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Monitoring and Evaluation of Government Agricultural Investment Projects in Laos

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Abstract

Purpose: This study examines the monitoring and evaluation (M&E) of government-funded agricultural investment projects in Laos. It aims to assess their relevance, effectiveness, efficiency, impact, and sustainability using the OECD/DAC framework, and to identify key challenges and opportunities for improving project performance and long-term outcomes.

Methodology: A mixed-methods approach was applied. Quantitative data were collected from 110 respondents, including project officers, M&E officers, data officers, and volunteers. Qualitative data were gathered through in-depth interviews with 15 project managers. Descriptive statistics and thematic analysis were used to evaluate project performance across OECD/DAC criteria.

Findings: The projects showed strong alignment with national priorities (Mean = 3.65) but weak alignment with beneficiary needs (Mean = 2.74). Effectiveness (Mean = 3.02–3.50) and efficiency (Mean = 2.96–3.11) were moderate, constrained by unclear objectives, weak M&E, and delayed budget disbursement. Environmental and social mitigation actions were positively rated (Mean = 3.66), while long-term impact remained uncertain (Mean ≈ 3.23). Sustainability recorded the lowest scores—organizational (2.65), financial (2.82), and technical (2.90). Respondents highlighted strong needs for technical assistance (95.5%), proposal-writing training (91.8%), modern technologies (86.4%), and strengthened M&E systems (72.7%).

Unique Contribution to Theory, Practice, and Policy: The study enhances theoretical understanding of the OECD/DAC evaluation framework within the context of developing countries, particularly in agricultural public investment. Practically, it offers evidence-based insights into performance gaps and capacity needs of project staff. For policy, it provides actionable recommendations for strengthening participatory planning, improving M&E systems, enhancing resource allocation processes, and developing sustainability mechanisms to ensure long-term agricultural development in Laos.

Keywords: *Agricultural Investment, Project Evaluation, Monitoring and Evaluation, Sustainability, Government Support.*

1. INTRODUCTION

Globally, many projects fail due to poor planning, inadequate resources, or weak implementation. Countries invest heavily in infrastructure and development initiatives to improve living standards, making effective project execution essential. Monitoring and evaluation (M&E) are critical for assessing project performance, yet many managers underestimate their importance due to limited understanding (Engineering Programme Group, 2019).

Aid agencies must comply with strict reporting standards, and M&E systems often provide the data necessary for accurate reporting (Crawford & Bryce, 2001). Sustainability is also a key challenge, influencing both project processes and outcomes (Silvius & Schipper, 2014). Proper M&E significantly enhances project success (Ernest, 2019).

In Laos, government investment leverages state budgets, natural resources, and assets to implement projects approved by the National Assembly in line with the national socio-economic development plan. The Ministry of Agriculture and Forestry (MAF) formulated the Agriculture Development Strategy for 2025 and a Vision for 2030, focusing on food security, competitive agricultural commodities, clean and sustainable agriculture, and modernizing the agricultural economy linked with rural development (MAF, 2015).

Despite numerous government and donor-funded projects in agriculture and forestry, many fail to meet planned objectives. This study addresses gaps in project implementation to enhance success, achieve targets, and promote sustainability. The findings are expected to guide project management, policy development, and future funding decisions.

Monitoring, inspection, and evaluation ensure that projects align with strategic objectives, provide evidence for accountability, and facilitate continuous improvement from central to local levels (MAF, 2015).

