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12th August, 2025

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Dear Mrs Conje,

RE: Phase Two ITTO Completion Report-PP-A/59-351

Please find attached the completion report for the project "PP-A/59-351 Community-based restoration of cyclone vulnerable mangrove Forest through the empowerment of coastal communities and women in the Rewa/Tailevu Delta (Fiji) - Phase 2."

We sincerely apologize for the delay in submitting this report. The submission was unfortunately held up due to the finalization of the Ministry of Forestry's financial year 2024-2025 within our Finance Section. Please note that the report was compiled based on the ITTO completion report format as found on the ITTO website.

We appreciate your understanding and cooperation on this matter. Should you have any questions or require further information, please do not hesitate to contact us.

Thank you for your continued support.

Sincerely,

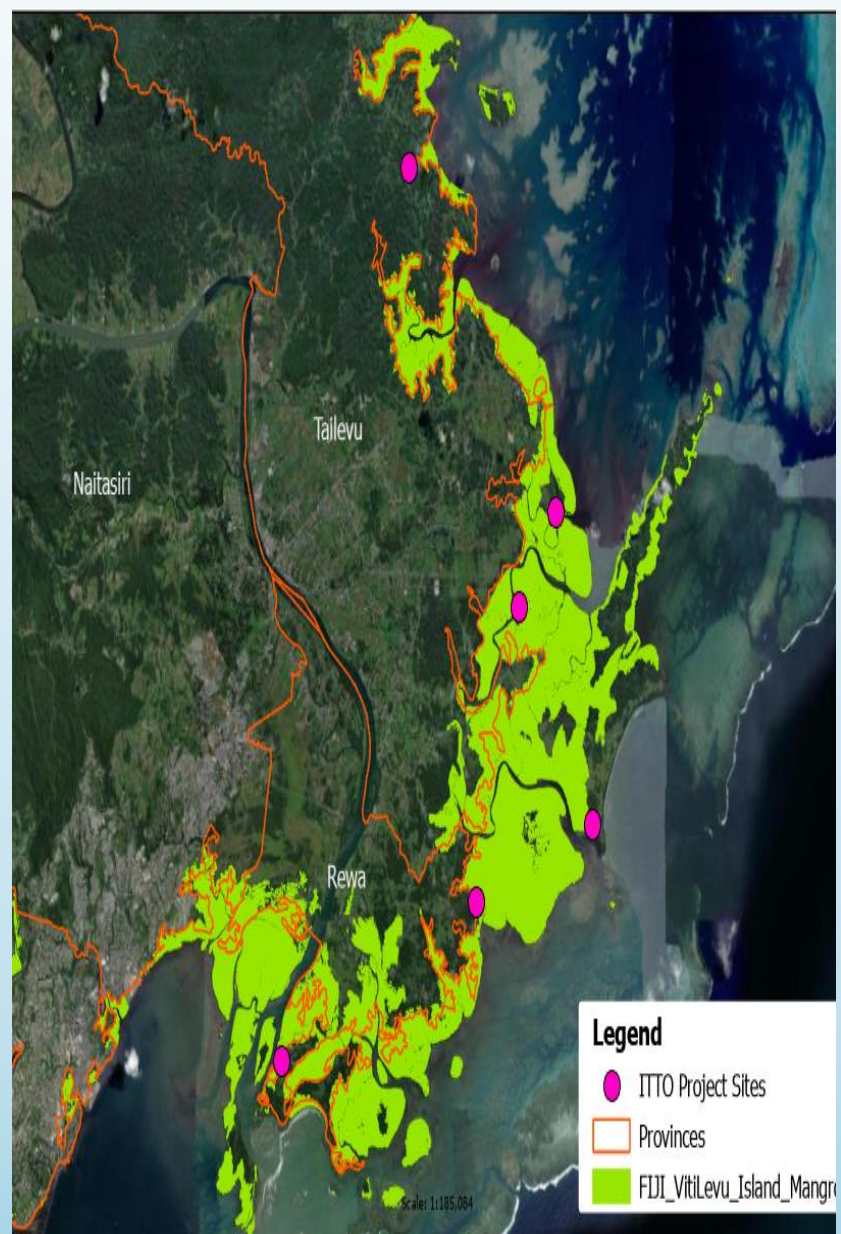
Sanjana Lal

(Acting Permanent Secretary, Fisheries and Forests)

PHASE TWO ITTO PROJECT COMPLETION REPORT FIJI ISLAND



1. Project Title : “Community-based restoration of cyclone-affected vulnerable mangrove Forest through the empowerment of coastal communities and Women in the Rewa/Tailevu Delta, (Fiji)”.-Phase 2
2. Executing Agency :
 - Ministry of Fisheries and Forest (MFF)
 - River House, Level 1, Nausori (+679 3477995)
3. Budget: USD 250,000.00-FIRST INSTALLMENT
4. ITTO Starting date & Expiry: 1st January 2024 – June 2025
5. Project Nb: PP-A/59-351:
6. Host Government : Government of Fiji
7. Project Duration : 18 Months
8. Period covered by the report : January 2024- June 2025.
9. Report submitted date : 12/08/2025



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We are also deeply grateful to the Honourable Minister of Fisheries and Forest, Mrs. Alitia Bainivalu, and the Acting Permanent Secretary, Mrs. Sanjana Lal, for providing the necessary time and support, which significantly facilitated the progress of the ITTO project.

Furthermore, we wish to acknowledge the communities involved in the ITTO project, especially the village administrators for the six villages are Naivakacau, Natila, Narocake, Muanaira, Waicoka and Nasilai, whose significant commitment and efforts were vital to the project's successful implementation.

We also extend our gratitude to the Ministry of Trade, Cooperative and Small Business Enterprise, through Mr. Beniamé Bulilevuka, for their crucial role in establishing cooperative stores and providing training within each community, thereby further empowering local initiatives.

Our sincere thanks also go to the Eco Grow team for providing essential Biogas materials, training and installation. Their efforts have significantly uplifted our communities by introducing modern kitchen practices and fostering a new lifestyle.

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Finally, our appreciation goes to the Steering Committee, particularly the Commissioner Central Mr Joseva Navuku and team Central, for their crucial support in building connections with communities. Their efforts enabled effective engagement and allowed the project to integrate smoothly within the communities, fostering a collaborative environment for its success.

CONTENT

2. PROJECT OBJECTIVES AND IMPLEMENTATION STRATEGY	Error! Bookmark not defined.
2.1. Project Rationale:.....	Error! Bookmark not defined.
2.1.1 Development Objective:	13
2.1.2 Specific Objective:	13
2.1.3 Output 1 indicators:	150
2.1.4 Output 2 indicators:	171
2.1.5 Output 3 indicator:	171
2.1.6 Output 4 indicators.....	11
2.1.7 Implementation Strategy:	12-13
2.1.8 Assumption Risk:.....	14
2.1.9 Risk Management Measures:.....	15-16
3.0 PROJECT PERFORMANCE(Present Plan Information)	17
3.1Planned Versus realized presence performance.....	17
3.1.1 Objective.....	18-19
3.1.2 Development Objectives.....	19
3.1.3 Specific Objectives:	19
3.1.4 Outcome Indicators.....	19
3.1.5 Amended Work plan.....	23
3.1.6 Project Duration.....	24-27
3.1.7 Project Budget and Input applied.....	27
3.1.8 Project Budget Cost expenses.....	28
4.0 PROJECT OUCOME(Target Beneficiaries)	29
4.1 Development Objective Outcome.....	29
4.2 Specific Objective Outcome.....	29
4.3 Output 1.....	30
4.4 Output 2.....	31-32
4.5 Output 3.....	33-34
4.6 Output 4.....	35-41
4.7 Target Benefit impact.....	42-48
4.8 Sustainability.....	61
4.8.1 Strengthened Local Governance and Capacity	47
4.8.2 Restored Ecosystems and Enhanced Climate.....	61
4.8.3 Diversified and Sustainable Livelihoods.....	61
4.8.4 Integrated Policy and Coordination.....	47
4.8.5 In essence, the project's sustainability hinges on a three-pronged approach:	61
4.8.6 Formal Arrangements with Project Beneficiaries:.....	62
4.8.7 Formation of Community-Based Organizations (CBOs)-Cooperative shareholders:	62
5.0 ASSESSMENT AND ANALYSIS	62

5.1 Analyses and comments on the Project rational.....	62
5.2 Analyses and comments on the (in)adequacy	63
5.3 Highlights and analyses the most critical differences.....	63
5.4 Evaluates and comments on the (in)adequacy of	64
5.6 Evaluates the anticipation and reality.....	64
5.7 Evaluates, while referring to section 4 above, the participation of	64
5.8 Analysis Project (in)sustainability after Project ,.....	51-66
5.8.1 Analysis Project sustainability after completion.....	53
5.8.1.1 Project Conceptualize 7 Impact on Sustainability.....	53
5.8.1.2 Assumption.....	53
5.8.1.3 Implementation condition and impact on Sustainability.....	54
5.8.1.4 Post Project Strategy.....	54
5.9 Analyses and comments on the understanding and appropriateness of the roles and.	69
5.9.1 Analysis of Roles and Responsibilities of Involved Institutions	69
5.9.2 Overall Commentary:	72
Strength:.....	73
Holistic Approach	73
Capacity Building Focus:	73
Local Ownership:	73
Government Buy:	73
6.0 LESSON LEARNT.....	66-70
7.0 CONCLUSION AND RECOMMENDATION.....	71
7.1 The Completion of Phase Two.....	72-80
7.2 Potential of replication.....	80
7.2.1 Positive element of replication.....	80
7.2.2 Prerequisites for successful replication.....	81
7.3 Potential for Scaling.....	81
7.3.1 Opportunities for scaling.....	81
7.3.2 Key considerations and challenges for scaling.....	81
7.4 Overall Comments.....	81

LISTS OF ACRONYMS

DFOCE : Divisional Forestry Officer central Eastern
CBRM : Community Based Resource Management
CF : Conservator of Forests
CI : Conservation International
DoE : Department of Environment
DOCE : Divisional Operation Central Eastern
EA : Executing Agency
FDP: Fiji Development Plan
INDC : Intended Nationally Determined Contribution
ITTO : International Tropical Timber Organization
ITTC : International Tropical Timber Council
ITTA : International Tropical Timber Agreement
MESCAL : Mangrove Ecosystems for Climate Change Adaptation and Livelihoods
MoA: Ministry of Agriculture
MoF : Ministry of Forestry
MoFF:Ministry of Fisheries and Forest
MoWE : Ministry of Waterways & Environment
MoL : Ministry of Land
NCSMED : National Centre for Small and Micro Enterprise Development
NGO : Non-Governmental Organization
NDP : National Development Plan
NTFP : Non-Timber Forest Product
PD : Project Document
PLA : Participatory Learning Appraisal
PMU : Project Management Unit
PRA : Participatory Rural Appraisal
PS : Permanent Secretary
PSC : Project Steering Committee
PTC : Project Technical Committee
SDG : Sustainable Development Goals
SFM : Sustainable Forest Management
SPC : Secretariat of Pacific Community
SPREP : Secretariat of the Pacific Regional Environment Programme
TC : Tropical Cyclone
USP-IAS : University of the South Pacific Institute of Applied Science
UNFF : United Nation Forum on Forests
UNFCCC : United Nation Framework Convention on Climate Change
UNCBD : United Nation Convention on Biological Diversity
YPO:Year Plan Operation
Nbs:Nature base Solution
FNU:Fiji National University
PWEEP:Pacific Women Economic Empowerment Program
MTCSBE:Ministry of trade Cooperative and Small Business Enterprise

EXECUTIVE SUMMARY

This project addresses the critical degradation of mangrove forests in Fiji's Rewa Delta, a challenge amplified by natural disasters and socio-economic pressures. Building on a successful initial phase, this initiative aims to bolster the resilience of both the environment and the communities dependent on it.

The core objective is to advance the conservation and sustainable management of mangroves, thereby enhancing the region's natural defences against climate change impacts and supporting local livelihoods. This is achieved through a strategic framework that prioritizes community engagement, particularly empowering women, in restoration efforts. The approach integrates practical training, the establishment of vital ecological infrastructure, and the diversification of economic opportunities, all underpinned by strengthened policy coordination for disaster risk reduction. Over the past eighteen months, the project's management platform has delivered substantial results. Key achievements include the full completion of assessments for alternative livelihoods, leading to the successful procurement of nursery materials and prawn feeds for six villages. Mangrove planting initiatives have reached 100% completion, with villages actively cultivating various species and demonstrating an 80% growth recovery rate in restored areas. Furthermore, the strategic planting of fast-growing fuel wood trees is complete with a 90% recovery rate, easing pressure on natural mangroves. The empowerment of women through cooperative management training and the provision of essential business resources has been fully realized, culminating in the registration of new cooperatives and the development of their operational bylaws. Crucially, community-level disaster action plans have been successfully established, enhancing local preparedness. This consistent and high level of execution underscores the effectiveness of the project's integrated management approach. Looking ahead, the project anticipates a significantly revitalized Rewa Delta, better protected from environmental threats. Communities will emerge stronger, equipped with enhanced skills and diversified income streams, fostering self-reliance and improved well-being. The long-term sustainability of these outcomes is secured through robust community ownership, the integration of traditional ecological knowledge, and sustained governmental and stakeholder collaboration, aligning with national climate resilience and sustainable development goals. The most impactful takeaway from this project's implementation is the demonstrated success of a participatory management model, where active community involvement, especially the empowerment of women, is fundamental to achieving both environmental restoration and sustainable socio-economic development. The successful completion of ITTO Project Phase Two offers critical insights for future replication and scaling efforts. While the project successfully delivered its four intended outputs, demonstrating significant potential, future expansion requires a proactive and comprehensive strategy. This strategy must directly address the operational, management, and external challenges encountered during Phase Two.

To ensure successful replication and scaling, it's crucial to implement robust improvements in key areas. Without these enhancements, the full potential of the project may be significantly hindered. These critical areas include:

- Project Planning: Strengthening initial project design and foresight.
- Administrative Efficiency: Streamlining processes and reducing bureaucratic hurdles.
- Human Resource Management: Optimizing staffing, training, and team support.
- Stakeholder Engagement: Enhancing collaboration and communication with all involved parties.
- Financial Oversight: Implementing stricter controls and more transparent financial management.

By addressing these identified challenges with a targeted strategy, we can maximize the likelihood of successful future ITTO project initiatives.

1. PROJECT IDENTIFICATION

1.1 Context:

The Rewa Delta, located in the southeast of Viti Levu Island, Fiji, is an archipelagic small island developing state of 18.274 square kilometres highly vulnerable to climate change impacts such as sea-level rise, intensified cyclones, and severe flooding. This region, encompassing parts of the Rewa and Tailevu Provinces, is a critical source of livelihood for local communities, providing essential forest and marine products. However, it faces significant environmental challenges, including critical habitat loss, increased tree cutting for domestic consumption, and siltation in river systems, leading to widespread degradation of its invaluable mangrove forests. This degradation is further exacerbated by a lack of awareness regarding the ecological and socio-cultural importance of wetlands, weak law enforcement, and insufficient inter-institutional coordination. The social and economic well-being of the Rewa and Tailevu Delta communities is intrinsically linked to the health of these mangrove ecosystems, which is approximately 75.62% of the total of 46,600 hectares of mangrove area in Fiji. Daily, a significant portion of community members rely on mangrove resources for food security and subsistence. The destruction of these forests not only increases vulnerability to natural disasters like storm surges and coastal erosion but also contributes to greenhouse gas (GHG) emissions, as mangroves are vital "blue carbon" sinks, storing significantly more carbon than terrestrial forests. In response to these pressing issues, the Government of Fiji, through the Ministry of Fisheries and Forestry (MoFF), has been actively working to mitigate mangrove degradation. This Phase Two project builds upon the successful outcomes of the first ITTO mangrove project (PD 696/13 Rev.2 (F)), which focused on community-based restoration and sustainable management in the Rewa Delta. The current initiative is particularly urgent given the recent impacts of Tropical Cyclone Cody (January 2022) and the tsunami/airborne ash from the Tonga volcanic eruption, alongside the ongoing socio-economic challenges posed by the COVID-19 pandemic.

The project aligns with Fiji's comprehensive national and regional policies and programs, demonstrating a strong commitment to environmental stewardship. These include:

2. Fiji's Intended Nationally Determined Contributions (INDC) and commitment to the Sustainable Development Goals (SDG), the Convention on Biological Diversity (CBD), United Nations Forum on Forests (UNFF), and United Nations Framework Convention on Climate Change (UNFCCC).
3. The Green Growth Framework and Low Emission Development Strategy 2018-2050 (LEDS), which outline pathways for low-emission development.
4. The Climate Change Act (CCA) 2021, providing a legal framework for a carbon-neutral and climate-resilient Fiji, emphasizing sustainable ocean management and nature-based solutions for climate mitigation and adaptation.
5. Fiji's membership in the RAMSAR Convention (2006), underscoring its commitment to wetland conservation.
6. The Fiji Forest Policy Statement (2007), which mandates the introduction of an effective mangrove regulatory management framework.
7. The Ministry of Fisheries and Forestry's "30 Million Trees in 15 Years" Planting Initiative, which includes mangrove reforestation.

This project also complements Japan's commitment to "Strengthening the Foundation for Sustainable and Resilient Economic Development" and "Climate Change and Disaster Resilience" under the Japan-Pacific Bond Policy. By integrating community participation, empowering women, and implementing sustainable management practices, the project seeks to enhance the resilience of the Rewa Delta against natural disasters and socio-economic shocks, while contributing to global climate change mitigation efforts.

1.2 Origin and Problem:

This project originates from the successful completion of the first phase of the ITTO mangrove project, PD 696/13 Rev.2 (F), titled "Community Based Restoration and Sustainable Management of Vulnerable Forests of the Rewa Delta, Viti Levu, Fiji." This initial phase, proposed by the Ministry of Fisheries and Forestry on behalf of the Government of Fiji in 2014 and approved by the ITTC in 2015, laid the groundwork for community-based mangrove management in the Rewa Delta. Key outcomes from the first phase included the restoration of degraded coastal and mangrove wetlands, the establishment of community-based guidelines for utilization and monitoring, strengthened governance systems, and improved community protection against storm surges.

