"	How can we have a Lao person teaching machine learning or advanced modelling? This is the first time that Lao people learn these skills? This phrase is not relevant to the context and should be removed.	What is being suggested, is that some of the training material (e.g., PPT slides etc.) could have been translated to Laos language. Such a translation can very well retain the technical words in English
Project Coordinator	180	Appendix 8 On the statement "Number of training manuals have been produced by the project (Indicator 2.2.1c), which are available for further use. However, these are in English language"	We have not been requested for this before this comment. All materials is being translated and will be published. It will constitute the first GIS training course in pasalao.	

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
Project Coordinator	181	Appendix 8 Table 13	It is not clear why the indicators were not searched in the PPR. This is complete in the PPR Using only the PIR version force to exclude the loudspeakers	The format of the Table is as per the FAO GEF guidelines for MTR (please see Table A11.2 Progress-towards-results matrix showing the degree of achievement of project outcomes and outputs in the guidelines), wherein information from the PIR needs to be quoted. However, while doing the assessment of the results the information from PPR has been dully considered. This is evident from the assessment for indicators 3.1c and 3.1.1
Project Coordinator	182	Table 13 Indicator 3.2.2 One the statement "Level of capacity achieved could not be ascertained"	About lacsa why not use the CIAT report?	The CIAT reports (two reports in Laos Language were shared, these reports were read using google translator) do not have an assessment regarding the effectiveness of the training
Project Coordinator	183	Table 13 Indicator 3.1a On the statement "The main platform being used for knowledge sharing and sharing of lessons learned is the website of FAO"	No, see comments above Lacsa facebook laofab etc	In view of the reviewers the idea here is knowledge sharing platform for dissemination of knowledge products, lessons learned. The Laofab is a google group whose contents could not be assessed during MTR, also who all have the access to this group could not be confirmed
Project Coordinator	184	Table 13 Indicator 3.1.1a	FFS is not a formal method accepted by MAF, this is why we do loudspeakers. MAF has no intension to continue with FFS this year In fact, the work of C3 is only working with NGOs that want to use loudspeakers.	Assessment is based on the indicator. Additional information shared is being included in the report.

Following comments and suggestions were received on the second draft report on 28 June 2021 for the mid-term review of 'Strengthening Agro-climatic Monitoring and Information Systems (SAMIS) to improve adaptation to climate change and food security in Lao People's Democratic Republic' (GCP /LAO/021/LDF), GEF ID 5462. With the remark that more documents and final set of comments from the project team would be shared shortly. Further comments and suggestions on the second draft report were received on 02 July 2021. Further, clarifications/documents for supporting the comments (at the request on the MTR team) were received on 14 July 2021. The second draft MTR report was submitted on 24 July 2021.

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
Technical Officer at FAO	185	Executive Summary Para ES 1 On the statement "As per the requirements for all full size the GEF Funded projects, a Mid Term Review (MTR) of the project has been carried out by a team of independent consultants comprising of an international consultant (Mr. Dinesh Aggarwal) a National Consultant (Mr. Thiphavong Boupha) and a Modelling Expert (Ms. Eunjin Han)."	Climate change modelling expert?	Agreed to the suggested change Correction done
Technical Officer at FAO	186	Executive Summary Para ES 4 On the statement "The project also links to Lao's national development goals, plans and policies and legislation."	This makes it sound like its not very good fit with government priorities? Language seems to suggest stronger fit with FAO and LDCF	More text added as suggested in comment 187
Project Coordinator	187	Executive Summary Para ES 4 (Replied to above comment from Technical Officer at FAO)	The project data are used to validate the 9th National development plan targets based on climate scenarios	This information is now added to the report.
Lead Technical Officer, FAO Asia Pacific Regional Office	188	Executive Summary Table 1 On the statement "Activity of 'upgradation of manual weather stations' is delayed and is ongoing."	It should be possible to indicate the numbers installed and still to be installed. All this information was provided.	The required information is added.
Lead Technical Officer, FAO Asia Pacific Regional Office	189	Executive Summary Table 1 On the statement "Number of training sessions were organised for the government officials.	I think it would also be helpful to provide an indication of the actual number of trainings.	The required information is added in the Table
Lead Technical Officer, FAO Asia Pacific Regional Office	190	Executive Summary Table 1 On the statement "Most of activities were performed as scheduled and the numbers of training programmes were carried out."	Indicate number.	Required information is added
Lead Technical Officer, FAO Asia Pacific Regional Office	191	Executive Summary Table 1 On the statement "However, the effectiveness of the training could not be ascertained during the MTR."	I am not sure if this statement is fully justified. If I am not mistaken, some of the training reports provided do include assessments of capacity before and after. Also, as the staff who have been trained are now producing the modelling outputs and analysis required for the project, it should provide some indication that the training has been moderately effective. The materials provided should have enabled the reviewers to	Except for a casual question during the interactions with to some of the trainees, about the effectiveness of the training a formal assessment of the effectiveness of training was not possible during MTR. The training reports do not have an assessment regarding the effectiveness of the trainings. This information is added to the report. Please, also see the response to comment number 12.