1.1 Problems in Project Management in Laos

Government-sponsored agricultural and land-investment projects in Laos routinely face multiple structural and management challenges that hinder their effectiveness and sustainability. First, many projects suffer from lack of clear objectives and strategic planning, as project documents frequently define broad or ambiguous goals without specifying measurable outputs or adaptive strategies, resulting in fragmented implementation and weak alignment with national development priorities (MRLG, 2025; OECD, 2024). Second, monitoring and evaluation (M&E) systems remain weak or underdeveloped, limiting the government's ability to track progress, ensure accountability, and make timely, evidence-based adjustments a persistent factor contributing to delays and reduced project performance (FAO & Lao PDR Government, 2018; Inthakesone & Syphoxay, 2021). Third, stakeholder participation in project design is often very limited, especially among local communities, non-state actors, and civil-society organisations, leading to interventions that lack local ownership and do not fully reflect community needs or

agro-ecological realities (GIZ, 2019; MRLG, 2025). Fourth, many projects suffer from insufficient financial and human resources, including shortages of skilled personnel, inadequate budgets, and under-resourced institutions, which constrain effective implementation, supervision and post-project follow-up (OECD, 2024; FAO, 2018). Fifth, feasibility studies and baseline assessments are frequently inadequate or missing, resulting in underestimation of environmental, social and economic risks, mis-targeted interventions, and unrealistic performance expectations (MRLG et al., 2021; Nature Communications, 2025). Finally, post-project sustainability planning is typically weak, with few institutional, technical or financial mechanisms to maintain project benefits once external support ends, leading to outcomes that are often short-lived or only partially realised (Inthakesone & Syphoxay, 2021; MRLG, 2025). Collectively, these inter-related challenges undermine project effectiveness, transparency, and the long-term positive impact of agricultural and land investments in Laos.

1.2 Definitions of Key Terms

1.2.1 Sustainability of Government-Funded Agricultural Projects:

Government investment uses public budgets, resources, and assets to implement projects aligned with national socio-economic development plans (State Investment Law, 2009; MAF, 2012).

1.2.2 Project Effects:

Effects refer to intended or unintended changes resulting directly or indirectly from a project, including outcomes like improved crop yields, incomes, living standards, or environmental conditions (OECD, 2002).

1.2.3 Project Monitoring:

Monitoring involves the ongoing collection of information on project inputs, outputs, and activities to ensure objectives are met. It detects deviations, identifies gaps, and informs corrective action. Progress reports track task completion, schedule adherence, and budget utilization.

1.2.4 Project Evaluation:

Evaluation is the systematic, objective assessment of a project's design, implementation, and results, focusing on relevance, efficiency, effectiveness, impact, and sustainability (OECD/DAC). Unlike monitoring, evaluation is retrospective and learning-oriented, guiding future project design and course corrections (State Investment Law, 2009).

1.2.5 Evaluation Criteria (OECD-DAC):

1) **Relevance:** Alignment with beneficiaries' needs, national priorities, and donor policies
2) **Effectiveness:** Achievement of project objectives

3) **Efficiency:** Transformation of resources into outputs
4) **Impact:** Positive or negative, direct or indirect consequences
5) **Sustainability:** Long-term continuation of benefits after support ends

1.3 Objectives of the Study

The study aims to analyze the relevance, effectiveness, efficiency, impact, and sustainability of government agricultural projects. Objectives include:

1. Assess project relevance to beneficiaries' needs and national priorities
2. Evaluate efficiency in terms of time, cost, and resource use
3. Analyze effectiveness in achieving objectives
4. Examine positive and negative impacts on communities, the environment, and the national economy
5. Evaluate sustainability of project benefits (technical, institutional, financial)
6. Provide practical recommendations to improve future project planning, implementation, and monitoring

1.4 Research Questions

1. Are project objectives and components relevant to beneficiaries and national priorities?
2. How efficiently are projects implemented in terms of time, budget, and resources?
3. To what extent are project objectives and outcomes achieved?
4. What are the positive and negative impacts on communities, the environment, and agriculture?
5. Are project results sustainable technically, institutionally, and financially?

1.5 Scope of the Study

The study aims to improve government-funded agricultural projects in Laos by examining monitoring and evaluation (M&E) systems and overall project performance through both quantitative and qualitative approaches. Quantitative data were collected from 110 project staff in Vientiane Capital, including project officers, M&E officers, data officers, and volunteers, while qualitative insights were obtained through in-depth interviews with 15 project managers to explore challenges, successes, and contextual conditions influencing project implementation. Guided by the OECD-DAC evaluation framework, the study assesses relevance, efficiency, effectiveness, impact, and sustainability to develop practical recommendations for strengthening project design, implementation processes, and long-term outcomes.