Despite these efforts, the main problem addressed by the current project remains the unsustainable management of coastal mangrove forests, which significantly increases the vulnerability of coastal communities to natural disasters. This overarching problem is rooted in several interconnected issues:

8. **Increased Greenhouse Gas (GHG) Emissions and Climate Change:** Unsustainable forest management practices lead to deforestation and forest degradation, which are major contributors to GHG emissions. Mangrove loss in Fiji was estimated at 1,135 hectares between 2001 and 2018, a 1.7% decrease, with 77% directly attributed to the impacts of Tropical Cyclones. The project aims to counter this by enhancing carbon sequestration through mangrove restoration.
9. **Degraded Coastal Mangrove Ecosystems and Loss of Habitats:** Over-exploitation of key mangrove and coastal species, coupled with limited rehabilitation efforts, has led to a significant loss of ecosystem services and biodiversity. The Rewa Delta, despite being Fiji's largest contiguous mangrove area and a recognized primary conservation site, suffers from critical habitat loss due to increased frequency of tree cutting for domestic consumption and siltation.
10. **Threatened Long-Term Livelihoods and Insecure Well-being for Local Communities:** The reliance of local communities on unsustainable practices for livelihoods, exacerbated by a lack of awareness and inadequate knowledge of alternative options, directly threatens their long-term well-being. The project seeks to alleviate this pressure by providing viable alternative livelihood options.
11. **Ineffective Coordination of Policy Guidelines:** There is a lack of coordination between key governing agencies to implement strategies and policies that incorporate traditional knowledge into ecosystem-based adaptation (EbA) and nature-based solutions (NbS). This weakness in governance hinders the strengthening of community resilience to climate-induced disasters.

The project also directly responds to urgent needs arising from recent natural disasters, including Tropical Cyclone Cody (January 2022), which caused widespread damage and evacuations, and the tsunami and airborne ash from the Tonga volcanic eruption. These events have highlighted the critical need to build resilience in the Rewa Delta against both [natural](#)

hazards and the socio-economic impacts, such as those from the COVID-19 pandemic, by empowering coastal communities and women in community-based mangrove restoration. The project is designed to reduce deforestation and degradation, rehabilitate degraded systems to address biodiversity loss, revive traditional knowledge, and foster multi-stakeholder collaboration to strengthen community resilience

2. PROJECT OBJECTIVES AND IMPLEMENTATION STRATEGY

Project Rationale, Development Objective, and Specific Objective(s)

2.1 Project Rationale:

The successful implementation of this project hinges on a robust, multi-stakeholder collaborative framework. The **Ministry of Fisheries and Forestry (MoFF)**, as the **Executing Agency**, provides strategic leadership, technical expertise, and logistical support. Building on the achievements of the previous project (PD 696/13Rev.2 (F)), key partner organizations—the **Secretariat of the Pacific Community (SPC)**, the **Institute of Applied Science/University of the South Pacific (IAS/USP)**, and **Conservation International (CI)**—have been formally requested to continue their vital involvement.

These core partners bring a wealth of specialized expertise, ranging from national and regional policy development, rigorous research, and advisory services, to proven direct experience in community-based project implementation. Their extensive history of practical, forestry-based community development in Fiji provides an invaluable foundation for the project's success.

Further strengthening this collaborative network are key public sector partners, including the **Ministry of Lands and Mineral Resources (MoLMR)**, **Ministry of Agriculture and Waterways (MoWA)**, **Ministry of Environment (MoFCECIP)**, **Ministry of iTaukei Affairs, Culture, Heritage and Arts (MoiACHA)**, and the **Ministry of Rural, Maritime Development and Disaster Management (MoRMDM)**. These agencies will ensure that all project activities align with critical government policy areas and will contribute essential technical insights to inform community discussions and awareness initiatives.

Recognizing the need for diverse expertise, regional research organizations and non-governmental entities will be significantly involved throughout all project stages. They will facilitate and support the Executing Agency, with specific project components strategically contracted to these institutions to enhance the MoFF's capabilities and guarantee high-quality project outputs and outcomes.

Effective mangrove ecosystem management necessitates unwavering political commitment and strong support from the Central Government, Divisional and Provincial Offices, and all relevant stakeholders. Vertical and horizontal coordination and cooperation among these institutions and other stakeholders are paramount to ensure the successful implementation of comprehensive mangrove ecosystem management policies.

Through this project, the Ministry of Fisheries and Forestry effectively leverage the established "**Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji**" for all rehabilitation and conservation efforts. This guideline is fully aligned with the **2007 National Forest Policy**, which aims to establish an effective mangrove management framework, particularly within the Rewa Delta. This framework will focus on developing demonstration sites that showcase successful community-based management for biodiversity conservation and provide sustainable alternative livelihoods, ultimately enhancing human well-being and contributing directly to the government's overarching goal of mitigating climate change impacts

2.1.1 Development Objective: To promote the conservation, restoration, and sustainable management of mangrove forests to contribute to the resilience of coastal communities and mangrove ecosystems to natural disasters in Fiji. It also aims to reduce carbon emissions from deforestation and forest degradation and enhance forest carbon stocks through increased community participation in reforestation, conservation, and management of mangrove wetland areas. This aligns with Fiji's goals of mainstreaming sustainable biomass energy and achieving net-zero carbon emissions by 2050.

2.1.2 Specific Objective: To promote community-based restoration of cyclone-affected vulnerable mangrove forests through the empowerment of coastal communities and women, by: (i) improving livelihoods of local communities through participation in avoiding deforestation, degradation, and biodiversity loss; (ii) promoting community-based mangrove restoration to compensate for degraded and lost resources and secure ecosystem services; and (iii) adopting integrated approaches to coastal adaptation for the protection of coastal populations from natural hazards, increased climate change resilience, and reduced vulnerability.

The outcome indicators of the project are listed as follows:

2.1.3 Output 1 indicators:

- The six communities of 120 individuals were trained and guided on how to use the Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji for their benefits concerning the importance of mangroves in climate change mitigation, its rehabilitation, conservation and the roles of communities as managers and stewards for its long-term sustainability.
- The six communities were involved in participatory progress assessment on the efficiency and productivity of existing alternative livelihood through questionnaires, personal interviews and focus group discussion (FGD) with views of participating women are taken into account.
- They were two existing alternative livelihood assessment results analysed, evaluated and implemented to further improve existing alternative livelihood in terms of output and revenue.
- Participatory Learning Appraisal (PLA) for the six communities have identified other viable alternative livelihood options such as the use of improved cooking stove, contemporary jewellery making, fabric painting and screen printing, caregiving and women cooperative to reduce community pressure and dependence on mangrove resources.

2.1.4 Output 2 indicators:

- Sixty individuals from the six villages' were trained on mangrove species identification, indigenous mangrove seed collection, and nursery techniques for raising native species.
- Six Mangrove nurseries were established (8m x6m) and 60,000 mangrove seedlings potted, serving as

a source of reliable seedling materials for continuous mangrove rehabilitation and reforestation in the Central Eastern Division.

- Six hectares of deforested wetlands were rehabilitated with Native, fruit and fuel wood species.
- 90% of potted mangrove seedlings were planted survived and thrived.

2.1.5 Output 3 indicators:

- Six communities were trained on the use of improved cook stoves and home biogas digesters, thirty women assisted with improved cook stoves while six communities assisted with home biogas digesters.
- Six hectares of fast-growing wood fuel seedlings (60,000 fruit, native and fuel wood seedlings) replanted in degraded areas and in the villages' outskirts.
- Three viable alternative livelihoods selected to be implemented are the cooperative store, Home biogas and caregiver training.
- By the end of the 7th month, at least six communities have adopted and implemented alternative livelihood options.

2.1.6 Output 4 indicators:

- By the end of the 3rd month, at least 120 individuals are trained in natural disaster preparedness and disaster risk management.
- By the end of the 3rd month, a Community Disaster Action Plan is developed.
- By the end of the 3rd month at least 6 communities are trained on farming techniques and climate smart agriculture by integrating traditional knowledge and skills to combat climate change.
- By the end of the 12th month, at least 6 communities have implemented the construction of protective infrastructure (strengthening of village hall, Installation of water tanks) to reduce disaster risk.

2.1.7 Implementation Strategy:

The implementation strategy for ITTO projects, particularly in Phase Two, generally emphasizes a multi-faceted and collaborative approach, building on lessons learned from phases one.

The Key elements typically include:

1. **Community-Based Approach:** This is central to ITTO projects in Fiji, especially for mangrove restoration. It involves empowering local communities, particularly women's groups, to take ownership of restoration and management activities. This includes training, capacity building, and integrating traditional knowledge.
2. **Stakeholder Collaboration:** Effective implementation requires strong partnerships between the Ministry of Forestry (the executing agency in Fiji), local government authorities (municipal, district, provincial), NGOs, universities, and community organizations. This ensures broad support, resource mobilization, and alignment with national policies and local needs.
3. **Integrated Management:** Projects aim for integrated forest and resource management plans that consider social, technical, and environmental issues. This includes not just timber production but also biodiversity conservation, watershed management, soil conservation, and the sustainable use of non-timber forest products.
4. **Livelihood Diversification:** To reduce pressure on natural forest resources, the strategy often includes developing alternative livelihood opportunities for communities. This can involve activities like prawn farming, piggery farming, beekeeping, and the establishment of fuel wood areas to reduce over-reliance on mangroves for fuel.
5. **Capacity Building and Training:** Providing training to community members, local authorities, and forest managers on sustainable forest management practices, restoration techniques, and relevant guidelines (e.g., Mangrove Guideline) is crucial for long-term sustainability.
6. **Monitoring and Evaluation:** Continuous monitoring of project progress, identifying areas for improvement, and ensuring alignment with international standards set by ITTO are essential. This helps in adaptive management and documenting achievements.
7. **Policy and Governance Integration:** Efforts are made to improve policies and community support facilities to strengthen collaborative governance structures for community-based management. This includes contributing to district land use plans and ensuring traditional land rights are respected.
8. **Demonstration and Replication:** Projects often establish demonstration sites to showcase successful approaches and technologies, with the aim of amplifying these sustainable policy programs and activities to other river systems and coastal communities in Fiji and the wider Pacific Region.
9. **Climate Change Resilience:** Given Fiji's vulnerability to natural disasters, the projects explicitly aim to enhance coastal community resilience to events like storms, tsunamis, and coastal erosion, while also contributing to climate mitigation and adaptation through ecosystem restoration.

Based from the above key elements, the ITTO phase two project document was designed to ensure the following key aspects are addressed on the Phase two implementation:

1. **Sustained Mangrove Restoration and Management:**
 - **Establishment and Maintenance of Nurseries:** Continued support for community-managed mangrove nurseries, particularly those run by women's groups, to ensure a consistent supply of quality seedlings for ongoing restoration.
 - **Application of New Guidelines:** Widespread training and implementation of the newly developed Mangrove Guideline (developed with Conservation International and SPC) to ensure best practices in restoration and management.
 - **Expansion of Restoration Sites:** Extending restoration efforts to more degraded mangrove areas beyond the initial demonstration sites in Rewa and Tailevu provinces.

2. **Diversification of Community Livelihoods:**

- **Sustainable Alternative Income Streams:** Further development and scaling up of successful alternative livelihood initiatives (e.g., prawn farming, piggery, and beekeeping) to significantly reduce community reliance on direct exploitation of natural forests.
- **Introduction of Fuel wood Areas:** Active development of fuel wood plantations with suitable species to provide a sustainable energy source and decrease pressure on natural mangrove resources for fuel. This should involve identifying suitable types of fuel wood that thrive in the local ecosystem.

3. **Strengthening Community Empowerment and Governance:**

- **Enhanced Women's Group Empowerment:** Continuing to empower women's groups through training, resources, and decision-making roles in project implementation, recognizing their crucial role in community well-being and environmental stewardship.
- **Formalizing Community-Based Management Structures:** Supporting the establishment and strengthening of formal community-based management governance structures to ensure long-term sustainability and local ownership.
- **Integration with Local and National Planning:** Ensuring that project activities and outcomes are integrated into local development plans and national forestry policies, fostering a supportive enabling environment.

4. **Capacity Building and Knowledge Transfer:**

- **Targeted Training Programs:** Delivering comprehensive training programs for community members, local government officials, and forestry extension officers on advanced sustainable forest management techniques, biodiversity conservation, and climate change adaptation.
- **Documentation of Traditional Knowledge:** Actively documenting and integrating traditional ecological knowledge into modern conservation practices, recognizing its value for sustainable resource use.
- **Knowledge Sharing and Replication:** Facilitating knowledge exchange platforms and South-South cooperation to share Fiji's experiences and lessons learned with other tropical timber-producing countries.

5. **Monitoring, Evaluation, and Impact Assessment:**

- **Robust Monitoring Systems:** Implementing robust monitoring systems to track ecological recovery, socio-economic benefits, and the effectiveness of management interventions.
- **Climate Change Impact Measurement:** Quantifying the climate mitigation and adaptation benefits of the restoration efforts (e.g., carbon sequestration, coastal protection).
- **Long-Term Sustainability Indicators:** Establishing clear indicators to measure the long-term effectiveness of projects in addressing livelihoods, environmental sustainability, and biodiversity conservation.

The Phase Two ITTO project implementation bases its strategy on these key aspects, as per the project document, especially in alternative livelihood development, training, and mangrove restoration, as well as the assessment of project implementation progress.

Based on the key elements and aspects outlined in the project document, implementation is channelled through the Ministry of Forestry and our key stakeholders' steering committees, headed by Commissioner Central Mr. Peni Navuku. This collaboration involves provincial offices at the Divisional level, linking down to village administrators in six communities. The village Administrators are the mediators between the government and the communities, representing the communities to the government and vice versa, for the government to the communities. The channel process of network follows this process on the project implementation, embracing the above elements and aspects. The aligning stakeholders from SPC, USP, and CI are embracing tools in advising the implementation of the project document's purposes and its benefit to the communities.

2.1.8 Assumption and Risk:

Assumptions

- **Availability of Best Practices:** The "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji" will be readily available and effectively utilized to inform appropriate species selection and rehabilitation techniques, leading to successful outcomes.
- **Government Agency Cooperation:** Relevant Government agencies (e.g., Department of Lands, Provincial Office) will maintain or increase their alignment with and support for the project's goals, recognizing the urgency of addressing the identified problems. The successful completion of Phase 1 will continue to provide leverage for this collaboration.
- **Continued Support from Department of Agriculture:** The Department of Agriculture will consistently provide necessary support services for the supply of relevant crops naturally found in coastal and mangrove wetland areas.
- **Community Responsiveness to Incentives:** Communities will continue to respond positively to well-structured incentives, fostering their full support and participation throughout the project's duration.
- **Effective Internal Coordination:** The Ministry of Fisheries and Forestry (MOF) divisions will maintain effective internal coordination, ensuring policies and plans do not inadvertently negatively impact mangrove rehabilitation targets.
- **Community Engagement for Long-Term Sustainability:** Communities will remain engaged in policing planted sites and upholding village by-laws, contributing to the long-term protection of rehabilitated areas beyond the project's close.
- **Market Demand for Alternative Livelihoods:** Robust economic analysis will consistently identify viable market demands for alternative livelihood options, mitigating perceived risks to income stability for adopting communities.

2.1.9 Risks and Mitigation Measures

Risk	Mitigation Measures
The illegal extraction of mangrove by community members not directly involved with the project.	* Widespread awareness campaigns targeted the general public, including neighboring communities and municipalities, not just the project's direct beneficiaries. * Community members were empowered and encouraged to actively police planted sites and enforce existing village by-laws against offenders. Awareness will be reinforced through posters, media releases, and workshops.
Lack of sustained buy-in from relevant Government agencies (e.g., Department of Lands, Provincial Office) resulting from non-alignment of project goals to their evolving strategic development goals.	* The Executing Agency proactively and continuously undertook awareness-raising activities among Government agencies to ensure ongoing alignment of strategic development goals with project objectives. * Leveraging the successful completion of Phase 1, the Executing Agency continued to build strong relationships and advocate for the urgency of the project's objectives with key Government stakeholders.
Lack of readily available seeds and propagating material for the reforestation and rehabilitation of desired species.	* The Executing Agency ensured consistent access to a diverse range of seeds for species considered important by communities, especially those not readily available

	locally. * The Department of Agriculture's continued support services are critical for the reliable supply of relevant native coastal and mangrove wetland plant species.
The reluctance of local communities to consistently attend scheduled training sessions and meetings leads to knowledge gaps and reduced participation.	* From the project's inception, clear and appropriate incentives were offered to communities to secure their full support and active participation. * Regularly rewarding communities for their involvement will be prioritized as a success factor to maintain the interest and engagement of diverse community groups.
Ineffective coordination and communication among various Ministry of Fisheries and Forestry (MOF) divisions leading to policies and plans that inadvertently undermine mangrove rehabilitation targets.	* The project organized regular in-house workshops and communication channels introducing Phase 2 of the ITTO Project to all relevant MOF divisions, clearly identifying areas of involvement and fostering inter-divisional collaboration.
Low survival rates of mangrove protection and re-forestation efforts due to environmental factors, inappropriate techniques, or insufficient ongoing care.	* The project strictly adhered to and fully utilize the "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji" to ensure best practices in species selection, planting techniques, and ongoing site management. * Continuous community engagement was crucial reducing pressures on mangrove forests, including monitoring and addressing factors that hinder survival rates. The Ministry of Forest, under the extension division, ensured maintaining survival rates every financial year.
Communities are reluctant to adopt new land use practices and mangrove-supportive livelihood options due to perceived risks to their income stability and uncertainties over market demand, leading to continued degradation of mangrove areas.	* Thorough community consultations and robust economic analyses will be conducted before introducing any alternative livelihood options to ensure their viability and address community concerns. * Comprehensive training will be provided to communities, explicitly linking the protection of ecosystems with long-term economic and social benefits, highlighting sustainable income opportunities.
Rehabilitated mangrove areas are eventually degraded after the project closes due to a lack of sustained community ownership, enforcement, or external pressures.	* From the outset, the project implemented a strong community-based management framework, empowering local communities with the knowledge, skills, and responsibility to manage and protect rehabilitated areas independently. * Long-term monitoring protocols will be established with community involvement to track the health and integrity of rehabilitated sites, allowing for timely interventions if degradation is observed. * Integration of mangrove protection into existing village by-

	laws and local governance structures will be emphasized to ensure long-term enforcement and sustainability. * The project explored opportunities for continued support or linkages with other ongoing or future initiatives that provide sustained resources and oversight for the rehabilitated areas.
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3.0 **PROJECT PERFORMANCE (Project Planned and Implementation)**

3.1 Planned versus realized project performance

The official start of Phase 2 of the ITTO project, "Community-based restoration of cyclone-affected vulnerable mangrove forests through the empowerment of coastal communities and women in the Rewa/Tailevu Delta (Fiji)," was originally scheduled for March 2023, as stated in the project document.

However, the recruitment of a new ITTO Officer did not begin until December 2023. This delay between the planned project start and the hiring of a key team member has resulted in a significant underperformance of planned activities. The project's current timeline is not aligned with the original schedule, which has impacted our ability to execute tasks as intended. The following table clearly explains some of the realised performance that was executed, deviating from the planned performance to meet the Ministry of Forestry's Financial system and its operation.