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
			trangulate some links between the trainings provided and the analysis being undertaken by DALAM.	
Project Coordinator	192	Executive Summary Table 1 On the statement "Knowledge and information sharing for local application, agriculture and food security planning and programming and project outcomes/outputs monitored and evaluated to ensure sustainability"	Please note that the FFS is a method that requires one training per week over 7 months in each village (except is it is not possible reach the village due to flood). Indeed, this is not clearly stated in the report because in FAO this is common knowledge. Apologise for this, but please revise Please see excel file "Local events report" for the total number of local events.	The national consultant having worked for a couple of assignments for FAO is well aware of the operations of FFS. He has briefed the MTR team adequately regarding the training etc. related to FSS. So the MTR team is well aware of these aspects. The assessment has been done based on the indicators and the corresponding targets (please see the indictors in this Table and the indicators for the outputs in Appendix 8. Certainly indicator 3.1a does not relate to the number of trainings etc., but to the framework for knowledge sharing and packaging of lessons learned. Indicator 3.1b is not relating to training at the FFS level, but the number of trainings and workshops delivered at the national/ provincial or regional levels. Also please see the complete language of the Outcome 3.1, including the part which has been highlighted.
Project Coordinator	193	Executive Summary Table 1 On the statement "This is complemented by the development of interactive communication channels such as mobile application, loudspeaker, TV and radio programming etc."	Based on a report produced by CIAT and shared by email, the loudspeakers are not an complement to the FFS system. They are a fiest stanting methodology allowing to cover wider areas	Text modified to address your concerns. The issues raised in the document 'Mission Schedule Vs. Documents shared' have been addressed separately
Project Coordinator	194	Executive Summary Table 1 On the statement "The main media used for training of the farmers is the FFS, which is being piloted at two districts (Champhone and Sing)	Lao National Radio covers 5 province too Loudspeaker also are a media and it is different than FFS Facebook is a media too	Do you use radio, loudspeaker and the Facebook page for training? Please see the text of the indicator. The word media is replaced with the word method, to provide clarity
Lead Technical Officer, FAO Asia Pacific	195	Executive Summary Table 1 On the statement "Few booklets and training programmes have reached the final stage of publication."	Numbers could be included here – published and in the OCC system.	Language of the indicator is expanded and more text added to improve the clarity

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Regional Office				
Lead Technical Officer, FAO Asia Pacific Regional Office	196	Executive Summary Para ES 6 On the statement "At one level the project is building infrastructure and comprehensive agroclimatic monitoring and information capacity focused on boosting sustainable production by optimizing farmers' and smallholders' resilience to climate change.	….through the preparation and provision of agrometeorological advisory services.	Suggested additional text is accepted and is now included in the report
Lead Technical Officer, FAO Asia Pacific Regional Office	197	Executive Summary Para ES 7 On the statement "With the successful establishment of the AWS and upgradation of the manual weather stations"	Statement should match what appears in the table above.	Agreed, Text modified to take care of this comments
Project Coordinator	198	Executive Summary Para ES 7 On the statement "The agrometeorological information being delivered by the project through LaSCA"	One of the benefits is the development of a modelling process and an information system that include near real time data from international entities (GCM), from MONRE and from MAF	It is not clear how GCM can be considered as an entity. To the best of the understanding of the MTR team GCM stands for 'General Circulation Model' which is used by different agencies/institutions to study the climate change impacts due to increasing GHG concentration. In case the MTR team is missing something please let us know.
Technical Officer at FAO	199	Executive Summary Para ES 8 On the statement "With the likely achievement of Outcomes for component 2 of the project, the government officials and policy makers will have insights into the distribution of agricultural populations that are vulnerable to climatic change."	Please clarify. The rating for Outcomes under component 2 are satisfactory. What does the MTR team mean by "likely achievement" please?	At the Midterm of the project, while reviewing the progress towards results, an assessment is made regarding the likelihood of the achievement by the end of the project. This is as per requirements, mentioned in the Guide for MTR of FAO-GEF projects.
Lead Technical Officer, FAO Asia Pacific Regional Office	200	Executive Summary Para ES 8 On the statement "At the organization level the project has benefited MONRE and MAF by strengthening of their skill sets, knowledge base, and understanding regarding the impacts of climate change and the adaptive options to negate the impacts."	Another benefit has been the strengthening of collaboration between the agencies in the preparation of agrometeorological advisors and the development agro-climatic monitoring and research.	The suggestion is accepted and is included in the report.
Technical Officer at FAO	201	Executive Summary Para ES 10	What about social, including gender/ IPs?	There are no adverse impacts More text added to clarify this

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Technical Officer at FAO	202	Executive Summary Para ES 11	Not sure if this sentence shows efficiency.	Agreed, this relates to the 'progress towards results'. Text modified
Technical Officer at FAO	203	Executive Summary Para ES 12 On the statement "there would be different institutions/agencies responsible for specific tasks for the overall delivery of advisory to the farmers at the local level"	Compared to the ones currently involved? Its unclear to me	More text added to clarify this
Project Coordinator	204	Executive Summary Para ES 16 On the statement "The project established partnerships for the implementation of the project with the government counterparts and other relevant stakeholders."	Some of the partnerships were based on international stakeholders interest and cofinancing.	This information is now included in the report
Technical Officer at FAO	205	Executive Summary Para ES 20 On the statement "Although, the impacts/benefits to the farming community are getting realized within the pilot areas"	Not sure if "although" is needed here. I like the way the conclusions have been linked to paragraphs	As suggested the word 'although' is dropped
Lead Technical Officer, FAO Asia Pacific Regional Office	206	Executive Summary Para ES 20 On the statement "Although, the impacts/benefits to the farming community are getting realized within the pilot areas, it will be possible for the national government to extend these benefits to the farmers across the nation with minimal incremental efforts."	We might need to distinguish here that 1) LaCSA is national so the agro-met advisories are already available to the whole country for the crops covered; 2) However, the project has provided additional support to ensure the distribution channels for advisories meet the needs of farmers and reflect the realities of how they seek out and use agronomic information. This second part of the work done by the project is not necessarily easy to replicate.	Agreed, more text added to clarify this
Technical Officer at FAO	207	Executive Summary Para ES 20 On the statement "One of the other impacts of the project will be strengthening of agro-climatic monitoring and information systems, leading to the required inputs for development of long-term plans for the agriculture sector."	Surely this is the primary impacts, which has led to the positive impacts on farmers. So not sure this is "one of the other impacts' – unless the MTR team means the other impact is setting up systems and capacities for longer term impacts on planning	More text added to clarify this
Project Coordinator	208	Executive Summary Para ES 20 (Replied to Technical Officer at FAO's comment above)	the project C2 has finalized modelling for future crops. Using these data as input, the gov is now developing strategies for future crops, and validating the 9th socio economic development plans (NSEDP) targets.	Please see the response to the above comment