2. LITERATURE REVIEW

2.1 Introduction

This chapter synthesizes existing literature on the monitoring and evaluation (M&E) of government agricultural investment projects, emphasizing theoretical foundations, project management, technical expertise, performance, sustainability, and evaluation frameworks. The review highlights the critical role of M&E in ensuring project effectiveness, efficiency, impact, and sustainability in the context of agricultural development.

2.2 Theoretical Foundations

2.2.1 Program Theory

Program theory provides a framework for understanding how project inputs are transformed into outputs and outcomes, linking activities to intended impacts (Bickman, 2007; Lipsey, 2011). It aids evaluators in analyzing the causal mechanisms of interventions and understanding how beneficiaries receive support, while guiding resource allocation and process design (Sethi & Philippines, 2012; Uitto, 2010). The input-process-output model under program theory clarifies the relationships among project components, enhancing performance measurement and enabling adaptive management.

2.2.2 Results-Based Management (RBM)

RBM, introduced in the 1980s and advanced by the OECD in the 1990s, emphasizes accountability, continuous monitoring, and evidence-based decision-making (Crawford & Bryce, 2013; UNDP, 2012). It aligns project activities with expected outcomes and fosters stakeholder participation in performance assessment. Key RBM elements include baseline data collection, regular feedback loops, performance documentation, and adaptive planning. When applied effectively, RBM enhances project efficiency, stakeholder accountability, and sustainable results (Hwang & Lim, 2013; Robert, 2010; Clarke, 2011).

2.3 M&E Planning and Project Performance

Effective planning for monitoring and evaluation is pivotal for improving project performance. Studies show that projects lacking structured M&E often underperform in cost, time, and quality management (Mackay & World Bank, 2007; Muhammad et al., 2012). Active involvement of management and continuous feedback enhance decision-making and project outcomes (Chandurkar & Dutt, 2017). A well-designed M&E plan ensures timely data collection, performance tracking, and strategic adjustments, which are essential for government-led agricultural initiatives.

2.4 Technical Expertise

Technical skills of project personnel significantly influence M&E effectiveness and overall project performance. Competencies such as visioning, leadership, interpersonal influence, emotional intelligence, and contract management improve project cost, quality, and time outcomes (Sunindijo, 2015; Vittal, 2008). Practical M&E training enhances staff capacity, ensuring accurate data collection, process monitoring, and utilization of lessons learned (Rossi, 2012; Bailey & Deen, 2012). Balanced work distribution, continuous support, and managerial guidance are essential to maintain staff commitment and accountability (Gorgens, Nkwazi, & Govindaraj, 2005; Ramesh, 2012).

2.5 Government Project Performance

Government investment projects require comprehensive planning, coordination, and multi-stakeholder engagement. Despite adherence to project management guidelines, many projects face challenges such as unclear objectives, insufficient stakeholder involvement, and weak monitoring systems (Kwak et al., 2014; Patanakul et al., 2016). Large-scale projects, in particular, exhibit lower performance in cost, schedule, quality, and effectiveness (Patanakul, 2014). Strengthening management support, accountability, and documentation is crucial for improving public sector project outcomes (Kwak & Anbari, 2010).

2.6 Sustainability of Agricultural Projects

Sustainability is central to government-funded agricultural projects, encompassing institutional, social, financial, and environmental dimensions (OECD, 2013). Long-term success requires capacity building, structured implementation, regular monitoring, and active stakeholder engagement (Mjema, 2017). Strategic planning, transparent communication, and adaptive M&E systems enhance sustainability, enabling projects to achieve enduring socio-economic benefits (Hwang, 2022). Timely task completion, resource allocation, and policy alignment remain critical for sustaining impacts (Kyalo & Muturi, 2015).