	PLANNED PERFORMANCE	REALISED PERFORMANCE
1	Project Timeline: March 2023- March 2024	January 2024 - June 2025-Based on the Ministry's financial year 2024-2025 Details: <u>January-July 2024</u> -First financial Period- Fund release from ITTO to the Reserve Bank and then to the Ministry allocation for project implementation. <u>August-December 2024</u> -Second financial period-Retained back the remaining budget from Finance after ODA to continue project implementation. <u>January – June 2025</u> -Third financial period- Complete the remaining activities after ODA submission to Finance.
2	Budget -410,000.00 USD	Budget – 250,000.00 USD
3	Consultant	Government staff, ministries related experts
4	Nursery attendants	Community involvement
	3 ITTO staff	3 staff-Jan-July 2024

		1 staff only- August 2024-June 2025
5	ITTO to provide the budget alone for the project.	The Ministry in Fiji is also involved with some of the expenses for the project to be completed.
6	Salary-Project Budget	Salary based on the interviewed position from Forester (while holding the ITTO position Level) to Forestry Officer Parks & Reserve.

3.11.Objective:

3.12 Development Objective:

To promote the conservation, restoration and sustainable management of mangrove forests to contribute to the resilience of coastal communities and mangrove ecosystems to natural disasters in Fiji.

3.13 Specific Objective:

To promote community-based restoration of cyclone-affected vulnerable mangrove forests through empowerment of coastal communities and women.

3.14 Outcome indicators of the above specific objectives with percentage details:

There were four outputs with sixteen activities covered within the eighteen months to complete the Project.

PP-A/59-351 / PHASE TWO PROJECT IMPLEMENTATION RESULTS

ACTIVITIES	EXECUTION PERCENTAGE (%)	COMMENTS	DURATION TIMELINE
Output 1.0 Local communities are trained to adopt the "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji" to strengthen the governance of mangroves, and women are			

empowered to participate in the decision-making process for the improvement of existing alternative livelihoods

<u>Activity 1.1</u> Training workshop on "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji" relative to the importance of mangroves, their rehabilitation, conservation, and the roles of communities as managers for their long-term sustainability.	100%	1. Conduct training with the extension Division from the Ministry of Forestry on Nursery establishment and Conservation International on the mangrove guideline to the six communities for two two-day training.	January-July 2024
<u>Activity 1.2</u> Participatory progress assessment on the efficiency and productivity of existing alternative livelihoods through questionnaires, personal interviews, and focus group discussions, with the views and opinions of participating women are considered.	100%	1. Conduct PPA on the six community sites and discuss the communities' needs and interests. Women's opinions on the best alternative livelihood source.	January -July 2024
<u>Activity 1.3</u> Results of participatory progress assessment were analyzed, evaluated, and implemented to further improve existing alternative livelihoods in terms of efficiency and productivity.	100%	1. Purchased and delivered all materials for Rewa Nursery and handed them over to the Rewa Provincial office. Team Extension will manage the construction in July 2025. 2. Delivered all Prawn feeds to the six villages. 3 Delivered maintenance materials, pipe at Waicoka for the Prawn farm. 4. Delivered two new water pumps for the Narocake and Waicoka Village. 5. Construct a piggery farm access at Nasilai village. 6. Supply three weaners (pigs) to improve the Nasilai village piggery farm. 7. Improve the prawn farm pond through machine construction	January-June 2025 August-December 2024 January-July 2024 August – December 2024 January – July 2024 August – December 2024

		and seek Fisheries advice on the best farming practices for shrimp and Tilapia to improve the community's management role on the pond.	
<u>Activity 1.4.</u> Identification of other viable alternative livelihood options for women's groups to reduce community pressure and dependence on mangrove resources.	100%	1. Observe, evaluate, and identify the community needs for each community and source of alternative livelihood that are mostly relied on and in demand, especially for women's groups.	January – July 2024
Output 2.0 Degraded coastal and mangrove wetlands rehabilitated to mitigate climate change through increased carbon sequestration.			
<u>Activity 2.1</u> Community training on the collection of quality seedlings for indigenous mangrove species and nursery techniques for raising native mangrove species.	100%	Conduct a two-day training for the six communities with support from the Forestry Extension team on quality seedlings collection, Nursery techniques, and raising of Native mangrove species.	January – July 2024
<u>Activity 2.2</u> Construction of a mangrove nursery and potting of mangrove seedlings.	100%	1. Constructed six mangrove nurseries, each for the six communities, and delivered all nursery materials for each village.	January – July 2024
<u>Activity 2.3</u> Field mangrove planting to restore identified degraded areas for coastal stabilization and moderate coastal flooding.	100%	1. The villages have raised the following Species in the village after the Nursery inspection -Mangrove(Rhizophora (mangle)- -Kumquat (Citrus Japonica)- -Soursop (Annona muricata)- 2. Purchase 60,000 pot bags for 10,000 each in six villages to raise mangrove species for the next Forestry financial Year 2025-2026.	August-December 2024

<u>Activity 2.4</u> Monitoring of restored areas to ensure the survival of planted mangrove seedlings and fast-growing fuel wood trees.	100%	1. One week Survival count from Team Extension on the last planted area for the six villages and resulting in 90% growth recovery.	January – June 2025
Output 3.0 Empowering women to adopt a suite of viable alternative livelihood options, reducing over-dependence on coastal and mangrove wetland resources for sustenance and life support.			
<u>Activity 3.1</u> Community training on the use of improved cook stoves and home biogas digesters to reduce GHG emissions.	100%	1. Conduct Biogas training awareness facilitated by Eco Grow one week, visiting the six villages. 2. Preparation of Biogas selected sites and Piggery waste (2 drums), including water supply. 3. Installation of the Biogas system and fittings connection to the improved cook stove.	January – July 2024 January – July 2024 August – December 2024
<u>Activity 3.2</u> Planting fast-growing fuel wood trees to reduce pressure on mangroves as an alternative source of wood fuel.	100%	A one-week survival count on the fuel wood trees planted in the six villages resulted in a 90% recovery rate.	January – June 2025
<u>Activity 3.3</u> Conduct a feasibility study to select the most viable alternative livelihood options, such as contemporary jewelry made from local resources, fabric painting and screen printing, caregiving and women's cooperatives. (Entrepreneurship skills)	100%	1. Conduct feasibility studies on the alternative livelihood for women to train on jewelry making, Fabric painting, Weaving, Tailoring and the establishment of a cooperative store.	August – December 2024
<u>Activity 3.4</u> Training programmes to assist women in acquiring knowledge and technical skills related to the selected alternative livelihood options in Act. 3.3.	100%	1. Conducted the Last training of the cooperative Management for Narocake and Muanaira from the Ministry of Trade, Cooperative and Small Business Enterprises. 2. Purchase and handing over of all Cooperative Materials as follows for the six villages:	January – June 2025 January – June 2025

		<ul style="list-style-type: none"> -Cooperative building materials -Foodstuff materials for the New shop in six villages. -Electrical appliance. -Weighing Scale. -Notice board -Stationery <p>3. Registration of Cooperative. For all six villages to the Ministry of Trade, Cooperative and Small Business Enterprises.</p> <p>4. Designing of cooperative bylaws and SOP for the six villages</p> <p>5. Training of women on fabric painting, Jewellery making, Weaving, and Tailoring</p>	<p>January – June 2025</p> <p>January – June 2025</p> <p>August – December 2025</p>
Output 4.0 Strengthen coordination of policy guidelines and framework to effectively address climate change and disaster risks at the national and subnational levels.			
<u>Activity 4.1</u> Community training on natural disaster preparedness, disaster risk management, and emergency response to climate change-related disasters.	100%	1. Conduct two days training with support from Provincial administrators for central division on natural disaster preparedness, disaster risk management, and emergency response to climate change-related disasters.	January – July 2024
<u>Activity 4.2</u> The Community Disaster Action Plan is established through relevant Government Agencies and NGOs to safeguard the lives of coastal communities.	100%	1. Conduct training on the Community disaster action plan through the commissioner's central support. 2. Conduct a meeting with Commissioner Central to discuss the Community Disaster Action Plan draft. 3. Design a Disaster Action Plan for the six villages.	January – July 2024 August – December 2024 January – June 2025

<u>Activity 4.3</u> Training on ecosystem-based adaptation relating to forestry, water, and agriculture by integrating traditional knowledge and skills on the conservation and sustainable use of natural resources to increase resilience and reduce vulnerability to natural hazards.	100%	1. Conduct two days of training with support from the Ministry of Agriculture on ecosystem-based adaptation relating to forestry, water, and agriculture by integrating traditional knowledge and skills on the conservation and sustainable use of natural resources to increase resilience and reduce vulnerability to natural hazards.	January – July 2024
<u>Activity 4.4</u> Community training to assist local communities to adopt and implement nature-based adaptation to build their resilience to the physical impacts of natural disasters.	100%	Conduct training awareness for the communities for preparedness and set up quotation of village halls, Evacuation centers maintenance, Foot path construction at Natila village and delivery of Water tanks to harvest rainwater.(5,300L)	January – July 2024

3.15 Table below show the amended work Plan for the project implementation based on the financial year set by the Government of Fiji :

AMMENDED WORKPLAN_ITTO JANUARY 2024 – JUNE 2025																	
PROJECT TITLE: Community-Based Restoration of Cyclone-Affected Vulnerable Mangrove Forests through Empowerment of Coastal Communities and Women In the Rewa Delta, Fiji																	
Output 1.0 Local communities are trained to adopt the "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji" to strengthen the governance of mangroves, and women are empowered to participate in the decision-making process for the improvement of existing alternative livelihoods																	
		FINANCIAL PERIOD															
		JANUARY-JULY 2024						AUGUST-DEC 2024				JANUARY- JUNE 2025					
<u>Activity 1.1</u> Training workshop on "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji" relative to the importance of mangroves, their rehabilitation, conservation, and the roles of communities as managers for their long-term sustainability.																	
<u>Activity 1.2</u> Participatory progress assessment on the efficiency and productivity of existing alternative livelihoods through questionnaires, personal interviews, and focus group discussions, with the views and opinions of participating women are considered.																	

<p>Activity 1.3 Results of participatory progress assessment were analyzed, evaluated, and implemented to further improve existing alternative livelihoods in terms of efficiency and productivity.</p>																			
<p>Activity 1.4 Identification of other viable alternative livelihood options for women's groups to reduce community pressure and dependence on mangrove resources.</p>																			
<p>Output 2.0 Degraded coastal and mangrove wetlands rehabilitated to mitigate climate change through increased carbon sequestration.</p>																			
	JANUARY-JULY 2024							AUGUST-DEC 2024					JANUARY- JUNE 2025						
<p>Activity 2.1 Community training on the collection of quality seedlings for indigenous mangrove species and nursery techniques for raising native mangrove species.</p>																			
<p>Activity 2.2 Construction of a mangrove nursery and potting of mangrove seedlings.</p>																			
<p>Activity 2.3 Field mangrove planting to restore identified degraded areas for coastal stabilization and moderate coastal flooding.</p>																			
<p>Activity 2.4 Monitoring of restored areas to ensure the survival of planted mangrove seedlings and fast-growing fuel wood trees.</p>																			
<p>Output 3.0 Empowering women to adopt a suite of viable alternative livelihood options, reducing over-dependence on coastal and mangrove wetland resources for sustenance and life support.</p>																			

	JANUARY-JULY 2024							AUGUST-DEC 2024				JANUARY- JUNE 2025						
<u>Activity 3.1</u> Community training on the use of improved cook stoves and home biogas digesters to reduce GHG emissions.																		
<u>Activity 3.2</u> Planting fast-growing fuel wood trees to reduce pressure on mangroves as an alternative source of wood fuel.																		
<u>Activity 3.3</u> Conduct a feasibility study to select the most viable alternative livelihood options, such as contemporary jewelry made from local resources, fabric painting and screen printing, caregiving and women's cooperatives. (Entrepreneurship skills)																		
	JANUARY-JULY 2024							AUGUST-DEC 2024				JANUARY- JUNE 2025						
<u>Activity 3.4</u> Training programmes to assist women in acquiring knowledge and technical skills related to the selected alternative livelihood options in Act. 3.3.																		
<u>Output 4.0</u> Strengthen coordination of policy guidelines and framework to effectively address climate change and disaster risks at the national and subnational levels.																		
	JANUARY-JULY 2024							AUGUST-DEC 2024				JANUARY- JUNE 2025						

<u>Activity 4.1</u> Community training on natural disaster preparedness, disaster risk management, and emergency response to climate change-related disasters.																		
<u>Activity 4.2</u> The Community Disaster Action Plan is established through relevant Government Agencies and NGOs to safeguard the lives of coastal communities.																		
<u>Activity 4.3</u> Training on ecosystem-based adaptation relating to forestry, water, and agriculture by integrating traditional knowledge and skills on the conservation and sustainable use of natural resources to increase resilience and reduce vulnerability to natural hazards.																		
<u>Activity 4.4</u> Community training to assist local communities to adopt and implement nature-based adaptation to build their resilience to the physical impacts of natural disasters.																		

3.16. Project duration:

The new project coordinator of the Phase two ITTO project joined the ITTO project in December 2023 while waiting for the other two staff to join in January 2024. However, during this period, the preparation for the inception report was progressing with the compilation of ODA document for the release of funds from the Ministry of Finance. More details of the project implementation period are tablet below:

FINANCIAL PERIOD	ACTIVITIES	DURATION
January-July 2024	1. Inception Meeting and report 2.First instalment-19/01/2024 3.ODA submission to finance 4.Purchase of capital items 5.Project implementations 6.Monitoring visit-ITTO secretariat(Mrs Jennifer & Dr Ma)	7 Months

	7. Request for project extension	
August-December 2024	1. Preparation of ODA 2. Approval of extension 3. Fund approved from Finance-September 4. Project implementation 5. Adaptation of the new FMIS system. 6. Attend to ITTO council meeting. 7. Request for further extension.	5 Months
January-June 2025	1. Waiting for extension approval 2. Continue with the remaining project implementation on the ground. 3. Submission of ODA to finance for release of fund-February 4. Project implementation 5. Compilation of completion report. 6. Engage Audit for ITTO audit report.	6 Months
TOTAL		18 Months

3.17 Project Budget and input applied:

The first installation of the project fund was received on 19/01/2024 with the total amount of 250,000.00 USD. After the submission of ODA (Official Development System) to the Ministry of finance, We received the fund on March 2024 to begin the ITTO project implementation.

Details of fund and input applied are tabulated as follows:

FINANCIAL PERIOD	ITTO FUND(USD)	EXPEDITURE(USD)	MISPOSTING (USD)	BALANCE(USD)
January- July 2024	New Instalment \$250,282.42	\$133,616.12	\$11,536.91	\$128.203.22
August-December 2024	Balance from Last Financial period- \$128.203.22	\$17,716.61		\$110,486.60
January-June 2025	Balance from Last Financial period- \$74,391.97			

The table clearly indicates that some misposting of funds may affect the previous submission reports, which were made during the project implementation period. The final verification of cash flows, accounts, and also through audit queries has finalized this table as the confirmation of all financial expenditure and balance to date.

3.18 Project Budget cost Expenses and Balance table:

	CONTRIBUTION	Expenditures To-date			BALANCE
COMPONENTS	U.S. \$	Committed	Spent	Committed & Spent	OF FUNDS
	(A)	(B)	(C)	(D)=(B)+(C)	(A)-(D)
FUND MANAGE BY EXECUTING AGENCY					
PROJECT PERSONNEL	\$ 77,534.00	\$ 14,787.77	\$ 22,569.76	\$ 37,357.53	\$ 40,176.47
SUB- CONTRACTS	\$ 2,500.00	\$ -	\$ 998.26	\$ 998.26	\$ 1,501.74
TRAVEL	\$ 1,300.00	\$ -		\$ -	\$ 1,300.00
CAPITAL ITEM	\$ 128,254.00		\$ 77,011.39	\$ 77,011.39	\$ 51,242.61
CONSUMABLE ITEMS	\$ 96,512.00	\$ 12,402.37	\$ 43,882.12	\$ 56,284.49	\$ 40,227.51
MISCELLANEOUS	\$ 21,900.00	\$ -	\$ 14,283.32	\$ 14,283.32	\$ 7,616.68
NATIONAL MANAGEMENT COST	\$ 15,000.00	\$ -		\$ -	\$ 15,000.00
PROJECT MONITORING AND ADMINISTRATION	\$ 67,000.00	\$ -	\$ 1,492.36	\$ 1,492.36	\$ 65,507.64
FUNDS RETAINED BY ITTO	\$ 410,000.00	\$ 27,190.14		\$ 187,427.36	\$ 222,572.64
FIRST INSTALMENT	\$ 250,282.42			\$ 187,427.36	
MISPOSTING-Jan-July 2024	\$ 11,536.91				
FIRST INSTALMENT + MISPOSTING	\$ 261,819.33	CURRENT BALANCE(USD) EXPECTED TO RETURN BACK TO MINISTRY OF FINANCE			\$ 74,391.97

SUMMARY					
		OVERAL EXPENSES		OVERAL BALANCE	
		FJD	USD	FJD	USD
JANUARY - JULY 2024		\$ 301,548.46	\$ 133,616.12	\$ 289,332.46	\$ 128,203.21
AUGUST-DECEMBER 2024		\$ 39,983.33	\$ 17,716.61	\$ 249,349.13	\$ 110,486.60
JANUARY-JUNE 2025		\$ 81,459.32	\$ 36,094.62	\$ 167,889.81	\$ 74,391.97
TOTAL		\$ 422,991.11	\$ 187,427.35	\$ 167,889.81	\$ 74,391.97

4. PROJECT OUTCOME (Target Beneficiaries Involvement)

4.1 Development Objective Outcome:

The 18-month project primarily focused on achieving outputs 1, 3, and 4, centred on community development in the Rewa and Tailevu delta regions. A key initial step involved training communities on the Mangrove Management Guideline, emphasizing its integration into their lifestyles while adhering to relevant ministerial policies and legislation.

Mangrove management in Fiji is governed by several key pieces of legislation, as listed below:

1. Environment Management Act (EMA) 2005 and EIA Process Regulations 2007: This primary legislation mandates Environmental Impact Assessments (EIAs) for developments potentially affecting mangroves.
2. State Lands Act 1946: This act regulates the leasing of state land, including foreshore and intertidal zones where mangroves thrive.
3. Forest Decree 1992: This decree pertains to forest reserves, which can encompass mangrove areas.
4. Fisheries Act 1942: This legislation governs the management of marine resources, many of which depend on healthy mangrove ecosystems.

Under the Ministry of Rural and Maritime Development and Disaster Management, Fijian villages operate with support from provincial and district administrations for service delivery and development projects. With financial support from the ITTO project, six communities have achieved national recognition for their development efforts. This ensures that their progress is sustained and aligns with established policies and regulations.

The Mangrove Management Guideline provides a clear framework for communities to understand and respect policies and legislation. It also helps village structures comprehend their connection to government processes and procedures for resource management and disaster preparedness.

4.2 Specific Objectives Outcome:

Phase Two of the ITTO project is strategically implemented with a primary focus on Output 2: Restoration of Degraded ITTO Project Areas. This initiative directly supports the Ministry of Forestry's Annual Operation Plan 2024-2025 by assisting and contributing to the reforestation of degraded forest lands. The project further facilitates this by providing ITTO vehicle support for the transportation of seedlings and planting operations beyond the immediate project sites. Also the

communities were supplied with pot bags to raise seedlings and also to register within the reforestation degraded Forest project required by the Ministry of Forestry to supply seedlings.

