

# Integrating Sustainable Project Management Principles Into Climate Mitigation and Adaptation Strategies: A Pathway to Effective Project Management

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**Abstract** - The gap between the design and effective management of climate change mitigation and adaptation strategies is one of the most significant challenges to sustainable development goals. Despite decades of global climate commitment, implementation remains fragmented, pilot-scale, poorly sustained beyond project closure and inadequate to the scale of climate vulnerability faced by communities in developing countries. Although the concept of Sustainable Project Management (SPM) which integrates environmental, social, and economic sustainability principles across the project lifecycle has gained growing recognition, it is not widely explored and under applied, especially in the climate implementation context. A systematic literature review was conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework to review secondary peer reviewed literature on the conceptual foundations, operational principles and practical application of SPM within climate mitigation and adaptation programming through the theoretical lens of the Sustainable Livelihoods Framework (SLF). The review identifies six core SPM principles relevant to climate implementation: lifecycle sustainability integration, stakeholder participation and community co-design, long-term impact and resilience orientation, efficient resource use, sustainability oriented monitoring and evaluation and proactive risk management. Applying these principles to climate mitigation and adaptation project design and implementation may address structural causes of implementation failure, such as donor-driven projects, weak community ownership and participation, absent or weak post project closure sustainability planning and fragmented or weak monitoring. It also positions the Sustainable Livelihoods Framework not only as a tool that looks at livelihood capitals but also as a framework that should take into account how projects actively build livelihood capital from inception. The findings call for investment in sustainable project management capacity building among project implementers, institutional reforms, and empirical research to operationalize sustainable project management in climate change.

**Keywords:** Sustainable Project Management; climate change adaptation; climate change mitigation; livelihood capital; implementation effectiveness.

## 1.0 INTRODUCTION

Climate change is one of humanity's most significant global challenges in the twenty-first century (Malhi et al., 2020). This phenomenon, defined by the changing of Earth's climatic patterns, is driven by human activities such as the use of fossil fuels, deforestation, and industrial operations, which result in a rapid increase in greenhouse gas emissions (Lan et al., 2023). It is also described as a statistically significant change in measures of climate, such as temperature, precipitation, or wind, that persists for at least a decade, resulting from both natural and man-made factors (Louisa Whitlock, 2012).

The repercussions of climate change are noticed throughout the globe, making it a global concern (Boyd & Ghosh, 2013). As a result, the United Nations (UN) highlights climate change as a major issue of the 2030 Agenda for Sustainable Development, in particular, Sustainable Development Goal (SDG) 13 (climate action), which calls for urgent action to combat climate change and its impacts (UN, 2015) with a demand for implementing effective mitigation and adaptation strategies across all regions, especially in developing countries, where exposure to climate hazards is greatest, with weak adaptive capacity characterized by limited assets, limited income opportunities, high dependence on agriculture, and food insecurity (Meza & Rivera-Ferre, 2014; Piya et al., 2019).

The development and implementation of climate policies, supporting the rising levels of national ambitions by the United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol, and Paris Agreement at multiple levels of governance (Calvin et al., 2023) has gained prominent support for local adaptation (Nalau et al., 2015). With the ultimate goal of implementing climate mitigation and adaptation strategies to improve livelihood and reduce vulnerability to climate change. In which one of the ways is by building livelihood capitals (financial, social, physical, human and natural) that people use to attain livelihood sustainability and resilience (Scoones, 1998a; Wang et al., 2021)