2.7 Evaluation Frameworks (OECD/DAC Criteria)

The OECD/DAC framework defines six key evaluation criteria: relevance, coherence, effectiveness, efficiency, impact, and sustainability (OECD, n.d.).

- **Relevance:** alignment with beneficiary needs and national priorities
- **Coherence:** consistency with other interventions
- **Effectiveness:** achievement of objectives
- **Efficiency:** cost- and time-effectiveness of resource use
- **Impact:** broader socio-economic and environmental effects

- **Sustainability:** likelihood of long-term benefits

These criteria provide a normative basis for assessing project performance and guiding improvements in planning and implementation.

2.8 The Effect of Agricultural Projects

Effective agricultural project management requires addressing key constraints: financial resources, time, and performance standards. Project managers' leadership skillsincluding decision-making, integrity, communication, and risk management directly influence project success (Zimmerer & Yasin, 2011; Maylor, 2013). Government support through adequate funding, infrastructure provision, and technology enhancement is vital for improving rural livelihoods (Madu & Wakili, 2012). Empirical evidence indicates that well-designed impact evaluations remain limited in developing countries, highlighting the need for stronger data-driven policy design and project monitoring (Del Carpio & Maredia, 2009; IDB, 2010).

2.9 Conceptual Framework

Based on OECD/DAC criteria, the conceptual framework positions relevance, effectiveness, efficiency, impact, and sustainability as independent variables hypothesized to influence overall project performance in the Lao agricultural sector (Figure 1). The framework assumes that higher levels of these criteria yield improved project outcomes, guiding M&E implementation and performance assessment.

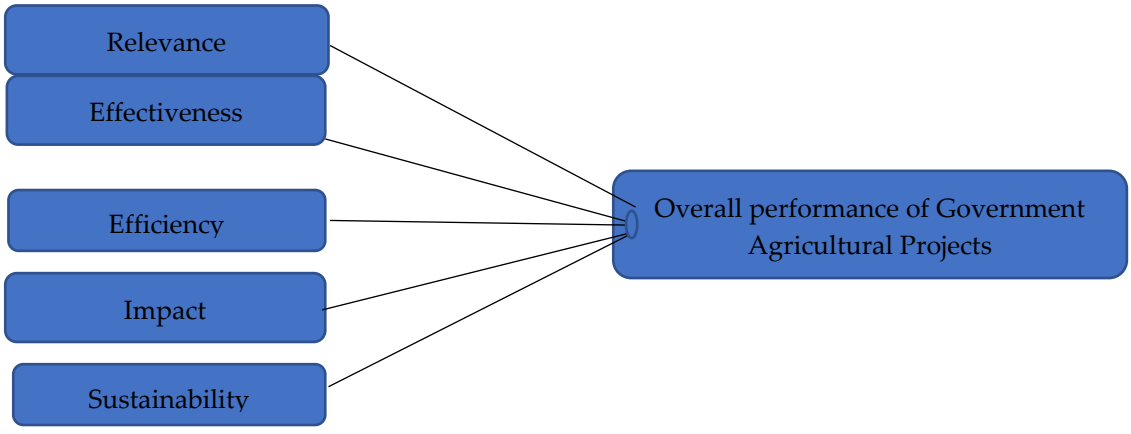

Figure 1. Conceptual Framework

3. METHODOLOGY

This study was conducted within government agricultural investment projects overseen by the Ministry of Agriculture and Forestry in Vientiane Capital, Laos, focusing on initiatives that had active Monitoring and Evaluation (M&E) units and had been operational for at least three years. The population consisted of 194 staff members, including 152 subordinate personnel project

officers, M&E officers, volunteers, and data officers and 15 project managers. Using Yamane's (1967) formula at a 95% confidence level and 5% margin of error, a sample of 110 subordinate staff was selected for quantitative analysis. Stratified random sampling ensured proportional representation of each staff category, while purposive sampling was applied in cases where representation was limited. Additionally, 15 project managers participated in qualitative interviews to provide deeper insights into project implementation, challenges, and performance outcomes.