Despite limited land availability within the project sites, a total of 15 hectares have been successfully planted with a combination of fruit trees, native species, fuel wood species, and mangroves. This diverse planting strategy aims to enhance conservation efforts within mangrove areas.

A significant positive impact from Phase One's planting of fruit trees and crops in these vulnerable areas is the establishment of vital food sources, including breadfruit (*Artocarpus altilis*) and soursop (*Annona muricata*), both highly nutritious fruit species.

Phase Two also introduces the planting of fuel wood species to reduce future reliance on mangroves for fuel, promoting sustainable resource management. In alignment with Fijian traditional lifestyles, breadfruit is a highly sought-after crop, serving as a valuable alternative to cassava, taro, and rice, and is also recognized as a non-communicable disease (NCD) friendly food source. The six vulnerable ITTO areas within the Rewa delta particularly benefit from breadfruit cultivation due to their limited land and low-lying elevation.

Furthermore, the ongoing tree planting within these village areas has significantly reduced siltation and erosion, especially along river banks and coastal lines.

The establishment of Village nursery engage communities not only to plant within the territory of the ITTO sites but also to be part of the Ministry of Forestry reforestation program in raising seedlings and supplying to the contribution of the Rewa and Tailevu delta Beat station area while receiving seedlings payments of \$3.00 per pot plant.

4.3 Output 1:

Local communities are trained to adopt the "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji" to strengthen the governance of mangroves, and women are empowered to participate in the decision-making process for the improvement of existing alternative livelihoods.

The first output of the project allows the communities to understand the importance of their role and the mangrove resource as part of their environment. Training the six communities to understand the Mangrove guideline and adapt to prevent the impact of climate change by building up a community framework that understands its process and procedures through Provincial offices, Commissioner Offices, and other related government ministries for any disaster occurrence or development required. These system concepts build an effective decision-making process for communities to identify viable alternative livelihood options for women's groups to reduce community pressure and dependence on mangrove resources through Participatory assessment within the six villages.

Activity	Tangible Outputs	Sectoral policies & Program	Physical Environment
<p>Activity 1.1: Training workshop on “<i>Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji</i>” relative to the importance of mangroves; their rehabilitation, conservation, and the roles of communities as managers for their long-term sustainability.</p>	<ol style="list-style-type: none"> 1. 86 Participants attended two days of training with registration, particularly from the six ITTO villages are Natila, Naivakacau, Nasilai Narocake, Waicoka, and Muanaira. 2. Participants were selected based on gender equality. The majority are mostly elderly women and men. 3. Each participant was given new printed mangrove guidelines with the training exercise books and stationery. 4. Presentation was done through a Multimedia screen in the Iaukei language for participants to understand. 5. Media report was also submit for facebook page for the Ministry of Forestry and also Ministry Viber updates. 	<p>This mangrove guideline is also linked to the following policies, where participants were informed with the presence of provincial Administrators:</p> <ol style="list-style-type: none"> 1. Fiji's National Climate Change Policy (2018-2030): 2. Environment Management Act 2005 (EMA) and Regulations (e.g., EIA Process Regulation 2007): 3. National Mangrove Management Plan for Fiji (e.g., 2013 Draft or updated versions): 4. Integrated Coastal Management (ICM) Frameworks and Plans (e.g., Provincial ICM Plans for Ra and Kadavu): 5. Ministry of Forestry's "30 Million Trees in 15 Years" Initiative: 6. Ministry of Fisheries Policies and Regulations: 7. Department of Environment Programs:-The Department of Environment is the focal point for environmental protection and often collaborates with NGOs and other agencies on mangrove restoration projects (e.g., through projects like MESCAL - Mangrove Ecosystems for Climate Change Adaptation and Livelihood). 	<ol style="list-style-type: none"> 1. One of the component topics of the mangrove guideline that was learned is for the community to understand the types of mangrove in Fiji, their characteristics, and how they relate to their environment to identify the management strategies required in various ecosystems.

<p>Activity 1.2: Participatory progress assessment on the efficiency and productivity of existing alternative livelihoods through questionnaires, personal Interviews, and focus group discussions with views and opinions of participating women taken into account</p>	<ol style="list-style-type: none"> 1. Defining the objective of PPA based on the projects requirements. 2. Engage government stakeholders for the visit 3. Visit the six villages and conduct interviews, discussions and opinions to focus group. Observe different characteristics and lifestyle for each community. 4. Transect walk for ground proof 6. Captured Data 	<ol style="list-style-type: none"> 1. The alignment of interviews, discussions on focus groups are based on the project document and the interest of the communities' links with their values and their livelihood need. 2. The community interest to such development is aligned to the required process and procedures for responsible Ministries such as Cooperatives, caregivers, and Nurseries, following its policies and legislations. 	<p>1. Each communities have different interests on various developments base on the physical environment they reside on. The PPA builds up capacity knowledge for the community to understand their physical environment through the Mangrove guideline and decide to identify the best development business needed within their community.</p>
<p>Activity 1.3: Results of participatory progress assessment analyzed, evaluated, and implemented to further improve existing alternative livelihoods in terms of efficiency and productivity to reduce dependence on mangrove resources</p>	<ol style="list-style-type: none"> 1. The assessed Data is analysed based on the different villages and gender groups, their experience, current situations facing, actual needs, and solutions. The solution is based on the interest of the communities in the best alternative livelihood they choose. 	<ol style="list-style-type: none"> 1. While analysing the data, it was also understood that the interest of the communities must adhere to the process and procedures required by the responsible ministry for development. 	<ol style="list-style-type: none"> 1. The selection of sites on development to be conducted was recommended to the communities. 2...Responsible government ministries advise on the process and procedures required to the physical environment required to develop.
<p>Activity 1.4.: Identification of other viable alternative livelihood options for women groups to reduce community pressure and dependence on mangrove resources.</p>	<ol style="list-style-type: none"> 1. The best alternative livelihood is finalised through the interest of the people with socioeconomic survey coordinated by ITTO and key stakeholders. 	<ol style="list-style-type: none"> 1. Confirmation of development is decided between the communities and key stakeholders concerning the process and procedures required by the government ministry and the project document. 	<ol style="list-style-type: none"> 1. Location of development is confirmed through traditional protocol among the land owning unit for approval to be develop under the project requirements, which is decided through Village meetings and Clan meetings.

4.4 Output 2:

Degraded coastal and mangrove wetlands rehabilitated to mitigate climate change through increased carbon sequestration

The second output of the phase two ITTO project covered four major activities that mainly focused on the initiative to mitigate climate change through enhanced carbon sequestration. This was achieved through a multi-faceted approach encompassing community capacity building of two days training on infrastructure development, active restoration, and post-restoration monitoring. Key activities include training local communities in sustainable collection and nursery techniques for indigenous mangrove species, Fruit trees, and fuel wood (Activity 2.1), followed by the construction of dedicated mangrove nurseries and the potting of seedlings (Activity 2.2) for the six villages. The core restoration effort involves field planting of these nurtured mangroves including native species, fuel wood and fruit trees in identified degraded areas to enhance coastal stabilization and mitigate flooding (Activity 2.3). Finally, a robust monitoring program was implemented through our extension team from the ministry to ensure the long-term survival of the planted mangroves and the success of the overall restoration efforts (Activity 2.4).

Activity	Tangible Outputs	Sectoral policies & Program	Physical Environment
Activity 2.1: Community training on the collection of quality seedlings for indigenous mangrove species and nursery techniques for raising native mangrove species	<ol style="list-style-type: none">1. 86 Participants attended two days of training with registration, particularly from the six ITTO villages are Natila, Naivakacau, Nasilai Narocake, Waicoka, and Muanaira.2. Participants were selected based on gender equality. The majority are mostly elderly women and men.3. Each participant was given new printed mangrove guidelines with the training exercise books and stationery. The manual guideline is the handbook of this activity.4. Presentation was done through Multimedia screen in the Iaukei language for participants to understand.	<ol style="list-style-type: none">1. The training is also aligned with the Mangrove guideline component on page 7 "Guide to restore Healthy Mangrove"2. The development construction of Nurseries for the six village follows all process of nursery requirements to the ministry to purchase and construct with the recommendation that the participants are trained well as part of the Ministry of Forestry requirements and the project document.3. The training was conducted in accordance to the research Division manual on nursery establishment and seedling	<ol style="list-style-type: none">1. Communities also learned to select a site to construct nursery in accordance to the Manual requirements of Nursery establishment such as water source availability, Sunlight access, Soil and sand availability etc.2. The selection of quality seeds to produce the best seedlings was determined to choose the best healthy trees available near the training area as a practical representative of choosing quality seeds by learning all the tree characteristics, growing capacity and health state.

	<p>5. The Participants took the practical knowledge and skills necessary for identifying, collecting, and handling high-quality mangrove propagules/seedlings, as well as establishing and maintaining mangrove nurseries.</p> <p>6. This training also involved the construction of Nursery and materials required and plan set for each six villages.</p> <p>7. Also involved the method of potting and raising of different types of seedlings and the maintenance strategies required which will be determined through survival count.</p> <p>5. A media report was also submitted through Facebook page for the Ministry of Forestry, and also shared with the Ministry's Viber updates pages.</p>	collection materials process and procedures.	
Activity 2.2: Construction of mangrove nursery and potting of mangrove seedlings.	<p>1. The Ministry extension team were assigned to camp around all the six village and with support from the communities to construct Temporary nursery base on budget for Mangrove and other native species including fuel wood.</p> <p>2. Nursery size of 8 x 6 meters which can consumed 1000 seedlings of mangrove and other Native, fruit trees</p>	<p>1. The construct of the six nurseries for the six village follows the process under the ministry of Forests in purchasing all required nursery materials recommended by the research team with all construction structures.</p> <p>2. The selection of nursery attendant was not covered through the project implementation due to the</p>	<p>1. The selection of nursery establishment site and construction was under the 60%approval from members of village clan and traditional protocol was followed accordingly.</p> <p>2. Site selection of the construction was being recommended by the Ministry in accordance to the availability of water source, Soil and sand for</p>

	<p>and fuel wood seedlings for 8cm x 10cm pot bag size.</p> <p>3. The Nursery is based on the Size of area available given by the community, Water source and the budget provided with its materials, and how the members of the community groups can manage it.</p> <p>4. The structures are pine posts and treated timbers with affordable sizes covered with greenhouse (Sylon Shade Cloth) and raised beds using wire mesh materials.</p>	<p>time limit and the unavailability of community involvement for there were more village commitments during the period. However, the Ministry has involved itself in supplying seedlings such as fuel wood, Native species, and fruit trees, maintaining the sustainability of the project implementation.</p> <p>3. The six Communities were slowly involved in raising fruit trees and mangrove, and were supplied with 5000 pot bags for each village and registered to the ministry RDF project to raise seedlings and to be purchased by the ministry for them to supply in the next financial year 2025-2026.</p>	<p>potting and how can it be managed and maintained. Also the protection from pests and animals, village disputes and Low flood risk.</p> <p>3. The camping of extension Forestry officers involved traditional protocols to be accepted by the communities with the presentation of Sevusevu and food raisins for a three-week camp.</p>
<p>Activity 2.3: Field mangrove planting to restore identified degraded areas for coastal stabilization and moderate coastal flooding.</p>	<p>1. Collaborative efforts between Ministry extension teams and six village communities have resulted in the planting of 15 hectares. Ministry-supplied native trees, firewood, fruit trees, and mangroves were established across the sites, complementing the communities' increasing capacity to raise their seedlings.</p> <p>2. Due to the unavailability of Land within the ITTO project sites, The Project involved its contribution to</p>	<p>1. The Ministry of Forestry under the Reforestation Degraded Forest Project, collaborates with the ITTO and local communities. They are responsible for promoting forest health, including mangrove forests, for their ecological and economic benefits. Their work includes establishing nurseries and conducting field planting.</p> <p>2. Fiji National Climate Change Policy (NCCP): This is a cornerstone policy in Fiji's response to climate</p>	<p>1. The selection of planting sites was initiated by clan members who, through established traditional protocol, provided their consent for the activity to proceed.</p> <p>2. Site selection is based on type of soil and the seedling required for that particular site. The climatic condition that suit the growth of plants. Mangrove planting focused on area where mangroves are adaptable to grow and are planted near the grown regeneration to</p>

	<p>the transportation of staff and seedlings from the new vehicle to support the Ministry's planting operation plans. Including important functions such as the International Day of Forest held at Naivucini village.</p>	<p>change. Mangrove planting is a prime example of a Nature-Based Solution (NBS) for climate change adaptation. The NCCP specifically mandates and promotes such interventions for coastal protection against sea-level rise, storm surges, and coastal erosion, all of which mangrove restoration addresses. It often includes strategies for "hybrid seawalls" that combine built and natural solutions, with mangroves as the first line of defence.</p> <p>3.Fiji National Adaptation Plan (NAP):The NAP is the operationalization of the NCCP, outlining prioritized adaptation needs across various sectors. Mangrove restoration directly addresses these needs by enhancing coastal resilience, protecting communities, and safeguarding livelihoods. It's a key adaptation measure.</p> <p>4.Fiji Green Growth Framework:</p>	<p>recover and boost its growth rate.</p> <p>3. Fuel wood selection was Albizia saman. The wood has a good calorific value, typically reported in the range of 5200-5600 kcal/kg. This indicates it produces a significant amount of heat when burned, comparable to good quality firewood. The Burning Characteristics considered a good quality fuel and can also be made into charcoal. It burns relatively slowly and provides a lasting heat. However, it's known to have a high initial water content (sometimes over 100% of its dry weight), meaning it must be seasoned very well to burn efficiently and cleanly. If not properly dried, it will produce a lot of smoke. Some sources even suggest it may need assistance from faster-burning wood to get going if not thoroughly seasoned. The species takes 5-6 years, and it is a quick-adapting species that grows quickly in the area.</p> <p>4. It is expected that Albizia Samon is to hold the weight of fuel wood demand for communities on mangrove removal.</p>
Activity 2.4: Monitoring of restored areas to ensure the survival of planted mangrove	1. The ministry staff extension team conducts a survival count for the	1. The Ministry of Forestry has mandates for sustainable forest	1. The Monitoring of the restored area guarantees the impact of the physical

seedlings and fast-growing fuel wood trees.	planted area and has resulting in an 80% of Native, fuel wood, and Fruit trees. 2.90% recovery for Mangrove plantation.	management, which include both native forests and planted areas for fuel wood. Their "Forest Monitoring, Control and Surveillance (MCS)" systems and internal M&E frameworks would include tracking the survival and growth of planted trees, whether for timber or fuel wood. This is linked into Sustainable Development Goal 15 "Life on Land".	environment on the species ' survival rates. The results indicate the adaptation level of the species towards the environment and the improvement capacity of its growth. Also, the maintenance rate from the communities explains their commitment to ensuring the planted areas are well-maintained all the time.
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4.5 Output 3:

Empowering women to adopt a suite of viable alternative livelihood options, reducing over dependence on coastal and mangrove wetland resources for sustenance and life support.

The Output three has four major activities, and the outcome of this completed output is a significant step towards enhanced community resilience and sustainable resource management. By empowering women with diverse and viable alternative livelihood options, the project has demonstrably reduced their reliance on vulnerable coastal and mangrove wetland resources. This not only directly contributes to the conservation of critical ecosystems but also fosters economic independence and improved well-being for women and their communities. The success of this output lays the groundwork for long-term ecological balance and sustainable development in the region. Alternative livelihood development was discussed and with feasibility studies with the local communities of six villages to confirm the best development to conduct trainings that required their interest as per the Project document.

Activity	Tangible Outputs	Sectoral policies & Program	Physical Environment
Activity 3.1: Community training on the use of improved cook stoves (ICS) and home biogas digesters to reduce GHG emissions.	1. The development begins with the training of 10-20 women's for each six villages depending on the amount of women who are full residing in the village. We conducted 3 days training half day for each six	1. The ITTO project outputs, particularly those focused on alternative livelihoods, improved cook stoves, biogas digesters, and mangrove conservation/rehabilitation, demonstrate strong linkages	1The selection Biogas system site was ensured to be on a flat area, raised and well fenced. It must be approximately 6-10 meters from the kitchen where the cook stove is to be located. The benefit of the system is