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			In that send I think this phrase seems ok but could be better worded by referring to the NSEDP policy	
Technical Officer at FAO	209	Executive Summary Para ES 22 (now Para 23) On the statement "Thus, the positive impacts due to component 2 will be realized over a period of time"	Meaning beyond lifetime of the project?	Suggested additional text added
Technical Officer at FAO	210	Executive Summary Para ES 23 On the statement "Presently there is no concrete plan for upscaling the results and benefits of the SAMIS project."	Meaning exit strategy or a different thing?	This is for upscaling/replication of the results of the pilot activities. Given the limited time left for the completion of the project, and considering the feasibility most of the activities under such a plan would need to be carried out beyond the implementation of the SAMIS project. Text added to clarify this
Lead Technical Officer, FAO Asia Pacific Regional Office	211	Executive Summary Para ES 23 On the statement "Presently there is no concrete plan for upscaling the results and benefits of the SAMIS project."	I believe a sustainability strategy has been developed in response to a request of the PSC. Please double check.	Based on the discussions with the project team, the impression of the MTR team is that an exit strategy is yet to be finalised. Based on the request by the MTR team to check on this (as per the comment) a preliminary one and half page note on sustainability was shared.
Project Coordinator	212	Executive Summary Para ES 23 On the statement "A strategy and plan may be worked out to upscale the results of the SAMIS project at the national level."	Please mention the GCF CN being developed. Although this is not a sust strategy and will not be ready soon, it might help the sust of results once finilized. thanks	This aspect is already mentioned in the present version of the MTR report (please see Recommendation 7 in the MTR report).
Project Coordinator	213	Executive Summary Table 2, rating for A.1.2.	9th NSEDP approved at the end of 2020	Agreed to the suggestion Text added
Lead Technical Officer, FAO Asia Pacific Regional Office	214	Executive Summary Table 2, rating for E 2.2. On the statement "The PCS takes note of the periodic monitoring report and approves the work plans. PCS is working as intended"	PSC	Correction done
Lead Technical Officer, FAO Asia Pacific Regional Office	215	Executive Summary Table 2, rating for E6 On the statement "The project is yet to organise the workshops/conferences for dissemination of the information."	Just to note that representatives from MoNRE and MAF have been disseminating lessons learned from the project at region and international forums. Comprehensive lists are provided in the PPRs.	More text added to clarify this

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			Please adjust.	
Project Coordinator	216	Executive Summary Recommendations 1 On the statement "some of the technical training was imparted by the international specialists in English language, the receptibility of the training imparted was low."	There has been no trainings were this problem has been reported, and all training have been translated. Of course Lao language training could have been organized if there was any person able to do such complex training speaking Laos. As of today, the gov entities are all able to undertake mapping independently with tools that were not in use 4 years ago These are maps done entirely in laos by lao experts https://51.38.177.32/webapp/?thematic=aez https://51.38.177.32/webapp/?thematic=sava I think it is different to say that training could be more, it can always be more. I also agree about the lao language, and we are now translating this as per your advice. However, the low receptibility is questionable, considering the capacity reached.	This is one of the findings of the MTR mission and stakeholder consultations. It is up to the project team, national counterparts and FAO and other users of MTR to accept it or not. Please see the response to comment number 12 above. As pointed out in the response, the MTR team is of the view that the trainings has not been very effective. The reasons for this view are also provided in the response to the comment number 12. In this comment, the link shared by the project team leads to two country maps with the markings of the provinces and planned layering of the information. But the required information is yet to be incorporated. MTR team is of the view that these outputs are not even a fraction of the results which can be expected due to the trainings which were provided under the project. The two basic country maps shared by the project team is not even proportional to the expected results due training on basic GIS (not to talk about climate models etc.). Please see the list of trainings imparted under the project at Appendix 9
Project Coordinator	217	Executive Summary Recommendations 1 On the statement "During the mission it was emphasized by the stakeholders that more technical training is needed particularly on agro-met."	It would be necessary to know which stakeholders requested that, because I believe this phrase relates to farmers and village level entities?	No, this does not relate to the farmers and village level entities. Please see response to comment number 12 and comment number 176

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Project Coordinator	218	Executive Summary Recommendations 3 On the statement "It is recommended that the geographical spread of the dissemination of the agroclimatic information/bulletin be increased"	Please clarify if this was recommended by one or more gov partners or by one of more villages. It would be useful to know who requested that. Please see excel file "Local events report" to see the total number of events held	This recommendation relates to extension of the benefits of the pilot activities, beyond the geographical areas where the pilot activities are presently being carried out. Please see the response to comment 210 as well. MTR team is of the view, that it is not important to know the source of the recommendation, but whether it is useful or not. Still to answer the question, this recommendation is from the MTR team against one of the review questions, 'Actions to follow- up or reinforce initial benefits from the project'. Please see the MTR review questions for section 5.2 of the report.
Lead Technical Officer, FAO Asia Pacific Regional Office	219	Executive Summary Recommendations 3 On the statement "It is recommended that the geographical spread of the dissemination of the agroclimatic information/bulletin be increased"	Agromoetorological? Agroclimatic implies longer term timescale. Farmer advisories are for near term and seasonal timescales.	Agreed, correction done
Lead Technical Officer, FAO Asia Pacific Regional Office	220	Executive Summary Recommendations 3 On the statement "(even if it means a marginal increase in the overall cost for this activity)."	Please note points above regarding the statements that impact can be easily replicated. The project has actually engaged in significant capacity building and investment to make sure these dissemination channels work and are effective – training for loud speaker operators, training for crafting advisories, investment in speakers, training district staff, etc.	The comment is not clear. This is a recommendation at MTR. The decision to implement it depends totally on the project team/FAO/national counterparts. Issues (if any) can be covered in the management response to MTR.
Project Coordinator	221	Executive Summary Recommendations 3 Bullet 4 On the statement "Toll free call back service provided by the mobile phone service providers"	Please could you refer to the fact that a free tool internet system for LaCSA is foreseen in the GCF proposal.	GCF project is still in the incubation stage. Further, toll free internet for access to LaCSA would limit the outreach to the farmers having smart phones/computers.
Lead Technical Officer, FAO Asia Pacific	222	Executive Summary Recommendations 3 Bullet 4 On the statement "Toll free call back service provided by the mobile phone service providers"	It would be helpful to know if this was discussed with stakeholders and the feasibility of this has been scoped.	This was discussed at length with the officials of Laos telecom. The response was that in case directions are given by the government, such services