Data collection integrated both primary and secondary sources to ensure comprehensive and credible findings. Primary data included structured questionnaires administered to project staff, along with in-depth interviews and focus group discussions involving project personnel, local officials, farmers, and community representatives. Secondary data were drawn from academic literature, policy documents, government reports, and online resources to provide theoretical grounding and triangulate field findings. Document review further supported the verification of project information and contextual understanding. Quantitative data were processed through systematic editing, coding, and tabulation, followed by statistical analysis using SPSS, Excel, and Word. The structured questionnaire contained 26 items aligned with the OECD-DAC evaluation criteria relevance, effectiveness, efficiency, impact, and sustainability and results were summarized using frequencies, percentages, means, and standard deviations. Qualitative data from the 15 semi-structured interviews were thematically analyzed to capture managers' experiences, decision-making processes, stakeholder participation, and perspectives on sustainability.

The study employed a mixed-methods research design to strengthen the validity and depth of findings. The quantitative component provided measurable and generalizable evidence regarding project performance through Likert-scale responses, while the qualitative component enriched the analysis by offering context-specific insights into implementation processes, challenges, and opportunities for improving M&E systems and agricultural project management in Laos.

4. DISCUSSION

4.1 Demographic Profile of Respondents

The demographic profile demonstrates the demographic data of the respondents such as gender, age, level of educational qualification, and Experience in the organization (Year). The respondents is shown in Table 3.

Gender Distribution: As shown that, 62 respondents (56.4%) were male and 48 (43.6%) female, reflecting a relatively balanced distribution. This diversity enhances the reliability of perspectives collected.

Age Distribution: The largest proportion of respondents were 36–45 years (41.8%), followed by 26–35 years (20.9%) and 18–25 years (19.1%). Only 18.2% were over 46 years. This

suggests that most participants were in their productive years, enhancing their engagement in project activities.

Educational Background: As shown that 49.1% of respondents held a Master's degree, 39.1% a Bachelor's degree, and 3.6% a Ph.D. This high level of education indicates strong technical and professional capacity among project staff.

Work Experience: Most respondents (81.8%) had more than five years of experience, with nearly one-third serving 13–15 years. This demonstrates substantial institutional knowledge and credibility in evaluating project implementation.

Table 1. Demographic Profile of the Respondents (n= 110)

Variable	Category	Frequency	Percent (%)
Age	18-25 years	21	19.1
	26-35 years	23	20.9
	36-45 years	46	41.8
	46-55 years	12	10.9
	>56 years	8	7.3
Gender	Male	62	56.4
	Female	48	43.6
Level of education	Diploma	5	4.6
	Higher diploma	52	47.3
	Bachelor	18	16.4
	Master	18	16.4
	Ph.D	17	15.5
Experience in the organization (Year)	1-4 years	20	18.2
	5-8 years	20	18.2
	9-12 years	22	20.0
	13-15 years	32	29.1
	16 years and above	16	14.5

4.2 Results and Discussion of Monitoring and Evaluation

4.2.1 Analysis of Relevance Projects

The results of the analysis regarding the relevance of government-funded agricultural investment projects reveal moderate agreement among respondents. according to Table 2.

Table 2. Distribution of responses on the Relevance of the projects

Statement	N	Mean	Std. Deviation
Harmony			
Are the objectives of the project clearly defined and appropriate?	110	3.25	1.281
Do the indicators accurately reflect the project's objectives?	110	3.11	1.095
The overall goals of the project are consistent with the objectives of the project.	110	3.12	1.254
The overall goal of the project is in line with the national socio-economic development Plan, Provinces, and sectors.	110	3.65	1.053
The beneficiaries			
Are the beneficiaries identified in the overall goals and objectives of the project?	110	3.31	1.187
Are the objectives of the project consistent with the needs of the beneficiaries?	110	2.74	1.072
Selection of project location			
Are the project locations selected strategically?	110	3.56	1.223

There are three Likert scales that have been applied to answer the questionnaires. So according to Table 2. The results of the analysis regarding the relevance of government-funded agricultural investment projects reveal moderate agreement among respondents. The mean scores across seven key indicators range from 2.74 to 3.65, indicating that while most respondents generally agreed that project objectives were relevant and clearly defined, their perceptions varied significantly, as shown by standard deviations greater than 1.0.