	<p>village through the support from the Biogas and cook stove product supplier is Eco Grow company. The training focused on the introduction of a Biogas system, including material requirements and cook stove connection, Biogas site selection, installation of the Biogas system, and Cook stove flame test. The participants were provided with a manual guide to follow the steps and adhere to it during the project implementation.</p> <p>2. The purchasing of the two systems (Biogas & Cook stove) and the handing over of the product to the six village each per village.</p> <p>3. Preparation of Biogas materials, i.e. two 44 drums of waste pig dung materials.</p> <p>4. Preparation of the Biogas system site.</p> <p>5. Installation of Biogas on the selected site and water filling, waste materials, and sand packing.</p> <p>6. Pipe fittings to the Cook stove at a selected kitchen 5 meters from the System.</p> <p>7. Cook stove flame test.</p> <p>8. The HBG and ICS was opened by Director Trade Training and Nasinu.</p> <p>9. Media was sent to our media Officer and was advertised</p>	<p>with several key sectoral policies and programs in Fiji. This alignment ensures the project's sustainability and amplifies its impact by contributing to broader national development goals.</p> <p>2. Fiji's National Energy Policy 2023-2034 (NEP) emphasizes energy efficiency, access, and sustainability. The project's promotion of ICS and HBD directly supports these objectives by reducing reliance on traditional biomass (firewood) and imported fossil fuels (like kerosene for cooking), thereby increasing energy efficiency and promoting cleaner energy sources, particularly in rural areas.</p> <p>3. The NEP aims to "decarbonize" Fiji's energy sector and align with the country's international climate change goals. ICS and HBD directly help reduce Greenhouse Gas (GHG) emissions from biomass combustion and methane from organic waste, aligning with Fiji's Nationally Determined Contributions (NDCs) under the UNFCCC Paris Agreement.</p> <p>4. Mangroves are explicitly recognized in Fiji's policy and legislative frameworks for their environmental protection role. They are</p>	<p>that it produces methane gas through waste materials to cook food through a stove and Source to produce manure for the new village new nursery.</p> <p>2. This activity reduced Biomass Consumption: ICS are more fuel-efficient, meaning less firewood is needed for cooking. HBDs use organic waste (like animal manure or food scraps) to produce biogas, further reducing the demand for wood fuel. This directly alleviates pressure on both mangrove and terrestrial forests.</p> <p>3. Lower Greenhouse Gas (GHG) Emissions: Reduced CO2 from Deforestation: Less wood burning means less CO2 released from the combustion of biomass that would otherwise contribute to deforestation.</p> <p>4. Reduced Methane (CH4) Emissions: Biogas digesters capture methane, a potent GHG that would otherwise be released into the atmosphere from decomposing organic waste in landfills or open pits. Burning methane for cooking converts it to CO2 (a less potent GHG) and water, offering a significant climate benefit.</p> <p>5. Reduced Black Carbon (Soot): ICS often produces less black carbon (soot)</p>
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		<p>vital for coastal protection against climate change impacts (sea-level rise, storm surges) and as carbon sinks.</p> <p>The ITTO project itself has been instrumental in supporting the Fijian Government's efforts to increase tree cover and reverse mangrove degradation, directly aligning with national goals to plant 30 million trees in 15 years and develop "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji."</p> <p>5. Mangrove conservation and rehabilitation: Fiji is also engaged in Blue Carbon assessments to improve the conservation and management of seagrass and mangroves, which directly supports national reporting and policy decision-making related to climate change and biodiversity. This project contributes valuable on-the-ground experience and data to these national efforts.</p> <p>6. Gender and Social Development Policies: Empowering Women with Alternative Livelihoods: Many national development plans and policies, including in Fiji, have a strong focus on gender equity and women's empowerment.</p>	<p>compared to traditional open fires, leading to improved local air quality and reduced deposition of black carbon on glaciers and snow, which accelerates melting.</p> <p>6. Improved Indoor Air Quality: While primarily a human health benefit, reducing indoor smoke and particulate matter also means less pollution is vented to the immediate outdoor environment around homes.</p>
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		The Ministry of Women in Fiji has a history of partnering on initiatives like "Cooking for Life" that aim to improve the lives of women, especially in rural areas, through energy-efficient solutions.	
Activity 3.2: Planting fast-growing fuel wood trees to reduce pressure on mangroves as an alternative source of wood fuel.	<p>1. The team extension camped at the six villages to plant fuel wood with a total of 15 hectares, combined with Native, Fruit trees, and mangrove. The planting of fuel wood is purpose to reduce mangrove fuel wood extraction in the future for the six communities. The fuel wood-focused species is Albizia saman adapted well to the climatic conditions at the Rewa and Tailevu delta, with 80% survival rate</p> <p>2. Due to the unavailability of Land within the six villages' site, the ITTO project contributes for the ministry's planting operational plan during the financial year through transportation of seedlings and staff using the new ITTO vehicle, and also supports the International Day of Forest planting program.</p>	<p>1. Under the National Forest Policy, the activity supports Sustainable Forest management program, Afforestation and reforestation of degraded land, Community engagement and empowerment, and Diversification of Forest products.</p> <p>2. National Energy Policy (NEP): Diversifying Energy Sources: Fiji's National Energy Policy (NEP) 2023-2030 aims to diversify energy sources and reduce reliance on imported fossil fuels. While not a direct alternative to fossil fuels, sustainable fuel wood production (especially when coupled with efficient cook stoves) provides a renewable, locally sourced energy option, contributing to energy security, particularly for rural communities.</p> <p>Reducing Greenhouse Gas (GHG) Emissions: The NEP has clear targets for reducing GHG emissions and achieving net-zero</p>	<p>1. The contribution to the physical environment under this activity is listed as follows, especially for these climatically affected vulnerable areas:</p> <ul style="list-style-type: none"> -Reduced Pressure on Natural Forests and Mangroves: -Coastal Protection and Resilience -Carbon Sequestration (Blue Carbon and Terrestrial Carbon) -Biodiversity Conservation -Soil Health and Water Quality

		emissions by 2050. By providing an alternative to unsustainably harvested wood (which can lead to deforestation and associated carbon emissions) and by supporting a more efficient use of biomass, this activity indirectly contributes to the reduction of GHG emissions from the energy sector and land-use change.	
Activity 3.3: Conduct a feasibility study to select the most viable alternative livelihood options, such as contemporary jewelry made from local resources, fabric painting, caregiving, and women's cooperatives.(Entrepreneurship skills)	<p>1. The activity was based on the project document component to conduct feasibility studies on the three important developments as part of the alternative livelihood for the community. The following steps were followed accordingly to ensure the development area is well implemented.</p> <p><u>Caregiver-</u></p> <p>-We took an Assessment of gender and age group for each community and identified the need for caregiver training. The majority were interested, especially young female teenagers in the age group of 25-35, including one male.</p> <p>-An available source of training is recognised under the Fiji National University with \$390 per participant, which guarantees the opportunity to work abroad</p>	<p>The activity linked policies and programs in the Fiji government ministries, aligning with the following lists:</p> <p>-National Development Plan (NDP) and Vision 2050:</p> <p>-Poverty Alleviation and Social Well-being:</p> <p>-Ministry of Women, Children, and Poverty Alleviation Policies:</p> <p>-Ministry of Trade, Cooperatives, Micro, Small and Medium Enterprises (MSME) Policies and Programs:</p> <p>-Tourism Sector Policies (for crafts):</p> <p>-Social Welfare and Health Policies (for caregiving):</p>	<p>Conducting this activity enables us to understand the following points:</p> <p>1.Reducing Pressure on Vulnerable Ecosystems (Primary Link):</p> <p>The overarching goal of identifying "alternative livelihood options" is to reduce over-dependence on coastal and mangrove wetland resources for sustenance and life support. By successfully identifying and recommending viable alternatives (e.g., jewelry, fabric painting, caregiving), the feasibility study paves the way for Activity 3.4 (training and implementation). When these alternative livelihoods are adopted, community members will have other means of income and sustenance, lessening their need to exploit sensitive natural resources like mangroves, coral reefs, and coastal fisheries.</p>

	<p>through the National Employment Centre.</p> <p>-20 participants showed their interest after this survey.</p> <p><u>Fabric Painting:</u></p> <p>-We took an Assessment of gender and age group for each community and identified the need interest to Fabric painting training. The interested majority were, especially adults at the age group of 35-40s women and two men.</p> <p>-We also captured available source to train the communities is the Pacific women Empowerment Program company which have been conducting training around Fiji not only on Fabric printing but also weaving and Jewellery making and Tailoring. The training calculated the amount to \$9715.00 for one week training program.</p> <p>-60 Participants interested to this training development.</p> <p><u>Cooperative:</u></p> <p>-I conducted a feasibility study to identify community source of income and mostly needed at times. Majority of people have more challenges to arrive from their farms and pay more expenses to visit town supermarket to buy groceries.</p>		<p>This directly contributes to mitigating environmental degradation caused by unsustainable harvesting of wood (for fuel or construction), overfishing, and other destructive practices that harm the physical environment of coastal and marine ecosystems.</p> <p>2.Promoting Sustainable Resource Use:</p> <p>The "feasibility" aspect of the study for options like "contemporary jewellery made from local resources" would inherently consider the sustainability of resource extraction. For example, it would assess whether the local resources for jewellery can be harvested without depleting populations or causing habitat damage (e.g., using sustainably collected shells, seeds, or waste materials rather than rare coral or protected wood).</p> <p>The study would likely guide towards environmentally benign or low-impact livelihoods, such as caregiving (a service-based activity with minimal direct environmental footprint) or fabric painting (which, if using eco-friendly dyes and responsible waste disposal, has relatively low environmental impact).</p>
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	<p>-The age group at the villages and efforts to make a business require a safe business that does not tire the body, as the majority of their source of livelihood is fishing. At the end of the day, people are tired at the age of 40s and above.</p> <p>-Cooperative store is the best option, especially for women's groups who are the most tired people in the village.</p> <p>-We visited the Ministry of Cooperatives and volunteered to conduct awareness for embellishment of a cooperative store.</p> <p>100% of the whole community in the six villages is interested in this development and has agreed to give their share for the business.</p>		<p>3.Enhancing Ecosystem Health and Resilience:</p> <p>By diverting human pressure away from over-exploiting mangroves and other coastal resources, the physical environment benefits from reduced deforestation, less erosion, healthier marine habitats, and improved water quality. Healthy mangroves, for instance, are critical for coastal protection against storms, erosion, and sea-level rise. By ensuring their preservation through reduced reliance, the study indirectly supports the physical resilience of coastal areas.</p> <p>The preservation of these ecosystems also ensures their continued function as carbon sinks (especially "blue carbon" in mangroves), which directly contributes to climate change mitigation.</p>
<p>Activity 3.4: Implement training programs to assist women in acquiring knowledge and technical skills related to the selected alternative livelihood options in Activity 3.</p>	<p>1, The training was conducted on the following development as part of an alternative livelihood source for the six villages to minimise pressure on the mangrove forest.</p> <p>-<u>Caregive</u>-20 participants have certificate from the Fiji National University for two weeks training and two</p>	<p>1. The activity is linked to the following sectoral policies and program with aligning Ministries.</p> <p>-. Women's Empowerment and Gender Equality</p> <p>-Technical and Vocational Education and Training (TVET) and Skills Development:</p>	<p><u>Caregiver</u></p> <p>The opportunity for this training is not only for creating Job opportunities, It also support Human characteristics knowledge for old people at the village especially during disasters or any disease outbreak.</p> <p><u>Fabric Painting/Jewellery maiking/Tailoring:</u></p>

	<p>weeks practical from Ministry of Health. The handing over was conducted by his excellency the ambassador of Japan Mr. Rokuichiro Michii at the commissioner Central Office. Some are Currently engaging to apply for the National Employment Centre for Overseas employment.</p> <p>-<u>Fabric Painting</u>-The Women Empowerment company program conducted one week training for 60 womens on Fabric Painting, Jewellery making, Weaving and Tailoring.</p> <p>-All women were given a certificate that guaranteed them to apply loan to the Ministry of Trade to start their own business at the village.</p> <p>-<u>Cooperative:</u> 120 participants trained and earned a certificate under the Ministry of Trade on cooperative management. Each village fill Cooperative registration form and submits to the Ministry of Trade, Cooperatives, and Small Business Enterprise. The Form is currently processing while all cooperative materials have been purchased on the following list:</p> <p>-Cooperative housing materials</p>	<p>Ministry of Education, Heritage and Arts (MEHA) / Fiji National University (FNU) - National Training & Productivity Centre (NTPC):</p> <p>-Micro, Small and Medium Enterprises (MSMEs) Development</p> <p>-Rural and Maritime Development:</p> <p>Ministry of Rural and Maritime Development and Disaster Management: This ministry works to improve livelihoods in rural areas.</p> <p>-Youth Development and Entrepreneurship:</p> <p>-Ministry of Women, Children and Poverty Alleviation / Ministry of Health and Medical Services:</p>	<p>This training open business strategy plan for communities to focused on their own creativity instead of buying. The communities have been supplied by sewing machine on phase one which this an opportunity to build their own tailoring store at the village.</p> <p><u>Cooperative Store:</u></p> <p>The Cooperative business is designed to build an SOP under the cooperative bylaws aligning with Cooperative 1996 for the members to manage the business store and other development that was established by ITTO from phase one and two. The board and its member will ensure that the business is manage sustainably without any failure.</p>
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	<ul style="list-style-type: none"> -Cooperative store food stuffs -Freezer -Scale -Electrical extension cords and power surge. -Cooperative store stationery. -The establishment of Cooperative bylaws and Standard Operating Procedures for the community to align all the development and store business under the Cooperative Act 1996, ensuring that the business is monitored by the Ministry of Trade, Cooperatives and Small Business Enterprise a Monthly basis and quarterly. 		
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4.6 Output 4:

Strengthen coordination of policy guidelines and framework to effectively address climate change and disaster risks at the national and subnational levels

Output four has four major activities. On the pre-project situation Before the project, there was a notable lack of coordinated policy guidelines and frameworks specifically designed to address the interconnected challenges of climate change and disaster risks. While some individual policies or initiatives might have existed, they often operated in silos, leading to fragmented efforts, inefficiencies, and limited impact at both national and subnational levels. Communities, particularly coastal ones, had limited formal training or established plans for natural disaster preparedness, risk management, and emergency response. Traditional knowledge and skills, though present, were often not systematically integrated into formal conservation or adaptation strategies. Furthermore, there was a generally low adoption of nature-based adaptation solutions at the local level due to a lack of awareness, training, and support. After the project completion, significant progress has been made in strengthening the coordination of policy guidelines and frameworks, resulting in enhanced community resilience and reduced vulnerability to natural hazards. The project's activities have directly contributed to a more integrated

and effective approach to climate change and disaster risk management. In summary, at project completion, the output of strengthened policy coordination has been significantly achieved through these completed activities. The pre-project fragmented and unprepared landscape has transformed into a more cohesive and resilient environment where communities are better trained, equipped with action plans, and actively implementing both traditional and nature-based adaptation solutions

Activity	Tangible Outputs	Sectoral policies & Program	Physical Environment
Activity 4.1 Community training on natural disaster preparedness, disaster risk management, and emergency response to climate change-related disasters.	<p>1. 86 Participants attended two days of training with registration, particularly from the six ITTO villages are Natila, Naivakacau, Nasilai Narocake, Waicoka, and Muanaira.</p> <p>2. Participants were selected based on gender equality. The majority are mostly elderly women and men.</p> <p>3. Each participant was given a handbook copy of the disaster action plan through the provincial administrator from the commissioner's offices under the Ministry of Rural and Maritime Development and Disaster Management.</p> <p>4. Presentation was done through a Multimedia screen in the Iaukei language for participants to understand the purpose of the training.</p> <p>5. The Participants took the practical knowledge and skills necessary to design a village disaster action plan for their communities..</p> <p>6. This training also involved participants from each</p>	<p>1. Activity 4.1, "Community training on natural disaster preparedness, disaster risk management, and emergency response to climate change-related disasters," is directly and strongly linked to several key sectoral policies and programs in Fiji. These linkages ensure that the training is relevant, supported, and contributes to broader national goals for resilience.</p> <p>2. The National Adaptation Plan (NAP):</p> <p>* <u>Overarching Framework:</u> Fiji's NAP is a comprehensive strategic plan for climate change adaptation. It identifies priorities and actions across various sectors. Community training on preparedness and response is an integral part of enabling these broader adaptation measures to be effective at the local level.</p> <p>* <u>Community Engagement:</u> The NAP emphasizes multi-stakeholder engagement,</p>	<p>This activity has been completed, leading to a substantial increase in community capacity. Compared to the pre-project situation where communities had little to no formal training, a significant number of individuals across targeted communities have now received comprehensive training. This has resulted in a heightened awareness of disaster risks, improved understanding of early warning systems, and enhanced practical skills for emergency response, including evacuation procedures, first aid, and basic search and rescue. This training has empowered communities to respond more effectively and safely during climate-related disaster events.</p>

	<p>village to prepare a quotation material plan for their village Hall maintenance to be upgraded to Evacuation centers, and also for Natila village on foot path materials.</p> <p>75. A media report was also submitted through Facebook page for the Ministry of Forestry, and also shared with the Ministry's Viber updates pages.</p>	<p>including strong participation from communities. Providing training ensures that communities are well-informed and equipped to participate meaningfully in adaptation planning and implementation processes articulated by the NAP.</p> <p>* <u>Vulnerability Reduction</u>: The NAP is designed to address vulnerabilities identified by the Climate Vulnerability Assessment. Improving community preparedness and response capabilities directly reduces these vulnerabilities.</p>	
<p>Activity 4.2: A Community Disaster Action Plan is established through relevant Government Agencies and NGOs to safeguard the lives of coastal communities.</p>	<p>1, After the training, Disaster action plan was designed for each village based from the training outcomes and was shared among each village to be part of their village strategy plan for disaster preparation. The Commissioner office with provincial administrators were part of support to the establishment of Village disaster action Plan.</p>	<p>1. Activity 4.2, the establishment of a Community Disaster Action Plan (CDAP) through relevant Government Agencies and NGOs to safeguard coastal communities, is fundamentally linked to several key sectoral policies and programs in Fiji. These linkages are critical for ensuring the plans are consistent with national priorities, receive necessary support, and can be effectively implemented.</p> <p>2. National Disaster Risk Reduction Policy (NDRRP) 2018-2030:</p> <p>* <u>Core Principle</u>: The NDRRP explicitly emphasizes a shift from reactive disaster response to proactive</p>	<p>This activity has been fully realized, marking a critical step forward in safeguarding vulnerable coastal communities. In contrast to the pre-project scenario where such plans were largely absent or uncoordinated, the project has facilitated the collaborative development and establishment of localized Community Disaster Action Plans. These plans, developed in partnership with relevant Government Agencies and NGOs, outline specific roles, responsibilities, and procedures for disaster preparedness, response, and recovery, tailored to the unique vulnerabilities of coastal areas. This</p>

		<p>disaster risk reduction (DRR). It prioritizes community-based disaster risk management (CBDRM), recognizing that local-level planning and action are essential for effective DRR.</p> <p>* <u>Decentralization</u>: The policy advocates for strengthening risk governance at all levels, including local authorities and communities. The establishment of CDAPs directly supports this decentralization by formalizing community roles and responsibilities in DRR.</p> <p>* <u>Vulnerability Reduction</u>: A primary objective of the NDRRP is to reduce the vulnerability of communities and assets to hazards. CDAPs, by identifying risks, capacities, and actions, are direct mechanisms for achieving this vulnerability reduction, particularly for highly exposed coastal communities.</p>	<p>formalized planning significantly enhances the ability of these communities to protect lives and assets.</p>
<p>Activity 4.3: Training on ecosystem-based adaptation relating to forestry, water, and agriculture by integrating traditional knowledge and skills on the conservation and sustainable use of natural resources to increase resilience and reduce vulnerability to natural hazards.</p>	<p>The two-day training was conducted by the Ministry of Agriculture for 86 participants, focusing on gender equality and methods of agricultural practice in conjunction with traditional methods to produce high-quality products on small pieces of land. The following methods were learned during the training were as follows:</p>	<p>1. <u>Policy Mandate</u>: The National Climate Change Policy (2018-2030) further anchors Fiji's climate change response within national policy and planning processes, creating the mandate for the NAP and promoting "ecosystem-based" and "gender and human rights-based" approaches to adaptation.</p>	<p>This activity has been successfully implemented, demonstrating a shift towards more holistic and culturally sensitive adaptation strategies. Unlike the pre-project situation where traditional knowledge was often overlooked in formal adaptation efforts, the project has effectively integrated indigenous</p>