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Regional Office				can be rolled out within one and half months. This service will require establishment of a couple of servers and data/voice storage, which is not a big deal.
Lead Technical Officer, FAO Asia Pacific Regional Office	223	Executive Summary Recommendations 4 On the statement "The real time information feed from the AWSs facilitates generation of agromet information and advisory for the farmers."	Here we refer to agromet and above to agroclimatic. Component 2 focuses on agroclimatic analysis. The data generated by LaCSA will improve potential and capacity for agroclimatic over time.	This related to component 1 (maintenance of AWS)
Lead Technical Officer, FAO Asia Pacific Regional Office	224	Executive Summary Recommendations 4 On the statement "It is recommended that the process be initiated to make provisions in the budgets of the respective department towards this head."	Need?	Correction done
Lead Technical Officer, FAO Asia Pacific Regional Office	225	Executive Summary Recommendations 5 On the statement "it is now possible to have weather information-based crop insurance models in the country."	It is a good idea in theory, but not well supported by the findings a wide range of long-standing, recent and ongoing work to develop functional and sustainable index-based weather insurance schemes in the region. There are very few if any broad-based weather index insurance schemes because of significant issues in terms of basis risk; particularly for the types of cereal crops currently covered under LaCSA. Successful index based insurance schemes focus I think we need to be more realistic about what is possible.	There is no disagreement that there are a number of challenges which needs to be overcome to for developing workable index-based crop insurance products. This include lack of historical weather data for different agro-climatic zones, crop yield data etc. This certainly needs dedicated efforts. Once the index-based crop insurance models has been developed, for implementation real time reliable weather data are needed. It is this aspect which will get addressed with the establishment of AWS under the SAMIS project and other projects which are facilitating establishment of AWSs. The recommendation is that as the required infrastructure for implementing the index-based insurance projects is getting created, the efforts in the direction of development of the products may be initiated. Certainly it is not going to be part of SAMIS project,

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				but would need to be taken care in a separate project. This is a recommendation at MTR. The decision to implement it depends totally on the project team/FAO/national counterparts.
Project Coordinator	226	Executive Summary Recommendations 5 On the statement "SAMIS project may initiate the overall process.	The CIAT coficinancing project has explored this side and the MONRE government does not look interested. Although this is possible, FAO is not able to start such a process without gov agreement Could it be mentioned (somewhere) that a first discussion was held by the cofinancing project CIAT and did not lead to intested by the gov? This discussion happened in a CIAT workshop in Hanoi held in 2019. The event a is reported in the PPRs or I can share more info.	Please see the response to the comment above
Project Coordinator	227	Executive Summary Recommendations 5 On the statement "The weather stations created under the SAMIS project can help the WB project by providing a dataset."	This database preparation based on LaCSA is ongoing since last year, so I am not sure if this is an observation or a recommendation	More text added to clarify this
Lead Technical Officer, FAO Asia Pacific Regional Office	228	Executive Summary Recommendations 7 On the statement "With the good results out of SAMIS project towards delivery of agroclimatic information to the farmers at selected locations"	See points above on agro-met vs. agroclimatic.	Correction done
Project Coordinator	229	Executive Summary Recommendations 8 On the statement "Create a centre of excellence in one of the institutions in Laos for Climate Change Adaptation for the Agriculture Sector"	How can the MTR suggest to open a research center and say that DALAM has need to further training about standard research softwares such as Python and R There seems to be some contraction	This recommendation is related to sustainability aspects of the project results beyond the implementation of the SAMIS project. Training is a continuous requirement and process. For example, new staff members would join the organization, replacing the existing staff over a period of time. Also, technology upgradation world over is a continuous process and in order to keep abreast with the latest, continuous

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				skill upgradation and training is required.
Lead Technical Officer, FAO Asia Pacific Regional Office	230	Executive Summary Recommendations 8 On the statement "A center of excellence may be created in Laos in one of the institutions to support continuation of the scientific work in the area of climate change impacts on the agriculture sector and adaptation to climate change."	It would be helpful to understand if this recommendation has accounted for the role that NAFRI plays in this regard and whether the recommendation was discussed with the NAFRI team and MAF more broadly; particularly DOPF. It would also be helpful to know to what extent this recommendation would go beyond the work that this agency already does on furthering research on climate change impacts on agriculture.	During the mission, discussions were held with the officials of NAFRI. One of the suggestions by NAFRI was the need for Long-term training for junior level government officials through linking to university/institutions. Please also see the response to the comment above this
Technical Officer at FAO	231	Para 5 First bullet On the statement "Baseline GEF Tracking Tool, GEF tracking Tool"	AMAT	Correction done
Project Coordinator	232	Para 22 On the statement "Within MONRE and MAF, main executing departments are DMH and DALaM at central level and at their field offices"	Contrary the original execution arrangements, various additional gov dep are involved. So I am asking myself if this should not be mentioned.	The implementation partners along with the departments and the local offices is already mentioned. It appears sufficient. In case you have strong views about it, please provide the list (along with the respective roles) which you wants to be included.
Technical Officer at FAO	233	Para 24 On the statement "The Government has appointed a 'National Project Director (NPD)'"	From which institution and what level	Text added
Technical Officer at FAO	234	Para 25 On the statement "A Project Management Unit (PMU) comprising of a Project Coordinator, a Knowledge Management and Advocacy Expert, is in place to oversee the implementation of the project on a day-to-day basis."	Would be useful to know which ones national and which ones international. Where is the PMU housed?	The project team comprises of about 42 individual consultants. Some of them are working regularly on full time basis, while the others has specific job responsibilities e.g. GIS climate scenario expert, GIS Land Cover etc. How many of them are national consultants and how many are international consultants was not explored at MTR? In case you have strong views for including this information in the report, we request PMU to share this information, for inclusion in the report. PMU is located within the premises of DMH.