Although various climate mitigation and adaptation strategies are being implemented through projects in both developing and developed countries across all sectors globally, there is a record of both success and failure stories (Bertana et al., 2022; Hansen et al., 2025a; Reckien et al., 2023). Additionally, even though these projects

are perceived to be means for implementing transformative change in communities against climate change, there is little evidence that such transformation occurs, which sometimes results in maladaptation (Mikulewicz et al., 2025). Evidence consistently demonstrates that implementation on the ground remains fragmented, pilot-scale, and weakly sustained after project closure (Bhanye, 2025; Mulimba, 2025; Werners et al., 2021). While studies such as (André et al., 2023; Goodwin & Olazabal, 2025; Laurien et al., 2022; Mafwela & Mafwela, 2025; Ray Biswas & Rahman, 2023; Ssekamatte, 2018) attributing limited funding, weak institutional capacity, weak monitoring and evaluation and inefficient resource allocation, limited community engagement and poor or lack of coordination among stakeholders, which lead to duplication of efforts as challenges to successful implementation.

Sustainable Project Management, climate mitigation and adaptation implementation, and the Sustainable Livelihoods Framework have each developed independently with limited understanding of how they can interplay to implement climate strategies effectively. Although Sustainable Project Management is in its infancy, it is becoming increasingly important in the project management cycle (Ćwikła, 2023) mainly in corporate and infrastructure projects compared to climate strategies (Dubois & Silvius, 2020; G. Silvius & Schipper, 2020) to integrate sustainability principles that identify specific strategies that lead to socioeconomic and environmental project outcomes that foster long-term sustainability (Ćwikła, 2023). Climate implementation literature mainly identifies challenges but is limited in suggesting sustainable project management solutions (Baniña et al., 2022; Kehinde, 2025; Werners et al., 2021). The Sustainable Livelihoods Framework literature captures livelihood capital outcomes but has not been integrated with project management frameworks as a tool for measuring implementation success (Chambers & Conway, 1992; Natarajan et al., 2022; Scoones, 1998b).

Climate mitigation and adaptation strategies, which are by their nature implemented as projects designed to create long-term social-ecological resilience through sustainability, are characterized by limited community participation, weak and a lack cooperation and coordination among stakeholders, lack of life cycle assessment (LCA), insufficient monitoring systems, short term goals driven by donor funding cycles and limited attention to long-term sustainability, implementation gaps that SPM principles should be addressing (Mogelgaard et al., 2018; Økland, 2015). Kehinde, (2025) further argues that incorporating sustainability principles into project management has been shown to be instrumental in promoting sustainable practices across different project stages, enhancing project outcomes and reducing adverse environmental impacts.

## 2.0 THEORETICAL UNDERPINNING

This section outlines the Sustainable Livelihoods Approach (SLA) and the Sustainable Project Management (SPM) as foundational theories to support and guide the integration SPM into Climate mitigation and adaptation strategies to build livelihood capital. It provides the framework for understanding the phenomena and helps in the effectiveness of project implementation.

### 2.1 Sustainable Livelihoods Approach (SLA)

The Sustainable Livelihoods Approach (SLA), a well-established theoretical framework that offers a comprehensive and people-centered perspective for understanding how individuals and households build their livelihoods, especially in the face of shocks and stresses such as climate change (Chambers & Conway, 1992; Department for International Development (DFID), 1999).

The Sustainable Livelihoods Approach (SLA) is a framework that was first coined by Robert Chambers in 1992, who highlighted that:

*“A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a living is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term (Chambers & Conway, 1992).”*

As such, this theory is widely used to understand and improve the lives of vulnerable communities by focusing on their ability to manage and utilize resources to meet their needs and enhance their well-being. It assumes that individuals and communities possess a variety of assets that can be developed and leveraged to achieve sustainable livelihoods (Alobo Loison, 2015). The theory explores how people utilize different types of capital (human, social, natural, physical, and financial) to improve their lives, and how these assets are affected by vulnerabilities and transforming structures (Natarajan et al., 2022).