	<p><u>-1. Diversified Cropping Systems (Multi-cropping/Intercropping):</u></p> <p>* <u>Concept:</u> Instead of monoculture (growing a single crop), communities learn to plant multiple crops together or sequentially. This includes traditional practices of multi-cropping in the same plot.</p> <p>* <u>Benefits:</u> Increased biodiversity on the farm reduces the risk of total crop failure due to pests, diseases, or extreme weather events affecting a single crop. Different crops have different needs and resilience, ensuring a more stable food supply. It also helps with soil health and pest control.</p> <p><u>2. Climate-Resilient Crop Selection and Seed Saving:</u></p> <p>* <u>Concept:</u> Identifying and cultivating traditional or locally adapted crop varieties that are inherently more resistant to specific climate stressors such as drought, floods, strong winds, or increased salinity (especially relevant for coastal communities). This often involves practices of saving seeds from resilient plants for future planting.</p> <p>* <u>Benefits:</u> Ensures that crops can survive and produce even under adverse conditions, reducing the</p>	<p>* <u>Traditional Knowledge Integration:</u> Both the NAP and the Climate Change Act 2021 (which operationalizes aspects of the NCCP) recognize and promote the integration of traditional knowledge of all Fijians relating to climate change adaptation. Activity 4.3 directly contributes to this policy objective by actively incorporating traditional knowledge into adaptation training.</p> <p><u>2. Sustainable Agriculture Initiatives:</u> The Ministry's programs often promote sustainable agricultural practices. EbA approaches learned reinforce these, contributing to soil health, water conservation, and reduced reliance on external inputs, which are key aspects of sustainable agriculture policies.</p> <p>* <u>Specific Projects:</u> There are projects like the "Fiji Rewa River Catchment Adaptation Programme" and "Strengthening the Adaptive Capacity of Coastal Communities in Fiji to Climate Change through Nature-Based Seawalls" (executed by the Ministry of Agriculture and Waterways), which explicitly incorporate nature-based solutions (a broader term for EbA) for climate proofing infrastructure and</p>	<p>practices and skills with modern ecosystem-based adaptation techniques. Communities have received training on how to leverage natural ecosystems (forests, water bodies, agricultural lands) for disaster risk reduction, such as through watershed management, agroforestry, and coastal protection measures. This integration has not only enhanced resilience to natural hazards but also promoted the sustainable use of natural resources, fostering long-term environmental and social benefits.</p>
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	<p>impact of climate change on food security.</p> <p>3. <u>Sustainable Soil Management:</u></p> <p>* <u>Concept:</u> Practices that maintain and improve soil health, fertility, and structure, which in turn enhances water retention and reduces erosion, particularly during heavy rains or droughts. This includes:</p> <p>* <u>No-till or minimum tillage:</u> Disturbing the soil as little as possible to maintain its structure and organic matter.</p> <p>* <u>Organic matter addition:</u> Using compost, manure, and green manures to enrich the soil.</p> <p>* <u>Crop rotation:</u> Changing the types of crops grown in a field over time to improve soil fertility and break pest/disease cycles.</p> <p>* <u>Terracing and contour farming:</u> Especially in hilly areas, these techniques reduce water runoff and soil erosion.</p> <p>* <u>Benefits:</u> Healthy soil acts as a natural buffer, absorbing excess water during floods and retaining moisture during droughts, directly increasing agricultural resilience.</p> <p>4. <u>Water Conservation and Management:</u></p>	<p>enhancing livelihoods. Training in Activity 4.3 directly supports the community-level implementation of such project components.</p> <p>3. The Ministry of Forestry's mission is to drive sustainable resource management and economic growth while balancing utilization and conservation. Activity 4.3, particularly training on agroforestry and reforestation, directly contributes to these goals.</p> <p>4. Fiji has various programs like REDD+ (Reducing Emissions from Deforestation and Forest Degradation) and Reforestation of Degraded Forests (RDF) programs. The training in Activity 4.3 encourages practices that increase forest cover, improve forest health, and reduce deforestation, thereby supporting these national programs.</p> <p>* <u>Biodiversity Conservation:</u> The Fiji National Biodiversity Strategy and Action Plan (NBSAP) 2020-2025 also recognizes the importance of ecosystems for human well-being and seeks to integrate biodiversity conservation into climate change adaptation. EbA in forestry directly supports NBSAP objectives.</p>	
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	<p>* Concept: Techniques to optimize water use and manage water resources sustainably, often drawing on traditional methods. This could involve:</p> <ul style="list-style-type: none"> * Rainwater harvesting: Collecting and storing rainwater for irrigation during dry periods. * Traditional irrigation methods: Using efficient, locally appropriate irrigation techniques. * Mulching: Covering the soil with organic material to reduce evaporation and retain soil moisture. * Benefits: Reduces reliance on external water sources, making farming more resilient to changing rainfall patterns and water scarcity. <p><u>5. Agroforestry Systems:</u></p> <ul style="list-style-type: none"> * Concept: Integrating trees and shrubs with crops and/or livestock on the same land. This often builds on traditional land use practices. * Benefits: Trees can provide shade for crops (reducing heat stress), act as windbreaks (protecting crops from strong winds), improve soil fertility through nitrogen fixation, and contribute to water retention. They can also provide additional food, timber, and non-timber forest products. 		
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	<p>6. <u>Traditional Pest and Disease Management:</u></p> <p>* Concept: Utilizing traditional knowledge of natural pest predators, resistant plant varieties, and cultural practices to manage pests and diseases without relying heavily on synthetic chemicals. This could involve using specific plant combinations or natural repellents.</p> <p>* Benefits: Reduces chemical inputs, promotes biodiversity, and makes the farming system more self-sufficient and environmentally friendly.</p> <p>7. <u>Seasonal Calendars and Environmental Observation:</u></p> <p>* Concept: Learning to interpret traditional ecological indicators (like plant flowering times, animal behaviour, lunar cycles, or specific weather patterns) to predict environmental changes, including impending hazards like cyclones or droughts. This allows for timely planting, harvesting, or protective measures.</p> <p>* Benefits: Enables farmers to make informed decisions about their agricultural activities, increasing their adaptive capacity and reducing vulnerability to climate variability.</p>		
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	<p>From the above practice, Village have practice home gardens and start to plants resistant plants practices that prevent pests and also practice crop rotation and agroforestry systems to improve soil fertility and rotate plant on same piece of lands sustainably getting the same production and quality every season of harvesting.</p>		
<p>Activity 4.4: Community training to assist local communities to adopt and implementing nature-based adaptation to build their resilience to the physical impacts of natural disasters.</p>	<p>1. The community were trained to improve their Village hall and upgrade to the evacuation centers level by producing Maintenance building materials and submit to ITTO team at CE for improvement including water tanks and foot path for Natila villages.</p> <p>2. Each village for the six ITTO sites have received all Building materials and start to improve their village and upgrade to evacuation centers for Disaster preventions.</p>	<p>1.The National Disaster Risk Reduction Policy (NDRRP) 2018-2030:</p> <p>* <u>Proactive DRR</u>: The NDRRP marks a shift from reactive disaster response to a proactive, risk-informed development paradigm. It explicitly highlights "Promoting ecosystem-based approaches" as one of the key strategies for strengthening disaster risk reduction.</p> <p>* <u>Community Preparedness</u>: The NDRRP emphasizes enhancing community preparedness and decentralizing disaster risk management to the community level. Activity 4.4 directly supports this by empowering communities with the knowledge and skills to implement NbA, which reduces their physical vulnerability to hazards like</p>	<p>This activity has been completed, resulting in a demonstrable increase in the adoption of nature-based solutions at the local level. Previously, communities had limited knowledge or practical experience with nature-based adaptation. Through this training, local communities are now actively identifying, planning, and implementing nature-based solutions such as mangrove restoration, coral reef protection, sustainable land management, and buffer zone creation. This practical application of nature-based approaches has directly contributed to building physical resilience against the impacts of natural disasters, such as storm surges, floods, and coastal</p>

		<p>storm surges, floods, and erosion, thereby aligning with the policy's goal of building economic, social, and environmental resilience.</p> <p>* Alignment with Sendai Framework: The NDRRP is aligned with the Sendai Framework for Disaster Risk Reduction, which promotes disaster risk reduction through various means, including strengthening environmental management and ecosystem services. NbA is a direct mechanism for achieving this.</p>	<p>erosion, Improving village Halls maintenance structure, reducing their vulnerability compared to the pre-project situation. to mitigate climate change and disaster risks.</p>
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4.7 How Target beneficiaries participate in the impact of the project and its benefits in the future.

The ITTO Project Phase 2, with its focus on "Community Based Restoration and Sustainable Management of Vulnerable Mangrove Forests through the empowerment of coastal communities and women," was designed with significant beneficiary participation at its core. The project's four outputs clearly illustrate how local communities and women were actively involved in implementation, and how the results directly impacted their lives and will continue to do so.

Overall Approach to Participation: The project adopted a **community-driven and gender-inclusive approach**. This means that target beneficiaries were not passive recipients but active agents in identifying needs, co-designing solutions, implementing activities, and contributing their traditional knowledge and skills. This participatory model ensures greater ownership, relevance, and sustainability of the project's outcomes.

Listed below is the breakdown of beneficiary participation and the utilization of project results across each output:

4.7.1 Output 1: Local communities are trained to adopt the Community-based Mangrove Management Guideline to strengthen the governance of mangroves, and women are empowered to participate in the decision-making process for the improvement of existing alternative livelihoods.

- **Beneficiary Participation in Implementation:**

- Training and Capacity Building: The Local community members, including traditional leaders, youth, and, significantly, women, directly participated in training workshops on the Community-based Mangrove Management Guideline. This wasn't just theoretical; it involved learning about mangrove ecology, the importance of sustainable management, and the practical application of the guideline in their local context.
- Guideline Development Input: While the guideline itself might have been drafted by experts, the community members likely provided crucial input during its development. They shared their traditional knowledge

about mangrove ecosystems, local uses, and management practices. This is to ensure that the guideline is culturally appropriate and practical.

- Decision-Making Forums: Women were specifically empowered to participate in local decision-making processes. This involved their active presence and voice in village meetings, natural resource committees, or specific mangrove management committees, contributing to decisions regarding the use and conservation of mangrove resources.
- Livelihood Identification: Women participated in discussions and assessments to identify and refine existing alternative livelihood options, articulating their needs, challenges, and preferences.

- **How Results Have Been/Will Be Used by Beneficiaries:**

- Improved Governance and Management: Communities now possess a formal, locally-owned framework (the Guideline) for managing their mangrove resources sustainably. This helps prevent over-exploitation, resolves local disputes over resource access, and ensures the long-term health of these vital ecosystems.
 - Empowered Voice: Women's enhanced participation in decision-making means their perspectives on resource use, conservation, and livelihood development are integrated, leading to more equitable and effective management strategies that consider the needs of the entire community.
 - Sustainable Livelihoods: By understanding the link between mangrove health and traditional livelihoods, communities can manage their resources to ensure sustainable access to products derived from mangroves (e.g., crabs, fish, firewood, traditional medicine) while exploring viable alternatives.
 - Increased Community Cohesion: Collaborative management often fosters stronger community bonds and a shared sense of responsibility for their natural heritage.
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4.7.2 Output 2.0: Degraded coastal and mangrove wetlands rehabilitated to mitigate climate change through increased carbon sequestration.

- **Beneficiary Participation in Implementation:**

- Site Selection and Assessment: The Local knowledge was crucial while identifying degraded areas suitable for rehabilitation. The Communities assist in assessing the extent of degradation and suitable species to replanting based on their traditional ecological knowledge.
- Nursery Establishment and Management: Beneficiaries, particularly women's groups, were actively involved in establishing and managing mangrove nurseries. This included collecting propagules (seeds), caring for seedlings, and preparing them for out-planting. This hands-on work provided valuable skills and a direct connection to the rehabilitation efforts.
- Replanting Activities: Community members, including men, women, and youth, directly participated in the physical replanting of mangrove seedlings in degraded coastal and wetland areas. This was often organized as a communal effort, fostering collective ownership.
- Monitoring and Maintenance: Communities were trained and engaged in monitoring the growth and survival rates of the newly planted mangroves, as well as undertaking ongoing maintenance (e.g., weeding, protecting from livestock).

- **How Results Have Been/Will Be Used by Beneficiaries:**

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- Enhanced Coastal Protection: Rehabilitated mangroves act as natural barriers, reducing coastal erosion, mitigating the impacts of storm surges and tsunamis, and protecting homes, infrastructure, and agricultural lands from sea-level rise and extreme weather events. This directly safeguards lives and property.
 - Restored Ecosystem Services: The return of healthy mangroves leads to the restoration of critical ecosystem services. This includes improved fish nurseries, increased crab and shellfish populations, and enhanced biodiversity, directly benefiting traditional fishing and crabbing livelihoods.
 - Improved Water Quality: Mangroves filter pollutants and trap sediments, contributing to cleaner coastal waters, which benefits both marine life and human health.
 - Climate Change Mitigation (Local Impact): While carbon sequestration is a global benefit, healthy local mangroves contribute to a healthier local environment that is more resilient to the impacts of climate change, such as ocean acidification and rising temperatures, which indirectly benefit coastal communities reliant on marine resources.
 - Sense of Achievement and Ownership: Direct involvement fosters a sense of pride and ownership over the rehabilitated areas, encouraging continued stewardship.
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4.7.3 Output 3.0: Empowering women to adopt a suite of viable alternative livelihood options, reducing over-dependence on coastal and mangrove wetland resources for sustenance and life support.

- **Beneficiary Participation in Implementation:**

- Needs Assessment and Identification: Women were central to identifying viable alternative livelihood options that were culturally appropriate, economically feasible, and aligned with their skills and interests. This would have involved community consultations, surveys, and focus group discussions led by women.
- Skills Training: Women directly participated in vocational and business training for selected alternative livelihoods. Examples might include sewing, handicrafts, Fabric painting, Tailoring, Jewellery making, and caregiving. Sustainable Cooperative business, Piggery farming maintenance, Biogas, etc. These trainings often included financial literacy components.
- Establishment of Enterprises: Women were actively involved in setting up and managing these new livelihood ventures, from planning and resource acquisition to production and marketing through cooperative business and also employment source like caregiver. The project also build up knowledge to the communities to raise mangrove on adaptable environment that grows quickly. Women group have added their traditional knowledge in establishing this new ideas.
- Mentorship and Networking: Participation in this output also involved connecting women with mentors, market linkages, and other women's groups to foster shared learning and collective action with support from the Ministry of Trade, Cooperative and small business enterprise and other reliable government agency source.

- **How Results Have Been/Will Be Used by Beneficiaries:**

- Diversified Income Streams: Women gain access to new and more stable income sources, reducing their economic vulnerability and improving household resilience, especially in the face of environmental shocks that impact traditional coastal livelihoods.
- Reduced Resource Pressure: By providing alternatives, the project indirectly reduces the pressure on over-exploited coastal and mangrove resources, contributing to their long-term sustainability (a direct link back to Output 1 and 2).

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- Enhanced Empowerment and Agency: Women's economic empowerment often translates to increased agency within households and communities, allowing them greater influence over financial decisions, access to education, and participation in broader community development.
 - Improved Food Security: Diversified livelihoods can lead to more stable household incomes, enabling better access to food and other necessities. Some alternative livelihoods, like Prawn farms, Piggery farms, growing of fruit crops like bread fruit and Fruit trees directly contribute to food security.
 - Skill Development and Entrepreneurship: Women acquire valuable vocational on caregiver knowledge, cooperative business that developed financial management skills and Biogas and quick stove experience, Fabric painting, Jewellery making and tailoring that can be applied to future entrepreneurial endeavours or employment opportunities.
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4.7.4 Output 4.0: Strengthen coordination of policy guidelines and framework to effectively address climate change and disaster risks at the national and subnational levels.

- **Beneficiary Participation in Implementation:**

- Consultation and Feedback: While this output is primarily focused on higher-level policy, beneficiary communities played a crucial role in providing grassroots perspectives, local realities, and traditional knowledge during consultations that informed the development or revision of policy guidelines and frameworks. Their experiences with past disasters and climate impacts provided essential data.
- Validation of Policies: Community representatives and local leaders participated in the training, validating the proposed policy guidelines, ensuring they are practical and relevant to local contexts.
- Demonstration of Best Practices: The successful community-level implementation of activities under Outputs 1, 2, and 3 served as concrete examples and "proof of concept" for the effectiveness of community-based approaches, providing evidence to support the integration of these approaches into national policies and how they can be applied to the local communities.

- **How Results Have Been/Will Be Used by Beneficiaries:**

- Enabling Environment: Strengthened policy guidelines and frameworks provide a more supportive and coherent enabling environment for community-led initiatives. This means that future community efforts in mangrove management, disaster preparedness, and alternative livelihoods are more likely to receive government recognition, technical assistance, and funding.
- Mainstreaming of Local Needs: Better policy coordination ensures that community-level needs and vulnerabilities, particularly those of coastal communities and women, are better integrated into national planning and budgeting for climate change and disaster risk reduction.
- Access to Resources: Improved policy frameworks can streamline processes for communities to access resources (e.g., climate finance, disaster relief (Commissioner Office), development grants (Cooperative)) from national and international sources.
- Legitimacy and Support: Having community-led initiatives underpinned by national policy provides them with greater legitimacy and ensures sustained support from various government agencies (e.g., Ministry of Forestry, Ministry of Rural and Maritime Development, NDMO, Ministry of Women, Climate Change Division). This reduces the risk of fragmented or short-lived interventions.

In essence, the ITTO Project Phase 2 exemplifies a truly participatory model. Beneficiaries were not just recipients of project benefits but active drivers of its implementation, ensuring that the project's results are directly relevant, owned, and sustainably utilized by them to enhance their resilience and well-being in the face of climate change and natural disasters.

4.8 Sustainability

4.8.1 Strengthened Local Governance and Capacity (Output 1): The training of local communities in Community-Based Mangrove Management Guidelines directly addresses the long-term governance and protection of mangrove ecosystems. This empowers communities to take ownership and manage these resources independently. The emphasis on women's empowerment in decision-making further strengthens this, as diverse perspectives often lead to more robust and sustainable solutions. This foundational capacity building is critical for ensuring the project's interventions continue beyond direct project involvement.

4.8.2 Restored Ecosystems and Enhanced Climate Resilience (Output 2.0): The rehabilitation of degraded coastal and mangrove wetlands provides a tangible, self-sustaining asset. Healthy mangrove ecosystems are naturally resilient and provide ongoing benefits (e.g., coastal protection, fisheries habitat, carbon sequestration) that do not require continuous external intervention once established. The increased carbon sequestration contributes to a broader environmental benefit, aligning with national and global climate change agendas.

4.8.3 Diversified and Sustainable Livelihoods (Output 3.0): By empowering women to adopt viable alternative livelihood options, the project directly tackles the root cause of over-reliance on vulnerable coastal and mangrove resources. This diversification reduces pressure on the natural environment and provides communities with economic resilience. These new livelihoods, once established and proven viable, are expected to continue independently, driven by economic incentives and community needs.

4.8.4 Integrated Policy and Coordination (Output 4.0): The strengthening of policy Mangrove guidelines and frameworks at national and subnational levels creates an enabling environment for the project's initiatives to be institutionalized and replicated. This ensures that the efforts are not isolated project activities but are integrated into broader governmental and regional strategies for climate change and disaster risk reduction. This institutionalization is crucial for long-term support and enforcement.