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
Project Coordinator	235	Para 25 On the statement "Figure 3 presents the overall organization structure for implementation of the project."	I suggest to add all involved departments	The guide for MTR of FAO-GEF project requires that key implementation partners be mentioned. (Please see Annex 11, point c. of the Guide) However, in case you was more name to be mentioned, please share the list which you would like to be included
Technical Officer at FAO	236	Para 25 On the statement "Figure 3 presents the overall organization structure for implementation of the project."	The figure below presents PCM MAF and PCM Monre – it would be good to also explain these. I did not find these in the original Prodoc. Are these new roles that were introduced? If yes, what was ration?	This figure is taken from the project document. The source of the figure is already mentioned in the MTR report. Please check at your end, if you are referring to the right version of the Project Document.
Technical Officer at FAO	237	Para 27	As LDCF objectives have changed since, should stress LDCF from GEf5 cycle	Agreed, correction done
Project Coordinator	238	Para 31 On the statement "With the 9th NSEDP (2021-2025), FAO Laos has contributed to the sectoral development plan (10-years strategy) in agriculture sector such as Forestry and Fishery, etc."	This is the policy that is being validated using the AEZ crop scenarios for the future	This is a comment Don't require any action
Technical Officer at FAO	239	Para 32 On the statement "The relevance of the project from the viewpoint of alignment with GEF and FAO strategic priorities is rated as satisfactory"	It seems to me from the write up, its highly relevant, so highly satisfactory?	As per the rating scale, 'Highly Satisfactory' means no shortcomings. It needs to be appreciated that a project design cannot take care of all the problems and issues. Hence there will always be some shortcomings.
Project Coordinator	240	Para 33 Bullet 7	9th	The 8th NSEDP is for the period 2016 to 2020. (The NSEDP is for the period 2021 to 2025). What is being referred here is the 8th plan and not the 9th plan. Relevance of the project is being seen in the context of the time when the SAMIS project is being implemented.
Project Coordinator	241	Para 45 On the statement "In some of the cases the language issues (trainings were conducted in English language) further complicated the situation."	Please inform who stated this as it would be useful to know to solve in the next phase. Village level?	Please see response to comment number 12 and comment number 217
Project Coordinator	242	Para 46 On the statement	Facebook page could be added facebook/dmh-samis	Agreed, action done

Reviewer	Comment number	Section / paragraph number	Comment/feedback on the draft MTR report	MTR Team's response and Action Taken
		"FAO website is being used as the main platform for dissemination of lessons learned and experiences."		
Project Coordinator	243	Para 46 On the statement "When it comes to organising the workshop, there is a need to do a bit of catching up."	Please clarify so that we can address this problem In addition, please also see the list of local events held, both FFS and loudspeacker farmers groups. Please see excel file "Local events report"	Please see Appendix 9, Table 13, Output 3.1.2a (Number of knowledge and information-sharing workshops organized). The information provided in the PIR against this indicator cannot in any manner be considered as knowledge/information sharing workshop. Assessment is based on the indicators. To clarify this more text is added.
Project Coordinator	244	Para 52 On the statement "The impacts of component 2 of the project are related to the development of the in-country capacity"	In case of interest, the LRMIS is now populated with 90% of the data https://51.38.177.32/webapp/?thematic=aez https://51.38.177.32/webapp/?thematic=sava	Please check at your end The links shared by you are the country map only. No data or information. Not sure what is the purpose of sharing these links
Project Coordinator	245	Para 64 On the statement "The proposed new version of the SOP was submitted to the PSC in July 2020	also, a public consultation was help in January 2021. A New Version is ready since April and under consultation	This is just a comment No clarification or correction needed
Project Coordinator	246	Para 65	No the PPR/PIR presents an additional risk, linked to the excess of projects in DMH. Please consult documents PPR and PIR. The additional risk is linked to excess of projects in DMH.	Correction done
Technical Officer at FAO	247	Para 65	Meaning MTR team agrees?	Comment is not clear Agree with what?
Technical Officer at FAO	248	Para 66 On the statement "The Project Steering Committee is the key decision-making body at a project strategic planning level."	And have met regularly?	Additional information included in the report
Technical Officer at FAO	249	Para 67	Any reason why MTR was delayed?	MTR was due much before COVID-19. There is no apparent reason for the delay. The project team somehow missed the timely action for the MTR. The project team has responded to this (please see the response by the project team at comment number 250 below.