According to Natarajan et al. (2022) and Scoones (1998b), SLA provides a comprehensive framework for understanding the complexities of livelihoods and the factors that influence them. Livelihood: A livelihood encompasses the capabilities, assets, and activities that people use to earn a living. The theory recognizes that people utilize various assets to achieve specific goals that people want to achieve through their livelihoods, which are categorized as (Kollmair & St. Gamper, Juli, 2002; Serrat, 2017):

1. Human Capital: Knowledge, skills, and health of individuals.
2. Social Capital: Networks, relationships, and social support.
3. Physical Capital: (transport, shelter, water, energy and communications)
4. Natural Capital: Natural resources, such as land, water, and biodiversity.
5. Financial Capital: Access to savings, credit, and other financial resources.

### 2.2 Sustainable Project Management (SPM)

Sustainable Project Management (SPM), a concept derived from sustainable development, dates back to the 1950s (Waas et al., 2011) and originates from the convergence of project management theory and sustainable development theory. Historically, traditional project management has measured project success through the iron triangle of cost, time and scope, with efficiency and control to deliver outputs, which has been criticized for neglecting long-term social, environmental, and economic values of projects (Atkinson, 1999; Turner, 2016). On the other hand, sustainability is defined as development that meets the present needs of the population without compromising the needs of future generations to meet their own needs (Gareis et al., 2014; Waas et al., 2011). Sustainability is a concept that involves the Triple Bottom Line (TBL) framework, which delivers outcomes that benefit people, planet, and profit a reflection of integrating environmental protection, social equity, and economic viability (Elkington, 2024). Therefore, it is from here that SPM emerges with the growing recognition for organizations to incorporate sustainability objectives within their structures and recognize projects as key implementation tools for sustainable

development strategies (Gareis et al., 2014; Silvius et al., 2017; Silvius & Huemann, 2024).

In 2008, the concept of sustainable project management was developed by the International Project Management Association, highlighting that project managers must take responsibility for sustainability, as the future of project management (McKinlay, 2008; Silvius & Schipper, 2014a). Sustainable project management (SPM), sometimes referred to as sustainability in Project Management, involves integrating environmental, social, and economic principles throughout the entire project lifecycle to deliver long-term value and minimize harm which goes beyond traditional measures of project success (time, cost, and scope) to ensure projects actively contribute to climate solutions and resilience (Ahmad Saadi et al., 2023; Derakhshan et al., 2019). Carboni et al. (2018), define SPM as the application of methods, tools, and techniques to achieve project objectives while taking into account outcomes of the project lifecycle to ensure positive impact on environmental, social, and economic dynamics. Sustainable project management isn't just about completing projects, it involves a positive impact on beneficiaries and making the world a better place (Baba et al., 2021; Kivilä et al., 2017). It also requires considering the broader implications of project decisions, including their impact on future generations, by ensuring that resources are used responsibly (Banjade, 2023; Sankaran et al., 2021).

In delivering successful and effective project results, Brooks, (2011); Hapeza & Chibomba, (2025); Singh et al., (2022) and Stadelmann et al., (2015) highlight that it is the extent to which climate mitigation and adaptation strategies achieve their intended outcomes, which includes reducing vulnerability, improving resilience, and well-being, and sustainability of livelihoods. Additionally, Gartlehner et al. (2006) and Hansen et al. (2025) notes that project success and effectiveness in the case of climate strategies is how well mitigation and adaptation strategies perform in locations of implementation. It is defined through the lens of the Sustainable Livelihoods framework, measured by the strategies' contribution to building five key community capitals (financial, social, natural, human, and physical) (Morse, 2025; Morse & McNamara, 2013).

The SLF has mainly been applied as an outcome measurement tool for communities with existing asset bases to build resilient livelihoods rather than as a design and evaluation framework for projects that seek to build the very assets in the first place. The integration of SPM principles with the SLF presents a significant theoretical contribution to assess and guide effective climate strategies implementation.