The study found that agricultural investment projects in Laos are largely aligned with national socio-economic development plans (M = 3.65), yet less responsive to the needs of local beneficiaries (M = 2.74). This pattern is consistent with previous studies in Laos and Southeast Asia. According to FAO (2018), MRLG (2025), and GIZ (2020), agricultural projects in the region are typically designed through a top-down approach in which national policy frameworks strongly shape project direction, while community prioritization and participatory planning remain weak. This results in strong compliance with national development agendas but insufficient alignment with the practical needs of farmers and local communities.

Similarly, ADB (2020) and World Bank (2019) report that many agricultural projects in Laos fail to integrate systematic needs assessments at the village level, leading to gaps in project relevance and reduced local ownership. These studies argue that without robust community involvement during the planning stage, even well-designed national programs may fail to generate meaningful grassroots impact.

This finding was echoed by one project manager, who stated: *"The projects are aligned with national policies, but they lack alignment with the actual needs of local communities in some*

areas. This is due to a lack of data from needs assessments and limited community participation in the actual planning process."

Such insights reinforce the argument in the literature that national policy alignment alone is not sufficient. Improving relevance requires bottom-up consultation, stronger beneficiary engagement, and systematic needs assessment methods.

4.2.2 Analysis of Effectiveness Projects

According to the data in Table 3, responses were measured using for indicators that reflect both the clarity of project objectives and the completion of expected results.

Table 3. Distribution of responses on the Effectiveness of the projects

Statement	N	Mean	Std. Deviation
The objective of the projects			
Are the outcomes set appropriately to achieve project objectives?	110	**3.03**	1.223
Have the objectives of the project been completed as planned?	110	**3.02**	0.986
The outcome of the project			
Are all project outcomes completed as planned?	110	**3.15**	1.060
Did all of the project's outcome contribute to the project's objectives?	110	**3.50**	1.047

There are two Likert scales that have been applied to answer the questionnaires. So according to the data in Table 3, responses were measured using four indicators that reflect both the clarity of project objectives and the completion of expected results.

Effectiveness was rated neutral to moderately positive (Means 3.02–3.50). This suggests that while some project outcomes contribute to broader objectives, inconsistencies remain in the clarity of objectives and completion of expected results. These findings strongly align with Inthakesone & Syphoxay (2021), who found that unclear objectives, weak baseline data, and limited stakeholder engagement significantly hinder the effectiveness of agricultural interventions in Laos. OECD (2021) further supports this, noting that when project objectives are vaguely defined or when indicators are not measurable, project teams struggle to translate plans into tangible achievements.

Acharya et al. (2006) and Creswell & Creswell (2017) similarly emphasize that weak monitoring and evaluation systems contribute to missed targets and inconsistent implementation. Your findings reflect this pattern, particularly the lower scores related to clarity and completion of objectives (M = 3.02–3.03).

A project manager elaborated: *"Most of the projects achieved their objectives at a moderate level. Many were not completed as planned because the project design was unclear, there was little beneficiary participation, and the indicators or expected outcomes were not clearly defined."*

This qualitative evidence further corroborates previous literature showing that effective implementation depends heavily on strong project design, measurable objectives, and active participation throughout the project cycle.

4.2.3 Analysis of Efficiency Projects

This was analysis the outcome variable of the study as the following indicators were considered to measure Efficiency of the project. According to the table 4.