4.8.5 In essence, the project's sustainability hinges on a three-pronged approach:

- **Community Empowerment and Ownership:** Building local capacity and fostering a sense of ownership over resources through the Mangrove guideline to adhere to and adapt to a certain lifestyle that is secure and sustainable.
- **Ecosystem Restoration and Natural Resilience:** The introduction of fuel wood planting to replace mangrove fuel wood extraction for plans and improve ecosystem restoration. Afforestation and reforestation of Native species with fruit and crop plant species build a sustainable ecosystem, natural resources to hold the pressure of communities' demand on food security, and also prevent coastal erosion and improve biodiversity.
- **Institutional Integration and Policy Support:** To ensure the sustainability of alternative livelihood businesses developed through the ITTO project, a mangrove guideline was introduced to six communities. This guideline serves to help businesses align with relevant policies and legislation upheld by the responsible ministry, which is tasked with safeguarding mangrove ecosystems. This approach allows communities to integrate their traditional knowledge with existing policies, fostering long-term environmental and economic sustainability.

4.8.6 Formal Arrangements with Project Beneficiaries:

This arrangement plan will be discussed with the Ministry and communities (ITTO Project Beneficiaries) after the project completion. To ensure both implementation and continued operation/maintenance are sustained accordingly.

The following lists explain the agreement between the Ministry of Forestry and the local communities to ensure the Sustainability of the ITTO project in the future:

4.8.6.1 Memoranda of Understanding (MoUs) or Agreements: Formal agreements between the project implementing agency and

The local communities/beneficiary groups. These MoUs will outline the following:

- Roles and Responsibilities: The village Cooperative share group to ensure to designing different groups responsible for managing each business development established by the ITTO project, and each is to present during the Cooperative AGM meeting for its progress under the management of the Ministry of Trade, Cooperatives, and Small Business Enterprise a Monthly basis.
- Resource Sharing: Communities (women's group) to ensure they share all resources such as nursery tools, Biogas, Cooperative business, and ensure that everyone shares its benefits.
- Community Contributions: Management of development and business established by the ITTO project especially the cooperative store that combines all ITTO development established from Phase 1 and Phase 2 with all SOPs and Cooperative bylaws must ensure that the business sustains well.
- Conflict Resolution Mechanisms: Agreed-upon procedures for addressing any disputes or challenges that arise concerning the development site or business. Village heads, Mataqali and Village administrator plays certain role to solve issues.

4.8.7 Formation of Community-Based Organizations (CBOs)-Cooperative shareholders:

- Formal Registration/Recognition: The development at the six communities is under the registration of cooperative in recognition under the cooperative act 1996 from the Ministry of trade, Cooperative and small business enterprises.
- Bylaws or Constitutions: Standard Operational procedures and Cooperative bylaws is prepared under the Cooperative act 1996.
- Elected Leadership: Chairman, Board of directors, Cooperative committees. Supervisory committee, Cooperative shareholder members

5. ASSESMENT AND ANALYSIS

5.1 Analyses and comments on the Project rationale and the Project identification process emphasizing the (in)adequacy of stakeholder identification and stakeholder participation in the Project formulation process;

The project aims to create alternative livelihood sources for six communities while protecting mangrove ecosystems. The rationale links these two objectives, implying that sustainable livelihoods can reduce pressure on mangroves. However, the stakeholder identification process, while including "six communities" and "responsible ministry," appears to be somewhat limited in its explicit breadth (e.g., local NGOs, other government agencies, specific vulnerable groups). Similarly, stakeholder participation in the formulation process seems to lean more towards consultation on pre-defined guidelines rather than co-creation of solutions from the outset. This could impact the long-term ownership and sustainability of the project. The interest of the people at the community level must be completely 100% and to see that it does link with their daily output commitment to be confident in taking the project ownership with them.

5.2 Analyses and comments on the (in)adequacy of the results of the identification process, emphasizing the correct definition of problems to be tackled, the Project Objectives, the choice of the implementation strategy (refer to section 2), etc.

The success of Phase 2 hinges entirely on the quality of the initial planning, or "identification process." Suppose this early stage failed to accurately define the true problems, set clear and shared objectives, or develop truly inclusive strategies. In that case, all subsequent efforts – from establishing new livelihoods and protecting mangroves, to strengthening institutions and sharing knowledge – will be compromised, leading to outcomes that are less relevant, effective, sustainable, and ultimately, not truly embraced by those they aim to help.

5.3 Highlights and analyses the most critical differences between planned and actual Project implementation as presented in section 3, and suggests any measures and actions that could have avoided these variations.

From the actual ground implementation and the Project document, we have seen that some amendments were made during the project implementation compared to the project document. A few have been listed as follows:

- Project Timeline: The Timeline set in the project document can be affected by the Ministry's Government budget year, which runs from July to August. The project must be designed according to the Fiji Government's year in order to follow the process of the financial system in Fiji in order not to affect its implementation, especially on the release of funding at the appropriate time that is required.
- Traditional Knowledge Vs expertise: Some of decisions do not need expertise, but traditional knowledge from the actual communities is much valuable because it gives the resource owners a sense of responsibility and reliance to manage any project development confidently.
- Budget: The reality is on the actual interest of the communities towards the project. Sometimes we design the project to its purpose for the people's benefit but we do not see their interest in it, but only to gain what has been given without ensuring to sustain its purpose. In this manner budget must be managed to released more only when you see the feedback of the community interest and action effectively and coordination towards the project purpose.
- Staff interest vs project timeline: The length of the project timeline build an interest purpose for a project coordinator to show his/her interest toward the project. The less the timeline create no purpose of the position in relation to any employment opportunities. The ITTO project phase 2 was affected for its implementation when staff realised that project timeline was not guaranteed employment opportunities to sustain long. They have resigned for suddenly affecting the project implementation. In this manner, any project designed must guaranteed have five years contract to give an employment opportunities to the applicants.
- Assumption Vs reality: it is important to ensure that the project document must designed to meet the reality on the ground. When they don't meet, it can affect financial turmoils and can cause dispute and differences that may cause incompleteness and unsustainable project outcome.

5.4 Evaluates and comments on the (in)adequacy of time and Project Inputs (quality and quantity personnel and equipment, financial resources, knowledge and expertise) for Project formulation and implementation;

The best project implementation shows every details of the actual activities need to be conducted with every step and costs. Quality and Quantity only can be earned when information are completely 100% clear on every step of the project implementation. Sometimes implementation cannot be define its quality when the designed is mostly generalise and does not have the actual justification on the expected outcome required to be achieved.

5.6 Evaluates the anticipation and reality of external influences, assumptions and risks etc. and the effectiveness of mitigating measures;

Challenges: The primary hurdle for this project is effectively managing development initiatives introduced by ITTO within communities where the majority of residents are aged 45 and above. Younger people (teenagers and young adults) have either emigrated or relocated to urban centres like Suva and Nausori.

This demographic presents a critical need for the project's design: it must be tailored to the existing capacity and skill sets of the older village population. The goal is to ensure they can withstand the pressures of development and effectively manage their roles within these new systems without being overwhelmed. In short, the project needs to avoid "pushing" an urban system onto a community that isn't equipped for it, ensuring the older generation can truly benefit and participate.

Opportunities: Despite the demographic challenge, there's a significant opportunity for these communities. They have available resources that, if properly harnessed, can facilitate the introduction of "urban systems" into rural areas. This isn't about simply importing city life, but rather about progressing development into a sustainable business system. The ultimate aim is to improve the overall village life system by integrating modern practices and economic opportunities in a way that is accessible and beneficial to the current population and its environment.

External Influence: A key external factor that can positively impact the project is government policy. Specifically, anticipated improvements in environmental regulations and the emergence of new lifestyle trends driven by trade agreements and new market entrants can create a favourable environment. These external shifts could potentially:

- Improve the environmental sustainability of the development.
- Open up new economic avenues for the communities through expanded trade.
- Introduce demand for new products or services that align with evolving lifestyle trends, potentially benefiting village businesses.

In essence, government support through policy and broader market shifts can act as a tailwind, helping to integrate the rural communities into a more modern and prosperous system, provided the project is designed to match the community's capacity.

5.7 Evaluates, while referring to section 4 above, the participation of anticipated and actual Project beneficiaries in Project implementation and how they have and will be benefited from the Project; (refer also to the dissemination strategy in section 2.8 of the Project document).

Based on the provided strategy for the ITTO project Phase Two and assuming the implementation of the four outputs has been completed, the communities in the six villages of the Rewa Delta can anticipate a range of significant benefits in the future, stemming from the integrated sustainable management of mangrove forests and the project's participatory approach.

i. Enhanced Livelihoods and Economic Resilience-Diversified and Sustainable Income Streams:

Alternative Livelihood Options: The project will have provided necessary alternative livelihood equipment and skills (e.g., aquaculture, beekeeping, sewing, as seen in similar ITTO projects in Fiji) to enhance community ability to gain more income. This reduces over-reliance on traditional resource extraction and offers more resilient income sources.

Sustainable Use of Non-Wood Products: The baseline assessment of market demand and supply for non-wood products, coupled with improved harvesting and monitoring strategies, will lead to more efficient and profitable utilization of these resources, ensuring their long-term availability.

Value Addition: If the "urban systems into rural areas through development progressing into a business system" involved, for example, processing local produce or crafts, communities will benefit from increased value-added products and access to wider markets through cooperative business.

Reduced Fuel Wood Dependency: The emphasis on fuel wood economics and potentially the introduction of fuel-saving cook stoves or alternative energy sources (like Home biogas systems mentioned in real-world ITTO projects) will reduce the pressure on mangrove forests for fuel, simultaneously lowering household expenses and improving indoor air quality.

ii. Improved Food Security:

Healthy Fish Nurseries: Rehabilitated mangrove areas act as crucial breeding and nursery grounds for fish, crabs, and other marine species. This will lead to increased fish stocks in the delta, directly improving the food security for the communities.

Access to Diverse Food Sources: A healthier, more bio diverse wetland ecosystem will provide a wider range of food sources from the mangroves and associated coastal areas.

iii. Enhanced Environmental Protection and Climate Change Resilience-Stronger Coastal Protection:

Natural Barriers: The rehabilitation of degraded coastal and mangrove wetlands with specific wetland species will create robust natural barriers against coastal erosion, storm surges, and rising sea levels. This directly protects homes, infrastructure, and agricultural lands in the delta.

Reduced Disaster Risk: Communities will be more resilient to the impacts of extreme weather events, tropical cyclones, and floods, reducing damage and displacement.

iv. Healthier Ecosystems and Biodiversity:

Biodiversity Restoration: Planting a mix of species, matched to suitable sites, will lead to the restoration of natural habitat distribution, supporting a greater diversity of flora and fauna within the Rewa Delta.

Improved Water Quality: Mangroves naturally filter pollutants and trap sediments, leading to cleaner water in the delta. This benefits both human health and marine life.

Carbon Sequestration: Healthy mangrove forests are highly effective "blue carbon" sinks, absorbing significant amounts of carbon dioxide from the atmosphere. This contributes to climate change mitigation efforts at local and global levels.

v. Sustainable Resource Management Practices:

Community-Led Conservation: The participatory approach, training workshops, and community involvement in mangrove management will instill a sense of ownership and responsibility, ensuring the long-term sustainable use and conservation of these vital resources.

Application of Best Practices: The use of techniques developed by the Ministry of Fisheries and Forestry and Conservation International, as prescribed in the "Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji," ensures that rehabilitation efforts are based on scientific best practices, increasing their success and sustainability.

vi. Strengthened Community Capacity and Governance-Improved Community and Institutional Capacity:

Enhanced Knowledge and Skills: Training workshops for community members (especially the 45+ age group) will improve their understanding of effective delta wetlands management and climate change issues. This empowers them to make informed decisions and take active roles.

Stronger Local Governance: The collaboration between government ministries, NGOs, universities, and local communities will have fostered better coordination and communication, leading to more effective local governance of natural resources.

Consensus-Based Decision Making: The participatory approach in developing a consensus-based vision for policy frameworks and livelihood options means that future decisions regarding the delta will reflect community needs and aspirations, increasing their acceptance and sustainability.

vii. Empowered Communities:

Increased Self-Reliance: By gaining new skills and equipment for alternative livelihoods and sustainable resource management, communities will be less dependent on external aid and more capable of driving their development.

Safeguarded Rights and Well-being: The project's explicit consideration for conserving and protecting natural resources while safeguarding the livelihood, rights, and social well-being of forest-fringe communities ensures that development is equitable and benefits all, including the vulnerable older demographic.

In essence, the future benefits for the Rewa Delta communities will be a result of a stronger, more resilient, and economically vibrant community, living in a healthier and more protected environment, underpinned by their enhanced capacity to manage their valuable natural resources sustainably.

5.8 Analysis Project (in)sustainability after Project completion, referring to section 4, as a result of Project conceptualization, assumptions made and implementation conditions (refer also to the post –Project strategy in the Project document); and

The sustainability of the ITTO project after its completion hinges on how well its conceptualization, underlying assumptions, and implementation conditions laid the groundwork for lasting impact. For the ITTO Rewa Delta project phase two, with its focus on integrated sustainable mangrove management, the transition from project-driven activities to self-sustaining community initiatives is crucial.

Listed below the link for the provided project strategy and implementation to its sustainability:

5.8.1 Analysis of Project Sustainability after Completion:

5.8.1.1 Project Conceptualization and its Impact on Sustainability:

- **Key Principle: Integrated Sustainable Management:** The guiding principle is sound. By focusing on *integrated* management, the project acknowledges the complex interdependencies within the Rewa Delta ecosystem and between human activities and the environment. This holistic view is fundamental to long-term sustainability, as addressing one issue in isolation often leads to unintended consequences elsewhere.
 - **Sustainability Link:** A well-conceived integrated approach means that the benefits (e.g., improved livelihoods, coastal protection) are not isolated but mutually reinforcing, making the overall system more resilient. If this integration truly happened, it will continue to foster a balanced human-environment relationship post-project.
- **Partnerships and Collaboration:** The strategy explicitly emphasizes developing partnerships with all direct and indirect stakeholders (research, education, social, economic, environmental organizations, communities, private sector).
 - **Sustainability Link:** This multi-stakeholder approach is a cornerstone of sustainability. It builds a broad base of ownership, shared responsibility, and resource mobilization beyond the project's lifespan. If these partnerships are genuine and robust, they will continue to coordinate mangrove management efforts, share knowledge, and address emerging challenges after the ITTO funding ceases.
- **Participatory Approach:** The commitment to stakeholder consultations and discussions with local communities for consensus-based vision development (policy framework, livelihood options, rehabilitation work) is critical.
 - **Sustainability Link:** True participation fosters *local ownership* and *empowerment*. When communities are involved in designing solutions, they are more likely to implement, maintain, and adapt them long-term. This is especially vital given the dominant 45+ demographic – solutions must resonate with their needs, capacities, and traditional knowledge. If the communities genuinely "own" the vision and the management guidelines, they will continue the work.

5.8.1.2 Assumptions Made and their Impact on Sustainability:

- **Assumption: Willingness and Capacity of Older Demographic:** A major implicit assumption is that the majority 45+ population, despite youth migration, is willing and able to engage in and sustain the new "urban business systems" and management practices.
 - **Sustainability Link:** The project's success hinges on whether the capacity-building (training workshops) and livelihood provisions truly met the specific needs and learning styles of this age group. If the training was too technical or not practically applicable to their daily lives, the skills might not be retained or utilized post-project, jeopardizing the economic sustainability of new ventures. The project explicitly states the design must "meet the capacity level of the people in the village to withstand the pressure of development and its role." The degree to which this was achieved will determine if benefits persist.
- **Assumption: Effectiveness of Dissemination Strategy (Section 2.8):** The success of knowledge transfer and community buy-in assumes the dissemination strategy was effective for this particular demographic.

- **Sustainability Link:** If the strategy successfully used traditional communication channels, practical demonstrations, and local champions, then the knowledge and awareness about sustainable management and climate change issues will have been deeply embedded within the communities. This ensures that the collective memory and skills for managing the delta wetlands persist after external support ends. If the strategy failed to genuinely reach and engage the older population, knowledge gaps could emerge, threatening long-term adherence to sustainable practices.
- **Assumption: Sustained Government Support and Favourable Policies:** The mention of government policies improving environmental regulation and new lifestyle trends.
 - **Sustainability Link:** Continued government commitment (e.g., enforcement of environmental regulations, support for trade agreements benefiting rural products on cooperative business) provides an enabling environment. If this support wanes, or policies shift unfavourably, it could undermine community efforts and market access for new livelihood options, impacting economic sustainability.

5.8.1.3 Implementation Conditions and their Impact on Sustainability:

- **Bringing Together Diverse Stakeholders:** The project brings together government ministries, NGOs, universities, consultants, etc., for training workshops and coordination.
 - **Sustainability Link:** This diverse pool of expertise should build strong local institutional capacity. The question for sustainability is whether these new capacities reside within the community and local government structures, or if they were merely project-dependent. If local institutions (e.g., village committees, traditional leadership) are strengthened to independently coordinate and seek resources, the project's impact will endure.
- **Alternative Livelihood Equipment and Skills:** Providing concrete tools and knowledge.
 - **Sustainability Link:** The *appropriateness* and *maintenance* of this equipment, along with the *ongoing relevance* of the skills, are key. If the equipment is robust, repairable locally, and the skills are genuinely adopted and continuously practiced, then the enhanced income generation will continue. If they are reliant on external spare parts or highly specialized knowledge, they may falter. The "economics of wetlands conservation and sustainable utilization" study, particularly on fuelwood, should have identified sustainable economic models.
- **Mangrove Rehabilitation Techniques (Ministry of Fisheries and Forestry and Conservation International Guidelines):** Applying established, science-backed methods.
 - **Sustainability Link:** Using proven techniques (mixed species planting, matching species to sites) increases the likelihood of successful ecological restoration. The sustainability here lies in the long-term survival and ecological function of the rehabilitated areas. Furthermore, if the community has been trained in these guidelines, they can continue smaller-scale rehabilitation or maintenance post-project, ensuring the ecological benefits persist.
- **Community Involvement in Management (Mangrove Guideline):** Facilitating direct involvement in mangrove management using the Mangrove Guideline.
 - **Sustainability Link:** This is paramount. If communities have genuinely taken over monitoring, surveillance, and enforcement of local management rules (e.g., areas for non-wood product extraction, rules for fuel wood collection and reforestation), then the resource base itself will be sustainably utilized, even without direct project oversight. The development of a consensus-based vision directly feeds into this self-governance.