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Project Coordinator	250	Para 67 (Replied to Technical Officer at FAO's comment above)	From project sides was first covid, and after that two MTR rejected due a new age limit rule. I think that this shold be mentioned too	This is the response by the project team to comment number 249 above.
Technical Officer at FAO	251	Para 72 On the statement "The project design provided for a 'Project Board' as the main tool for national stakeholder engagement and coordination amongst different agencies participating in implementation of the project."	FAO projects do not have Project Board. Does the MTR team mean something else – PSC, perhaps?	Correction done
Technical Officer at FAO	252	Para 74 On the statement "As explained by the Project Coordinator, FAO don't allow for a project specific website."	Outside of FAO website. FAO website can host information on the project. This needs to be clearly presented.	Agreed, text modified
Lead Technical Officer, FAO Asia Pacific Regional Office	253	Para 74 (Replied to Technical Officer at FAO's comment above)	http://www.fao.org/in-action/samis/ru/	This is response to the above comment number 252
Project Coordinator	254	Para 74 On the statement "The project also has a Facebook page and a google webpage."	what is a google webpage? LaoFAB?	Text modified. Additional information provided in a new footnote
Project Coordinator	255	Para 74 On the statement "The FAO website is also being used for disseminating the information booklets, knowledge products and other publications."	It would be necessary to briefly mention: The LACSA site The LRIMS site (but I am not sure because the new version in online since June only)	LaCSA and LRIMS are project specific deliverables and not knowledge and publication platforms
Project Coordinator	256	Para 74 On the statement "The activity of dissemination of the weather/climate information, is complemented by the development of other communication channels such as mobile application, loudspeaker, TV and radio programming etc."	One important point is that loudspeakers is not complementary, or not only Loudspeaker can functions and were tested in villages without FFS Please see excel file "Local events report" for the number of events held	Agreed, text modified
Lead Technical Officer, FAO Asia Pacific Regional Office	257	Para 77 On the statement "The project design has provision for organisation of a number of workshops for Knowledge and information sharing"	Please see points above. Project has been showcased at a number of international and regional events. Details were provided in the PPRs. The project is widely covered in local media.	Please see response to comment number 243. More text added
Project Coordinator	258	Para 77	List of newspaper articles and international conferences are in the PPRs	Yes, they have been taken into consideration right from the beginning. However, they cannot substitute for the knowledge sharing workshops.

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Technical Officer at FAO	259	Para 89	What about to scale up nationally by the gov?	The activities for component 2 are at national level. Thus, scaling up nationally is not considered. However, ensuring sustainability of the results and continuation of the modelling work (including skill upgradation is important considerations.
Project Coordinator	260	Para 89 (Replied to Technical Officer at FAO's comment above)	The gov is testing the results of C2 for - Village level planning - Policy making	These activities are not scaling up.
Lead Technical Officer, FAO Asia Pacific Regional Office	261	Para 100 On the statement "A strategy and plan may be worked out to upscale the results of the SAMIS project at the national level."	It can still be noted here that the PSC had instructed the project team to develop a follow-on initiative in the form of a GCF project and that work has been started in this front.	This information is included in the report
Project Coordinator	262	Para 100	One important point is that the gov has requested to have a scale up of C1 and C2 tools, so not just the LaCSA one There is a connection between C1 and C2	Connection between Component 1 and Component 2 is fine. As Component 2 is being implemented at the national level, what kind of scaling up of the tools developed under Component 2 is envisaged. The comment is not clear
Technical Officer at FAO	263	Para 101 Conclusion 1 On the statement "positively impacting the earnings of the farmers."	More information on this conclusion would be useful	Cross reference to para 97 has been provided for more information
Project Coordinator	264	Para 101 Conclusion 2 On the statement "it will be possible for the national government to extend these benefits to the farmers across the nation"	1. This is not the target of samis 2. What could we do at national scale beyond the TV and radio shows? Please indicate	This suggestion is not for the SAMIS project. The actions under this may be partly carried out during remaining implementation period of SAMIS project and rest of the actions may be carried out beyond the implementation timelines of the SAMIS project, either by the national government at its own, or as a part of any subsequent development project. Please see recommendation 3
Technical Officer at FAO	265	Appendix 2 Component 1 table	Meaning end of project target or achieved till date?	In the Results Framework the project document uses the phrase 'End project

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		On the table header "End project target"		target'. This is the project target. Text modified to avoid any confusion.
Technical Officer at FAO	266	Appendix 2 Component 1 table Outcome 1.1.	What do these yes represent? Are the milestones reported by project and MTR confirms these?	The AMAT indicators apart from yes/no sues the numerical numbers 0,1,2. Thus, these numbers are appearing against the indicators. For the results against these indicators please see Appendix 8.
Project Coordinator	267	Appendix 5 On "4. Project Progress Report (PRR)"	Most activies of for awareness rising, news, and conferences are in the PPR, C3 report section Most trainings and workshop activities are in C1 and C2 report In order to assess the traning and awareness rising aspects, it is recommended to focus on the PPR (including old ones) For the local level events, please also see Excel file "Local events report"	The information in PPR and PIRs has already been considered and included in the MTR report right from the beginning.
Project Coordinator	268	Appendix 8 On the text "Progress towards results – Component 1, Outcome 1.1"	Kindly note the correction in the TT, 2.2.1. The file is attached.	Table updated based on revised Tracking Tool
Project Coordinator	269	Appendix 8 Table 9 On the text "The implication of delay in the establishment of laboratory/calibration centre is that there may not be sufficient time for the staff to get on the job training before the closure of the SAMIS project."	Procured, should arrive in mid-August	This information is now included in the report
Project Coordinator	270	Appendix 8 Table 13 On the statement "The information provided in the Tracking tool is number of persons"	The TT for Y3 (MTR) has been revised and it is attached.	Revised information is added to this Table
Project Coordinator	271	Appendix 8 Table 13 On the statement "Considering that the project is almost at completion of its implementation, this activity needs prioritisation"	Agreed but please check in the PPRs about evens held in the country and abroad	Please see the targets, they are very specific, website, training materials, publications, maps etc. No corresponding documents are available at MTR. However, based on the information in PPRs, more text has been added
Project Coordinator	272	Appendix 8 Table 13 On the statement "6 FFS have been carried out along with 7 FFS is the NAFRI villages"	Please see attached table "Local events report"	Text updated, based on the 'Local Events Report'