Table 4. Distribution of responses on the Efficiency of the projects

Statement	N	Mean	Std. Deviation
The total cost of the project			
Is the use of the project budget in the implementation according to plan?	110	3.11	1.095
Timetable of the project			
Is the implementation of the project according to the schedule?	110	2.96	1.188
Quality of work			
Is the quality of labor, materials, equipment, technology required for the work sufficient to achieve it?	110	3.01	1.096

There are three Likert scales that have been applied to answer the questionnaires. So according to the table 4. Efficiency ratings (Means 2.96–3.11) indicate challenges with budget utilization, timeline adherence, and quality of inputs. These findings align with World Bank (2020) and ADB (2019) reports, which highlight that agricultural project in Laos often suffer from delayed government budget approvals, slow procurement processes, and inconsistent resource allocation, all of which undermine timely implementation.

OECD (2024) also points to administrative bottlenecks and limited financial management capacity as common constraints affecting project efficiency in developing countries. These findings align with the moderate-to-neutral perceptions in dataset.

One project manager confirmed this trend: *"Project management still presents several concerns, such as financial spending, delays due to unclear project timelines, and slow annual budget approvals. These delays caused many activities to fall behind schedule."*

This emphasizes that efficiency problems are not isolated cases but reflect systemic institutional constraints, consistent with the broader research context in Laos.

4.2.4 Analysis of Impact Projects

There are two Likert scales that have been applied to answer the questionnaires. So The findings are displayed in Table 5.

Table 5. Distribution of responses on the Impact of the projects

Statement	N	Mean	Std. Deviation
Negative impact on society and the environment			
Are there any negative social and environmental impacts during the implementation of the project?	110	2.64	1.179
Are the social and environmental actions comprehensive enough in the implementation of the project?	110	3.66	1.052
Have you considered the negative social and environmental consequences of using the project and have a plan to avoid/correct the effects?	110	3.23	1.089
Positive impact			
Is there a plan to maintain and continue the positive impact, especially through the achievement of the overall goals?	110	3.23	1.072

There are two Likert scales that have been applied to answer the questionnaires. So according to table 5. The impact findings were mixed, with strong acknowledgment of environmental and social action (M = 3.66) but neutral perceptions of negative impacts (M = 2.64) and uncertainty about long-term impact continuity (M = 3.23). These observations closely match FAO (2019) and MRLG (2025), which report that agricultural projects often apply short-term environmental mitigation strategies but lack long-term frameworks to manage environmental and social impacts.

World Bank (2020) evaluations also show that while projects may provide short-term positive outcomessuch as improved farming techniques or infrastructure the lack of long-term community engagement or continuous monitoring often leads to inconsistent or unsustained impacts.

A manager described this challenge: *"The impacts of the projects were both positive and negative. Some had short-term impact mitigation plans, but many lacked long-term strategic plans. There were no preventive measures, and community participation in managing the impacts was limited or absent."*

This reinforces existing literature indicating that impact sustainability is weak, and community involvement is essential for long-term positive outcomes.

4.2.5 Analysis of Sustainability Projects

There are three Likert scales that have been applied to answer the questionnaires. So according to Table 6

Table 6. Distribution of responses on the Sustainability of the projects

Statement	N	Mean	Std. Deviation
Organizational sustainability			
Are there a usage and maintenance plans, agreements, rules, and procedures that identify organizations and responsible groups?	110	2.65	1.104
Financial sustainability			
Are there operational and maintenance plans, agreements, regulations, procedures that clearly state financial sustainability?	110	2.82	0.979
Technical sustainability			
Is there a use and maintenance plan that clearly states the technical and material sustainability?	110	2.90	1.040

There are three Likert scales that have been applied to answer the questionnaires. So according to Table 6. Sustainability scored lowest across all dimensions (Means 2.65-2.90). This finding is consistent with the majority of previous studies, including ADB (2019), OECD (2021), and MRLG (2025), which identify weak institutional capacity, lack of financial continuity, and limited technical support as primary barriers to sustainable agricultural development in Laos.

Hox & Boeije (2005) and Glesne (2016) further argue that sustainability requires ongoing training, strong local leadership, and clearly defined maintenance mechanisms all of which are often missing in government-funded projects.