## 2.0 METHODOLOGY

### 3.1 Study Design

This study employed a systematic literature review methodology through the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework (Page et al., 2021; Sarkis-Onofre et al., 2021). The systematic review design was selected for its capacity to provide a transparent, reproducible and rigorous synthesis of the available evidence across a multi-disciplinary literature, such as sustainable project management, climate governance, sustainable development and sustainable livelihoods framework (Sohrabi et al., 2021). A thematic narrative synthesis approach was applied, given the methodological and disciplinary collection of the included literature. This approach enabled the identification of convergent conceptual themes and contested claims across the literature through the following steps (Stovold et al., 2014).

### 3.2 Identification

A systematic search was conducted across major electronic databases such as Scopus, Web of Science, Google Scholar and JSTOR for peer-reviewed journal articles, books and other scholarly materials. The primary search string applied across title, abstract, main texts and keyword fields was: ("sustainable project management" OR "sustainability in project management" OR "project lifecycle sustainability") AND ("climate change" OR "climate adaptation" OR "climate mitigation") AND ("implementation" OR "community resilience" OR "livelihood" OR "developing countries"). Other searches included "Sustainable Livelihoods Framework," "project success criteria," and "post-project sustainability" to ensure comprehensive coverage of thematic intersections among the disciplinary areas.

### 3.3 Screening

Following the PRISMA four-stage process of identification, screening, eligibility assessment, and final inclusion, a total of 4,312 records were identified across all databases, supplemented by 58 additional records from citation tracking and manual searches, with a total of 1,187 duplicates which were removed. The remaining 3,183 records underwent title and abstract screening and 2,541 were excluded as insufficiently relevant to the intersection of SPM, climate implementation, and SLF. A full-text assessment was conducted on 642 records and 538 were excluded due to insufficient thematic focus, methodological issues, and/or full-text unavailability, with a final of 104 studies which were retained for synthesis and about 71 were published between 2014 and 2026 which formed primary evidence base with studies on the SLF and SPM retained for theoretical contextualization.

### 3.3 Inclusion and Exclusion

Studies were deemed eligible for inclusion if they, (i) were published in a peer-reviewed journal or credible institutional report, (ii) were written in English, (iii) addressed either sustainable project management principles, climate change implementation or the Sustainable Livelihoods Framework, (iv) engaged explicitly with themes of implementation effectiveness, lifecycle sustainability, community participation, monitoring and evaluation or livelihood capital outcomes; and, (v) employed clearly articulated methodologies. Studies were excluded from the literature that (i) addressed traditional project management exclusively without engagement with sustainability dimensions, (ii) focused on climate science or impact without implementation or governance information, (iii) were conference abstracts, editorials or commentary pieces without analytical content and (iv) were unavailable in full-text format.

### 3.4 Data Extraction

Data were extracted using citation details, study context and population, core SPM principles or/and SLF dimensions addressed. Others included key findings on implementation effectiveness or sustainability outcomes and author-proposed implications for practice or research.

## 4.0 RESULTS AND DISCUSSION

The concept of sustainable project management, although not widely studied, has grown significantly over the years, becoming a focal point in both academic and professional circles (Chofreh et al., 2019; Friedrich, 2023; G. Silvius & Huemann, 2024). It is defined as

“the planning, monitoring, and controlling of project delivery and support processes, with consideration of the environment, economic, and social aspects of the life cycle of the project’s resource, processes, deliverables, and effects, aimed at realizing benefits for stakeholders, and performed in a transparent, fair and ethical way that includes proactive stakeholder participation” (A. J. G. Silvius & Schipper, 2014a, 2014a). Additionally, Omamode Henry Orieno et al. (2024) highlight that Sustainable Project Management is the integration of sustainability principles into project processes to ensure that environmental, social, and economic values are considered simultaneously throughout the project lifecycle. It emphasizes comprehensive stakeholder participation, short and long-term value creation, ethical resource use, risk management, and transparent monitoring to deliver project success (Silvius & Schipper, 2015). Sustainability in Project Management is linked to resilience and adaptive capacity, implemented projects or strategies must be capable of absorbing shocks while continuing to function and evolve (Folke et al., 2010) it goes beyond to ensure that project activities meet the present needs of beneficiaries without compromising the ability to meet the needs of future generations and contribute to long-term resilience and sustainable development (Agarwal & Semenova, 2016; Chukwu, 2025; Vranić & Glišović, 2019; Zhang & Carboni, 2021) mainly due to how projects are designed, implemented and monitored within an organization (Silvius & Schipper, 2014a).