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Project Coordinator	273	Appendix 9 Comment 11 On the statement "This statement is deleted"	The LRMIS is ready as of June https://51.38.177.32/webapp/?thematic=aez https://51.38.177.32/webapp/?thematic=sava	The links shared by you is just two Laos country maps, without any data, information. Not sure what is the purpose of sharing these links
Project Coordinator	274	Appendix 9 Comment 12 On the statement "For the online training sessions translators were hired by AIT"	so this means that if a local or gov staff cannot understand English the training cannot be effective? gov staff use these softwares weekly, so these trainings were successful in term of capacity adquired	These are the observations of the stakeholders consulted during the mission. It is better to ask this question to them.
Project Coordinator	275	Appendix 9 Comment 12 On the statement "Discussions with DALaM officials said that there were difficulties for the team regarding how to use the program Python and R model"	How can the MTR suggest to open a research center and say that DALAM cannot use standard research softwares such as Python and R. Kindly clarify	These are the observations of the stakeholders consulted during the mission. It is better to ask this question to them.
Project Coordinator	276	Appendix 9 Comment 12 On the statement "Discussions with DALaM officials said that there were difficulties for the team regarding how to use the program Python and R model"	indeed two years of training are not solving all needs, but the gov staff use the two software weekly to undertake their job the MTR could have considered the progresses obtained some of the maps produced: https://51.38.177.32/webapp/?thematic=aez https://51.38.177.32/webapp/?thematic=sava	Once again, these are the views of stakeholders consulted. Regarding the maps whose links has been shared by you, please see the response against comment number 195
Project Coordinator	277	Appendix 9 Comment 12 On the statement "Discussions with the officials of NAFRI revealed that Long-term training for junior officials is needed through linking to university"	true! Kindly note the NAFRI is not involved in the modelling part of the project they do other activities in the project.	Fine, NAFRI is not involved in modeling. However, it must be appreciated that they do have a very good understanding of the situation in Laos regarding climate change modeling.
Project Coordinator	278	Appendix 9 Comment 14 On the statement "It did not expand the scope of the project to loudspeakers."	it is true that the expansion happened with no approval of the PSC but the gov entities agreed and endorsed this In fact two entities had contracts with SAMIS to manage the loudspeaker (DALAM and PPC) with the PAFOs DAFOs offices	Putting it on PSC was wrong
Project Coordinator	279	Appendix 9 Comment 14 On the statement "Please read the complete sentence, use of loudspeakers is already mentioned."	The loudspeakers are independent system from FFS Also, the assessment is done also in villages that have loudspeaker only	Agreed, corresponding correction has already been done in the MTR report
Project Coordinator	280	Appendix 9 Comment 15 On the statement	The FFS method requires one meeting per week over 7 months, in each village. This is	Your comment was that TV shows, newspaper articles ….. were not considered.

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		"It relates to the training of the farmers and stakeholders at the local level."	reported in the FFS calendar in the PPR Please see file local events report	The response was to this comment.
Project Coordinator	281	Appendix 9 Comment 16 On the statement "This additional information is now included in the report."	Thanks	No response required
Project Coordinator	282	Appendix 9 Comment 27 On the statement "MTR team is of the view that most of the events, mentioned in the PIR against this indicator are not truly knowledge sharing workshops."	thanks, understood now. Please consider see in the PPR C3 the booths and presentations to fairs. SAMIS has done many of these events and they are all reported.	These events are not workshops
Project Coordinator	283	Appendix 9 Comment 33 On the statement "The comment is not clear"	The project has an harmonized workflow between C1 and C2 at the central level. The C1 and C2 gov team collaborate continuously This refers to the fact that the project is only one and both IT system and managed and maintained by both ministries. Also, most trainings cover both ministries Also, most research work involve both ministries I think it would be possible to try to see the project as one. The assessment might suffered by the consideration that the two entities work separately.	What gives the impression that the MTR considers the two entities work separately
Project Coordinator	284	Appendix 9 Comment 38 On the statement "Does the comment say trainings were not imparted in English Language?"	See number 12	See the response for comment number 12
Project Coordinator	285	Appendix 9 Comment 39 On the statement "The point of discussion is not, who suggested and who agreed for online training, but the fact that there are issues."	See number 12	See the response for comment number 12
Project Coordinator	286	Appendix 9 Comment 40 On the statement "Delivery of training don't necessarily mean that it has been successful and the participants got trained adequately."	Dmh and dalam do advanced modelling weekly, so I could be said that the trainings were indeed adequate No doubt more trainings could be useful, and pasalao translation of training manuals	MTR team is not in agreement

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			in indeed ongoing as recommended	
Project Coordinator	287	Appendix 9 Comment 41 On the statement "The source of the recommendation is not important."	The explanation you provide in number 12 is very useful to try to tailor the last trainings It does not seem that all the entities have the same level of problem with the English or with other aspects	Different trainees would have different levels and types of problems. The training need assessment report prepared by the project is a very good pointer in this direction. Maybe the project can do a need assessment (along with the assessment of trainability of the participants) before further training sessions.
Project Coordinator	288	Appendix 9 Comment 42 On the statement "the recommendation here is to translate some of the training materials (like PPT, handouts etc. used in the trainings) in the local language."	The trainings manuals are being translated. However, this is taking time due to the limited numbers of experts available.	This is just a comment and does not require a response
Project Coordinator	289	Appendix 9 Comment 56 On "Monica Petri"	surname	Typo error. Correction done
Project Coordinator	290	Appendix 9 Comment 56 On the statement "Where does the recommendation asks to go beyond the national boundaries? Geographical areas don't mean outside the country."	Sorry this is a misunderstanding of my English The SAMIS cannot be expanded because it already reach the entire country This means that NGOs and other partners are and can use the system as of from 2019.	This recommendation is specifically for the expansion of pilot activities so that the farmers across the country get benefited.
Project Coordinator	291	Appendix 9 Comment 63 On the statement "It is a very irresponsible comment."	Please see attached word document MissionSchedule vs DocumentsSent The mission was undertaken before reading various documents.. the list is indicated in the attachment Instead of planning the meetings base on the role of partners, the documents were sometimes read after, or not consulted at all in some case. Even if documents were read after the mission, this is not sufficient. SAMIS is not a field project, only 11% of the budget is field based. However, the majority of the MTR work and of the reccomandations relate to field. This is because the documentation have not been	The document 'Mission Schedule vs Document Sent' which was sent separately by you has been replied pointwise separately and has already been shared. In summary, this document prepared by you is nothing but a bunch of lies, misleading and manipulating statements. MTR team don't have any preference for any of the component of the SAMIS project. Too much of the funds have been spent on the training under component 2. This has a direct impact on the efficiency and effectiveness of the project.