A project manager confirmed this in your study: *"The sustainability of the projects remains limited because there are no clear sustainability plans. Most communities cannot continue operations independently after project completion due to lack of training, insufficient capacity-building, and limited knowledge."*

This aligns with longstanding evidence that sustainability remains the most critical weakness in public agricultural projects.

4.3 Government Support Needs

To identify the types of government support considered most crucial for improving the effectiveness and sustainability of agricultural investment projects, respondents were allowed to

select multiple options from a list of potential support mechanisms. The responses from 110 participants are summarized below.

Table 7. Types of Government Support Needed (n=110)

Variables	Selected (n)	Percentage %
Training on project proposal writing	101	91.8
Development of a monitoring and evaluation system	80	72.7
Training on project monitoring and evaluation techniques	59	53.6
Training on operations and maintenance (O&M) after project completion	48	43.6
Financial support for ongoing project activities	43	39.1
Technical assistance and capacity building	105	95.5
Providing access to modern agricultural technology and inputs	95	86.4
Community engagement and participation facilitation	76	69.1

Note: Respondents could select more than one option.

Respondents prioritized technical assistance (95.5%), proposal-writing skills (91.8%), agricultural technology (86.4%), and stronger M&E systems (72.7%). These needs mirror findings from OECD (2024), FAO (2018), and World Bank (2020), all of which emphasize that Laos faces capacity gaps, technology limitations, and weak M&E functions.

Scheyvens (2014) and Leavy (2022) similarly highlight that community engagement and capacity-building programs are essential for improving agricultural project performance and long-term sustainability.

One project manager summarized this need clearly: *"The success and sustainability of the projects depend heavily on strong government support. There is a high demand for technical assistance, modern equipment, proposal writing skills, and a stronger M&E system because these weaknesses reduce overall project efficiency."*

This reinforces the global research consensus that capacity building and technology access are central to improving project outcomes.

5. Conclusion

The study assessed government-funded agricultural investment projects in Laos using the OECD-DAC criteria relevance, effectiveness, efficiency, impact, and sustainability, and found mixed but informative results. Projects were strongly aligned with national policies, yet their relevance to local community needs was inconsistent due to limited participatory planning. Effectiveness scores were moderate, reflecting unclear objectives and insufficient stakeholder involvement, while efficiency ratings suggested challenges in budgeting, scheduling, and maintaining implementation quality. The impact dimension showed some positive environmental efforts but limited long-term social or environmental benefits, highlighting the need for improved

mitigation measures. Sustainability was the weakest dimension, with inconsistent implementation and uncertainty regarding the continuation of project benefits after funding ends. Respondents expressed strong needs for technical assistance, proposal-writing skills, modern agricultural technologies, and stronger M&E systems, alongside increased community engagement. Overall, the findings emphasize that improving capacity, participation, and long-term planning is essential for enhancing the performance and sustainability of agricultural projects in Laos.

5.1 Future Directions

Future research on government-funded agricultural investment projects in Laos should adopt a broader and more systematic approach. First, expanding the study area to include multiple provinces with diverse agro-ecological and socio-economic conditions will enable a more comprehensive understanding of project performance across the country. Second, longitudinal studies are recommended to assess the long-term sustainability of project outcomes, particularly after the withdrawal of government or donor support. Further exploration is needed on the application of digital technologies such as mobile-based monitoring systems, GIS tools, and real-time data platforms to strengthen the accuracy and timeliness of monitoring and evaluation processes. Additionally, future studies should examine the role of community participation and social inclusion mechanisms to better understand how beneficiary engagement influences project relevance, ownership, and effectiveness. Capacity development remains an essential area for future investigation. Research should evaluate different models of technical training, results-based management approaches, and skills development to determine their effectiveness in improving staff performance and data quality. Moreover, examining budget disbursement procedures and financial governance systems will help identify institutional reforms necessary to enhance project efficiency. Finally, future research should consider the potential contributions of public–private partnerships and innovative financing mechanisms to support agricultural development. The development of a Laos-specific evaluation framework that aligns with national agricultural strategies and local contexts may also provide more practical and culturally appropriate tools for assessing project performance.

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