In this case, the concept of Sustainable Project Management refers specifically to how climate mitigation and adaptation initiatives are designed and managed to ensure sustainable livelihoods with community ownership in mind in vulnerable communities (Datta & Behera, 2022; Türkeş, 2024). This means the project management approach must ensure that climate strategies address environmental risks such as droughts, floods, and heatwaves, improve household resilience and livelihood stability and remain viable and beneficial after project closure by donors and implementers. These approaches include;

#### Integration of sustainability into the Project Life Cycle

Sustainability must be integrated into Project design, Planning, Implementation, Monitoring, evaluation and post-project sustainability, contrary to traditional project management (time, budget, scope) that focuses on short-term deliverables (Marcelino-Sádaba et al., 2015; Sankaran et al., 2021; A. J. G. Silvius & Schipper, 2015; Toljaga-Nikolić, 2023). This approach ensures that projects continue to generate benefits even after completion by incorporating long-term maintenance plans, capacity-building initiatives, monitoring and evaluation, and community training programs that sustain benefits beyond the project implementation phase.

Lifecycle integration operates across the project lifecycle stages of design, planning, implementation, monitoring and evaluation and post-closure. It requires that sustainability objectives be defined, such as livelihood capital outcomes, ecosystem protection, and community resilience be established as primary success criteria before activities (Marcelino-Sádaba et al., 2015; Sankaran et al., 2021), even though most of the projects are driven by funding logic rather than livelihood realities (Manda et al., 2024). Which compels project designers to ask from inception what institutional capacity, community governance and economic mechanisms must be in place for climate strategies in this case to function independently after external support ends. Even as Huemann & Silvius, (2017) observe, SPM demands that projects consider both ‘sustainability of the project’ which involves adopting sustainable approaches and processes throughout delivery and ‘sustainability by the project’ which includes delivering outcomes that contribute to broader sustainable development goals. For example, a climate adaptation

strategy such as a solar energy project can consider lifecycle integration not just by designing to install a target number of solar systems but also by reducing household energy insecurity in a manner that builds community technical maintenance capacity, creates a financially viable local servicing system and reduces deforestation. Questions such as which livelihood capitals are most depleted by climate stress in this community? must be explored in order to understand what capitals can be pursued in a particular community.

#### Stakeholder Participation and Community Involvement (co-design)

A comprehensive stakeholder Participation and Community Involvement is recognized as a fundamental element of sustainable project management. It involves active, diverse stakeholders such as local communities, government institutions, non-governmental organizations (NGOs), and development partners to ensure that project objectives align with the needs and priorities of vulnerable communities (Aarseth et al., 2017). Additionally, Mambwe & Mwanaumo, (2020); G. Silvius & Schipper, (2016) highlight that stakeholder engagement enhances project acceptability, sense of ownership and responsibility, transparency, and long-term sustainability when communities are actively involved in project planning and implementation. This requires co design projects with own definition of problems, not just solutions to be developed with communities (Aarseth et al., 2017). It requires asking questions such as what climate shocks does this community experience, in what sequence, with what differentiated consequences for different household types, and what responses have they already attempted?

Furthermore, community involvement incorporates local knowledge (indigenous knowledge) into project design, which improves the relevance and effectiveness of climate mitigation and adaptation strategies (Dorji et al., 2024; Siatwiinda et al., 2025). Indigenous and local knowledge is developed through centuries of observation about how local ecosystems behave under climate change, for instance, which crops tolerate drought on specific soil types, where flooding occurs and why, which tree species regenerate fastest after fire among others

governance, and accountability systems and not just being informed or consulted but with design predetermined or involvement but power remaining with the project team. This prevents implementation failure attributable to community resistance, low adoption and post-closure collapse.