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			read, or not been read at the right moment. So this phrase could be please worded more mildly, because this comment in fact proven.	
Project Coordinator	292	Appendix 9 Comment 66 On the statement "It is not clear, which table of contents is being referred here."	The same in para 6, not all locations are listed Also, please see Excel file "Local events report"	This sentence mentions the field locations where the mission for MTR was carried out, and not all the locations where pilot activities under the project were carried out.
Project Coordinator	293	Appendix 9 Comment 67 On the statement "This is a highly irresponsible comment."	Please see attached word document MissionSchedule vs DocumentsSent The mission was undertaken before reading various documents.. the list is indicated in the attachment Instead of planning the meetings base on the role of partners, the documents were sometimes read after, or not consulted at all in some case. Even if documents were read after the mission, this is not sufficient. SAMIS is not a field project, only 11% of the budget is field based. However, the majority of the MTR work and of the reccomandations relate to field. This is likely because the documentation have not been read, or not been read at the right moment So this paragraph or phrase could be please worded more mildly, because this comment in fact proven. The coordinator could not do anything else than notice that documents were not read, because this was confirmed by the continued requests to access documents that were already provided from the beginning.	Please see response to the comment 291 . Once again the document attached by you is a bunch of lies, misleading and manipulating statements.
Project Coordinator	294	Appendix 9 Comment 93 On the statement "This assessment of C2 is not sufficient and does not focus on the effectiveness of the project, linked to gov buy in and capacity acquired."	As per 12	Please see the response to comment 12 and comment 291

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Project Coordinator	295	Appendix 9 Comment 98 On the statement "Please see Appendix 8, Table 13, Out 3.1.2. It is mentioned that the workshops mentioned in the PIR (e.g. PSC meetings etc.) are not the workshops and there is no achievement against this indicator."	When we do FFS we do one training every week over 7 months time. Sometimes, due to flood or other problems, this is not done. However, this is covered by the FFS weekly meetings. See local events report	You are once again requested to kindly have a look at the indicators and targets for the Output 3.1.2. Also please see the corresponding activities in the 'project document' How these local events can qualify for the workshops for dissemination of knowledge products.
Project Coordinator	296	Appendix 9 Comment 105 On the statement "What is being talked about the geographical coverage across the nation by the weather stations."	This is not clear. The stations cover already the entire country Maybe you might refer to increase number of station? The forecast covers the entire country	What is being said is that as AWSs created under the SAMIS project are across the nation, it will be possible to provide location specific advisory to the farmers (apart from those at the pilot locations) across the nation. Text modified to clarify this
Project Coordinator	297	Appendix 9 Comment 123 On the statement "They are mentioned in which reports, please specify"	Last PIR, excess of new projects and financing to DMH	This information is now included in the MTR report
Project Coordinator	298	Appendix 9 Comment 130 On the statement "that the value of the project remains to be understood by the team"	This refers to the MTR team, the MTR team does nto seem to have made an effort to determine the intersection and interaction between C1 and C2 teams and modelling	This is in your imagination. There is no basis for this statement
Project Coordinator	299	Appendix 9 Comment 130 On the statement "There are interpersonal issues between the project team and the officials of DMH. MTR is not an opportunity to settle personal issues."	The project team has done everything possible to work wit the MTR and to stress the positive environment between the project and the government. This comment comes to me as a surprise. It is true that sometimes working with gov entities is not the easiest, however, the MTR team does not seem to focus on the successes obtained. It would to know who in the project team in which manner these comments were expressed in order to solve this.	The matters where the viewpoints are different need to be discussed and sorted out. For example, one of the periodic reports shared during MTR, mentions that during the entire year, the project coordinator and the NPD has met only once. This is despite the fact that PMU is located within the premises of DMH
Project Coordinator	300	Appendix 9 Comment 158 On the statement "The maintenance of web page won't require significant funds"	For a site like LRMIS using cloud computing could range around 4000 per year	4000 what? USD or Euro or some other currency. What is the basis for this assessment? Is this figure significant?
Project Coordinator	301	Appendix 9 Comment 176 On the statement	Same as 12	Please see the response for comment number 12,

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		"No assessment regarding the effectiveness of the trainings provided has been carried out by the project team."		comment numbers 274, 275 and 276.
Project Coordinator	302	Appendix 9 Comment 177 On the statement "Please see the reply to the comment above	As 12	
Project Coordinator	303	Appendix 9 Comment 178 On the statement "Comment is not clear"	As 12	
Project Coordinator	304	Appendix 9 Comment 179 On the statement "What is being suggested, is that some of the training material (e.g., PPT slides etc.) could have been translated to Laos language."	This is ongoing. There are few professional translators, a translation before the trainings was not possible	This is just a comment and does not require any response or action.
Project Coordinator	305	Appendix 9 Comment 184 On the statement "Assessment is based on the indicator."	Please consider that FFS meet once a week over the rainy season Sometimes, in case of rain, meeting could be less regular due to flood but in general the number of meetings/trainings at community level is high	The indicator is about the number of FFS organized and implemented. It is not about the number of meetings organized for each FFS