#### Long-Term Impact and Resilience

Long-term impact and resilience ensure that strategies are designed to strengthen long-term climate resilience rather than providing temporary relief to the community to create durable solutions that strengthen the capacity of communities and ecosystems to withstand environmental, economic, and social shocks (Aarseth et al., 2017). Such strategies enable vulnerable communities to adapt to changing climatic conditions while reducing their long-term vulnerability. Even as Marcelino-Sádaba et al., (2015) and Robinson et al. (2026) note that sustainable project success should not only be measured by immediate outputs but also by the extent to which projects improve long-term resilience and sustainability. This approach should ask whether strategies or solutions will last or not in providing resilience to vulnerable communities. As well as for example whether or not climate mitigation strategies are reducing emissions and adaptation strategies are adjusting communities to new climate realities now and later, or if they will fail once external funding or support ends.

Sustainable project management reframes success around livelihood capital accumulation by measuring improvements in the financial, social, natural, human, and physical capital assets that determine a community's capacity to withstand and adapt to climate shocks (Aarseth et al., 2017; Marcelino-Sádaba et al., 2015). For instance, a project measured by capital outcomes asks whether household financial capital has increased through reduced fuel expenditure and whether the community's physical capital, such as drainage infrastructure, flood-resilient housing, has been strengthened to act on warnings effectively

#### Efficient Resource Use

Efficient and responsible resource management is a principle of sustainable project management that promotes the efficient use of natural, financial, and human resources while minimizing environmental degradation (Huemann & Silvius, 2017; Silvius & Schipper, 2014a). It involves adopting environmentally responsible practices such as renewable energy technologies, sustainable land management, waste reduction strategies, and cost-efficient use of resources to contribute to the economic sustainability of projects (Stanitsas et al., 2021)

#### Monitoring and Evaluation of Sustainability Outcomes

Monitoring and evaluation are essential components of sustainable project management, as such projects are evaluated not only on completion of activities but also on sustainability outcomes, such as improved food security, increased income stability, reduced environmental degradation, improved community well-being and enhanced climate resilience (Brown et al., 2018; Scott & Moloney, 2022; G. Silvius & Schipper, 2016). Additionally, climate change being unpredictable, projects must adopt the agile methodology that can be flexible to adjust once one adaptation strategy fails to allow a management approach that can be swiftly changed based on monitoring (Nabaa Latif et al., 2025; Scott & Moloney, 2022). Evaluating outcomes helps determine whether projects are truly contributing to sustainable development goals and allows project managers and policymakers to identify lessons and improve the effectiveness of future sustainability initiatives (Soares et al., 2024).

#### Risk Management

In sustainable project management, risk management is identified in the early stages of planning and integrated throughout the entire project life cycle to identify, assess, and mitigate risks that may threaten the environmental, social, and economic sustainability of project outcomes (Hiranobe et al., 2025). This means that risk management ensures that projects do not create unintended negative impacts, such as social inequality, community resistance, project conflicts, land degradation, and the failure of livelihood strategies, which could compromise sustainability goals.

Many sustainability risks originate from poor stakeholder management, even as Song et al., (2025) and Domínguez-Gómez & González-Gómez, (2021) note that stakeholder engagement helps in risk identification, assessment, and mitigation to influence positive sustainable project outcomes by working together to reduce the likelihood and impact of identified risks. By involving stakeholders in communication, collaboration, and decision-making, projects are more likely to achieve sustainable outcomes (Song et al., 2025).

#### Application of Sustainable Project Management practices

A Sustainable Project Management approach not only looks at whether the climate strategies achieved their intended objectives, but also at how they were implemented. It assesses whether strategies

empowered local communities, protected the local ecosystem during implementation, created lasting economic opportunities and built capacity to independently manage future climate shocks by vulnerable communities.

The adoption and application of sustainable project management practices require a certain level of flexibility and openness to implementing changes on a project (Silvius & Schipper, 2014b). It is one of faster route to attain sustainable development and therefore projects must consider sustainability (sustainability of the project), which is adopting sustainable processes throughout delivery and processes that create value to society and contribute to sustainability (sustainability by the project) which involves delivering outcomes that contribute to sustainable development goals through implementing sustainability solutions (Huemann & Silvius, 2017; Goedknecht & Silvius, 2012). Studies such as Ahmadu et al. (2025); Carvalho & Rabechini, (2017a, 2017b); Dubois & Silvius (2020); Ferrarez et al. (2023), Khalifeh et al. (2020; Rehan et al. (2025); Sampaio et al. (2022); G. Silvius & Schipper (2015) have shown that incorporating sustainable project management practices in the life cycle of projects creates value, efficiency, and successful impact both to organizations and the community. However, many organizations fail to manage projects despite incorporating sustainability due to both internal and external challenges (Madureira et al., 2022; Toljaga-Nikolić et al., 2020), including unclear definitions of sustainability, limited adoption of green technologies, and a lack of expertise and training. Additionally, Carboni (2024) and Magano et al. (2025) note that development projects operate in challenging environments such as limited resources, lack of competency and institutional support, competing stakeholder interests, and global crises that show no sign of slowing. It is therefore important to have sustainability in every decision-making process. Stakeholders such as project managers, organizations, and policymakers must work together to overcome these challenges (Omamode Henry Orieno et al., 2024). Although Banihashemi et al. (2017) argue that existing challenges to sustainability mainly require project managers to be proactive and adopt adequate planning and implementation of projects and that the experience and competencies of a project manager is one of the most influential success factors in sustainable project management, which can guarantee the protection of environmental resources and simultaneously create well-being for people (Gruden & Stare, 2018; Sampaio et al., 2022). (Muyaloka & Kachamba, 2024; Rehan et al., 2025) add that the competence of a project manager leads to project success. However, this may be far-fetched because even though most project managers recognize the importance of sustainability and are intrinsically motivated to adopt sustainability (Magano et al., 2021; Marnewick et al., 2019; G. Silvius & Schipper, 2020) evidences shows that awareness and knowledge of how to integrate sustainability practices into project management activities is limited and that organizations must invest in capacity building programs to promote education and raise awareness about sustainable project management practices (Marnewick et al., 2019; Moutinho et al., 2025).

## 5.0 CONCLUSION AND IMPLICATION

Sustainable Project Management addresses the structural challenges that undermined climate strategies implementation at the community level. The integration of SPM with the Sustainable Livelihoods Framework further repositions project implementation to consider not only completing project activities but also whether climate projects succeed in building human, social, natural, physical, and financial capital upon which climate sustainability and resilience depend.

However, achieving this demands deliberate collaborative engagement and investment among donors, government, project

managers, organizations, policymakers, and other stakeholders in the institutional reforms, competency development and enabling governance conditions to incorporate sustainability into decision-making processes in order to become a strategic tool for advancing sustainable development and without investments, commitment and reform, SPM risks remaining theoretical without tangible practical reality in climate mitigation and adaptation projects in the communities where transformation is needed the most.

The study addresses a critical gap in the literature by looking at how climate strategies or projects may effectively build livelihood capital and builds on existing research that have identified adaptation practices but has fallen short of how sustainable project management may contribute to effective capital/asset formation. This work contributes to efforts to enhance the understanding of sustainable project management, which, according to scholars, is still in its infancy, especially in the implementation of climate strategies.

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The authors declare that they are not aware of any competing financial interests or personal relationships that may have influenced the work described in this document.

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