5.8.1.4 Post-Project Strategy (Refer to Project Document Section X):

The explicit "post-Project strategy" in the Project Document is the most direct indicator of planned sustainability. This section should detail:

- **Exit Strategy:** How will the project gradually withdraw support, transferring full responsibility to local entities?
- **Institutionalization:** How will the project's achievements be integrated into local government plans, budgets, or community structures?
- **Funding Mechanisms:** Are there plans for communities to generate their own funds for maintenance (e.g., from alternative livelihoods, eco-tourism, carbon credits) or access ongoing government/NGO support?
- **Monitoring and Evaluation Framework:** How will continued monitoring of mangrove health and community benefits occur? Who will be responsible?
- **Replication/Scaling Up:** Plans for sharing lessons learned and potentially expanding successful models to other areas.
-

In summary, the sustainability of the ITTO Rewa Delta project after completion will be directly impacted by:

- The depth of community ownership and empowerment cultivated through genuine participatory approaches, particularly for the 45+ age group.
- The appropriateness and adoption of new skills and alternative livelihoods, ensuring economic viability beyond external funding.
- The institutionalization of management practices within local governance structures and the continued collaboration among stakeholders.
- The long-term ecological success of the rehabilitation efforts and the communities' ability to maintain these gains.
- The continued enabling environment provided by supportive government policies and external market opportunities.

If the project has successfully built *capacity, ownership, and self-reliance* within the six villages, integrated with sustainable ecological practices and supported by relevant policies, then its impact will indeed be sustainable, allowing the communities to continue benefiting from a healthy Rewa Delta long after the project team departs. Conversely, if dependency on the project was high, or if the "urban systems" were not adequately adapted to the local context, the benefits could erode over time.

5.9 Analyses and comments on the understanding and appropriateness of the roles and responsibilities of the institutions involved with the Project implementation.

The involvement of such a comprehensive list of institutions in the ITTO Rewa Delta project demonstrates a robust understanding of the complexity inherent in integrated sustainable management and rural development in Fiji. The appropriateness of their roles largely aligns with their mandates and strengths.

Here's an analysis and commentary on each institution's understanding and appropriateness of roles and responsibilities:

5.9.1 Analysis of Roles and Responsibilities of Involved Institutions

1. **Ministry of Fisheries and Forestry:**

- **Understanding:** Clearly understood. As the primary government body responsible for forest and mangrove resources, their role is foundational. Their involvement in developing and applying management guidelines ("Community-based Management Guideline for Mangrove Rehabilitation and Restoration in Fiji") and potentially acting as the executing agency for ITTO projects, signifies their technical and regulatory authority.
- **Appropriateness:** Highly appropriate. They are the mandated authority for sustainable forest and mangrove management, environmental regulations, and resource monitoring. Their technical expertise, policy enforcement capabilities, and ability to integrate project outcomes into national strategies are crucial for the project's legitimacy and long-term sustainability. They are essential for ensuring practices align with national environmental protection goals.

2. **NGO Conservation International:**

- **Understanding:** Well understood. Conservation International (CI) has a strong track record in Fiji and globally for community-based conservation, ridge-to-reef approaches, and developing practical conservation tools. Their partnership with the Ministry in creating Mangrove guidelines indicates a deep understanding of on-the-ground implementation and community engagement.
- **Appropriateness:** Highly appropriate. NGOs like CI excel at facilitating community participation, providing technical and scientific support, and bridging the gap between government policy and local action. Their expertise in designing and implementing community-led conservation projects, often with a focus on sustainable livelihoods, directly aligns with the project's goals, particularly in working with vulnerable communities.

3. **Ministry of Trade, Cooperatives and Small Business Enterprise:**

- **Understanding:** This Ministry is critical for the "business system that improve village life" aspect of the project. Their role would involve supporting the development of new livelihood options into viable small and micro-enterprises (MSMEs), facilitating market access, providing Cooperative business training, and potentially offering financial assistance or cooperative structures for the six villages.
- **Appropriateness:** Highly appropriate and essential. For the "urban system to the rural area through development progressing into a business system" to be sustainable, economic viability is paramount. This Ministry's expertise in business development, cooperatives, and market linkages is crucial for ensuring that alternative livelihoods are not just skills but translate into actual income-generating activities for the communities, especially given the older demographic that may need tailored business support.

4. **Secretariat of the Pacific Community (SPC):**

- **Understanding:** SPC is a regional scientific and technical organization with broad expertise across various sectors, including land resources, fisheries, climate change, and disaster management. Their role would likely involve providing technical advice, regional data, capacity building support, and potentially helping to integrate project findings into broader regional strategies.
- **Appropriateness:** Very appropriate. SPC brings a regional perspective, access to diverse technical expertise, and an understanding of best practices across the Pacific. Their involvement can ensure the project benefits from regional knowledge, and its outcomes can potentially inform or be replicated in other Pacific Island countries facing similar challenges. Their work in climate change adaptation and disaster risk management also aligns well with the project's objectives for coastal resilience.

5. **University of the South Pacific (USP):**

- **Understanding:** USP is the premier regional tertiary institution with strong programs in environmental management, climate change, sustainable development, and community engagement through centers like PaCE-SD. Their role would involve research (e.g., baseline assessments, ecological monitoring), providing scientific validation, developing tailored training curricula, and potentially engaging students in fieldwork or internships.
- **Appropriateness:** Highly appropriate. USP provides academic rigor, independent research capacity, and a platform for long-term knowledge generation and dissemination. Their involvement ensures that project interventions are evidence-based, that ecological impacts are scientifically monitored, and that capacity

building benefits from academic expertise. They can also help develop formal training pathways for community members.

6. **Eco Growth Biogas Company:**

- **Understanding:** This Company's name suggests a focus on renewable energy, specifically biogas. Their role would likely involve the technical assessment, design, installation, and maintenance support for biogas systems in the six villages, potentially linked to waste management or energy production for cooking/lighting. This aligns with the "urban system to the rural area" concept.
- **Appropriateness:** Appropriate, provided their technology is suitable and maintainable by the community. Introducing biogas technology directly addresses the fuel wood issue (a key pressure on mangroves) and offers a clean, sustainable energy source. The challenge lies in ensuring the technology is robust, affordable for the communities, and that adequate training and local support mechanisms are in place for ongoing operation and maintenance by the 45+ demographic. Their involvement signals a practical, tangible intervention that can directly improve village life.

7. **Pacific Women's Economic Empowerment Program:**

- **Understanding:** This program focuses on increasing women's economic empowerment, leadership, and decision-making across the Pacific. Their involvement indicates an explicit understanding of gender equality as crucial for sustainable development. Their role is to ensure that women in the six villages, particularly within the 45+ age group, have equitable access to training, alternative livelihoods, resources, and decision-making roles within the project through Fabric printing, Jewelry making, Weaving, and Tailoring.
- **Appropriateness:** Critically appropriate. Women often play central roles in traditional resource management and household economies in Fiji. Ensuring their economic empowerment not only improves their well-being but also strengthens the overall sustainability of community-based initiatives. This program's expertise in gender-sensitive approaches is vital for overcoming potential cultural barriers and ensuring inclusive benefits.

8. **Ministry of Rural and Maritime Development and Disaster Management:**

- **Understanding:** This Ministry is responsible for coordinating and facilitating rural and maritime development programs and disaster risk management across Fiji. Their role would be to integrate the project's activities into broader rural development plans, facilitate coordination with local government structures (e.g., Provincial Councils, District Offices), and ensure the project contributes to community resilience against natural hazards.
- **Appropriateness:** Highly appropriate. This Ministry serves as a crucial link between the project and broader government development agendas at the local level. Their involvement helps to ensure that the project is not an isolated initiative but is integrated into national efforts to improve rural livelihoods and build disaster resilience, which is directly relevant to coastal communities in the Rewa Delta.

9. **I-Taukei Affairs Board:**

- **Understanding:** The I-Taukei Affairs Board (TAB) is responsible for the administration, welfare, and good governance of the indigenous Fijian (I-Taukei) people, including customary land and traditional leadership structures. Their role in the project would be to ensure cultural appropriateness, engage traditional leaders, facilitate community acceptance of new initiatives, and align the project with I-Taukei customs and regulations, particularly concerning land and resource use.
- **Appropriateness:** Extremely appropriate and essential. Given that the project operates within I-Taukei traditional land and resource areas and involves I-Taukei communities, the TAB's involvement is non-negotiable for the sake of legitimacy, cultural sensitivity, and effective community engagement. They help bridge the gap between traditional governance systems and modern development initiatives, ensuring that the project respects customary rights and works within established community frameworks.

10. **Ministry of Lands and Mineral Resources:**

- **Understanding:** Managing State land on Terrestrial and Mangrove aquatic zones, including leases, valuations, and land use planning. They are crucial for making land available for various development projects (residential, commercial, industrial).

- **Appropriateness:** The MLMR's mandate directly aligns with critical aspects of project implementation, particularly for projects that require land acquisition, changes in land use, or involve the extraction or utilization of natural resources and Mangrove zones.

11. Ministry of Environment:

- The Ministry of Environment (formerly part of the Ministry of Waterways and Environment, and previously Local Government, Housing and Environment) is responsible for the protection and sustainable management of Fiji's environment.
- **Appropriateness:** Formulating and implementing environmental management policies and promoting sustainable development practices.

5.9.2 Overall Commentary:

The list of institutions involved demonstrates a very comprehensive and well-thought-out understanding of the multi-dimensional nature of sustainable resource management and rural development. The roles assigned appear highly appropriate for each institution's mandate, expertise, and operational capabilities in the Fijian context.

Strengths:

- **Holistic Approach:** The inclusion of environmental, economic, social (gender, community well-being), and governance institutions reflects a holistic approach to sustainable development.
- **Capacity Building Focus:** The involvement of universities and NGOs in training and guideline development indicates a commitment to building long-term local capacity.
- **Local Ownership:** The central role of local communities and the I-Taukei Affairs Board is crucial for fostering genuine ownership and ensuring interventions are culturally relevant.
- **Government Buy-in:** Strong involvement from various government ministries (Forestry, Trade, Rural & Maritime, I-Taukei Affairs) signals high-level support and potential for policy integration and scaling.

In summary, the project's institutional framework is well-conceived and highly appropriate for its ambitious goals in the Rewa Delta. The success of its implementation depended on the effectiveness of inter-agency coordination through the steering committee, the practical application of each institution's expertise, and their collective ability to empower the local communities to take the lead to sustainable management.

6. LESSON LEARNT:

Project identification and design matters such as:	
Aspects of Project identification and development, including problem analysis and stakeholder identification and participation, which most contributed to success or failure in achieving the Specific Objective contributing to the Development Objective;	<p>The main lesson learned after the completion of the four outputs, especially when considering the achievement of a Specific Objective contributing to a Development Objective, is that the effectiveness and ultimate impact of a project are profoundly determined by the rigor and inclusiveness of its initial identification and design phases, rather than solely by the successful production of outputs.</p> <p>Even if a project successfully delivers its intended outputs, these outputs may not lead to the desired Specific Objective if the foundational elements of project identification and design were flawed.</p>

<p>Additional arrangements that could improve cooperation between the relevant parties Interested in the Project;</p>	<p>Building on the lesson learned that effective project identification and design are paramount, here are additional arrangements that could significantly improve cooperation between the Ministry of Land and Mineral Resources (MLMR), the Ministry of Environment (ME), and other relevant parties interested in a project in Fiji:</p> <ol style="list-style-type: none"> 1. Formalized Inter-Ministerial Working Groups/Taskforces: 2. Joint Capacity Building and Knowledge Sharing: 3. Integrated Planning and Permitting Processes: 4. Early and Continuous Stakeholder Engagement Frameworks: 5. Joint Monitoring, Evaluation, and Learning:. <p>By implementing these additional arrangements, Fiji can significantly enhance coordination, reduce bureaucratic hurdles, prevent costly delays, and ensure that projects are not only technically successful in delivering outputs but also achieve their broader Specific and Development Objectives sustainably and inclusively.</p> <p>○</p>
<p>Aspects of Project design, including implementation strategy, that most contributed to success or failure in achieving the Specific Objective contributing to the Development Objective;</p>	<p>Following the completion of the four outputs, the core lesson learned regarding Project Design, including its Implementation Strategy, is that the effectiveness of the outputs in achieving the Specific Objective is critically dependent on how well the "doing" of the project was conceptualized and planned from the very beginning.</p> <p>It's not enough to define what needs to be produced (the outputs); the design must clearly articulate how those outputs will be produced, who will produce them, how resources will be managed, and how the project will adapt to challenges.</p>
<p>Actions to be taken to avoid variations between planned and actual implementation (Schedule, costs, etc); quality of Project planning;</p>	<p>Based on the lessons learned, here are key actions to be taken to significantly reduce variations between planned and actual implementation (schedule, costs) and enhance the overall quality of project planning:</p> <ul style="list-style-type: none"> ○ Actions to Enhance Project Identification & Problem Definition by Conduct Rigorous Needs and Problem Analysis. ○ Actions to Improve Project Design & Planning Quality by Conduct Rigorous Needs and Problem Analysis: ○ Actions to Strengthen Implementation & Execution by Strengthening Project Management Capabilities: ○ Actions to Enhance Monitoring, Evaluation, and Control by implementing a Robust Monitoring, Evaluation, and Learning (MEL) System: <p>By systematically integrating these actions into the project lifecycle, particularly during the critical identification and design phases, organizations can significantly improve project success rates, minimize costly variations, and ensure that investments lead to tangible and sustainable development outcomes.</p>

<p>Factors which will most likely affect Project sustainability after completion, including dissemination strategy, post-Project strategy, and involvement of stakeholders, and other matters.</p>	<p>The main lesson learned from the completion of the four outputs, especially when considering the achievement of a Specific Objective contributing to a Development Objective, is that:</p> <p>Successfully producing the planned outputs does not automatically guarantee project success or sustainability if the initial problem identification, design, and implementation strategy were flawed, or if key factors for post-completion sustainability were not adequately addressed from the outset.</p> <p>In simpler terms: "We built it, but will it last? Did it even solve the problem we thought it would?" The completion of outputs is a milestone, not the finish line for achieving impact. The true measure of success lies in the project's long-term sustainability and its contribution to broader development goals. The need for the Rewa delta after achieving those four output is the support from Local institution and government Ministries to align there annual operational plans to the development that has been established by ITTO and ensure to Sustain well in collaboration with the Six communities.</p>
<p>Operational matters such as:</p>	
<p>Project organization and management;</p>	<p>Having completed the four outputs of Phase Two, the lessons learned regarding Operational Matters—specifically Project Organization and Management—from the project's identification, design, and implementation phases highlight that even a well-conceived project can falter if its day-to-day execution and internal management are not robust and adaptive.</p> <p>The overarching lesson is: The effectiveness of project operations, including its organizational structure and management practices, is a direct determinant of whether the planned outputs are delivered efficiently and contribute as intended to the Specific Objective. Some of the important points that links to the ITTO Phase 2 scenarios are listed as Follows:</p> <ul style="list-style-type: none"> ○ <u>Project Organization and Management</u>: In contrast to ITTO and the Executing agency, there is a big challenges on the differences standard requirements of donor fund and the executors. This affects financial process and project implementation with timelines and must considered to avoid differences between the implementing agency and the Donor. ○ <u>Responsibilities and HR Management</u>: The decision to manage HR with responsibilities must also be considered, especially in times of unexpected scenarios, to withstand additional roles. This may affect implementation and reporting, which can create miscommunication with Donor funding. Such a scenario was experienced during the Phase 2 ITTO project. Two ITTO staff left without being replaced, which affected the project implementation process. <p>In essence, the completion of Phase Two outputs highlights that the "engine room" of the project—its organization and management—must be finely tuned.</p>

	Even with a great blueprint, if the day-to-day operations are inefficient, uncoordinated, or unresponsive, achieving project objectives within the planned schedule and cost, and with the desired quality, becomes a significant challenge.
Flow of funds; •	<p>Having completed the four outputs of Phase Two of the ITTO project, significant lessons can be drawn from the project's identification, design, and implementation phases concerning Operational Matters, specifically related to Flows of Funds.</p> <p>The overarching lesson is: The efficiency, predictability, and transparency of financial flows are critical operational drivers that profoundly impact a project's ability to execute planned activities, deliver outputs on schedule and within budget, and avoid operational bottlenecks. Even excellent technical planning can be undermined by poor financial management.</p> <ul style="list-style-type: none"> ○ Efficiency and Predictability of Fund Disbursement from Donor: The Delays or unpredictability in the release of funds from the donor (ITTO) to the implementing agency create significant operational disruptions. Complex or lengthy donor approval processes for disbursements halt the project activities. More processes of preparing ODA must be prepared in advance to allow financial flows: ○ Streamlined Internal Fund Release Mechanisms: The delay release of funds on request internally mostly hinders the project implementation and affects the outputs to be achieved on certain timelines. ○ Capacity of Financial Management Units: The human resource capacity (skilled accountants, financial managers) and system capacity (financial software, internal controls) within the project's financial management unit and partner organizations (if they directly handle funds) are vital. Weak capacity leads to errors, delays in reporting, and difficulties in compliance. This affects cash flows updates and creates more confusion error on the misposting of funds. <p>In summary, the completion of Phase Two outputs has underscored that effective Flows of Funds are the lifeblood of project operations. Lessons learned likely emphasize the need for meticulous financial planning in the design phase, efficient and predictable disbursement mechanisms (both external and internal), strong internal financial management capacity, and timely, transparent reporting to ensure that financial constraints do not derail the project's ability to achieve its objectives on time and within budget.</p>
Definition of the roles and responsibilities of the institutions involved in the Project Implementation	The steering committee have important role to work closely with communities in maintaining the continuous management of the project development that relates into their annual operational plans. A lesson learnt for the Phase two ITTO project that government stakeholder's lack of regular visit to the local communities who have been established with related development such Piggery, Prawn farming, Biogas, Nursery etc.
Project documentation;	One of the lessons learnt is the reporting documentation of the project implementation on the progress of implementation due to the unavailability of

	ITTO staff and unexpected scenarios of the project changes timeline that extend to complete the project. The unavailability of staff led to less documentation of the project and more miscommunication through the Executing agency and the ITTO office.
Monitoring and evaluation	<p>Based on general project management principles, particularly within the context of development organizations like ITTO, and common challenges in the project lifecycle, here are key lessons learned concerning operational matters, specifically focusing on Monitoring and Evaluation (M&E) for the four outputs after the completion of Phase Two of an ITTO project:</p> <p>Lessons Learned from Project Identification and Design (Impacting M&E):</p> <p>Clarity and Smartness of Objectives and Outputs:</p> <p>Lesson: Vague or overly broad project objectives and output definitions at the identification and design stages make effective M&E impossible. If you can't clearly state what you expect to achieve, by when, how much, and how you'll measure it, you can't monitor progress or evaluate success.</p> <p>Operational Implication for M&E: The four outputs should have been defined using SMART criteria (Specific, Measurable, Achievable, Relevant, and Time-bound) from the outset. This includes articulated indicators, baselines, targets, and means of verification. Any ambiguity carried over from Phase One into Phase Two will severely hamper the ability to demonstrate output completion.</p>
External factors that influenced the Project implementation and that could have been foreseen and that could not have been foreseen; and other matters.	<p>Drawing lessons from external factors that influenced the implementation of an ITTO project, particularly after the completion of Phase Two and considering its four outputs, requires a systematic look at how the external environment interacted with project plans and activities,</p> <ol style="list-style-type: none"> 1.The Market Fluctuations and unfavourable weather condition: (e.g., timber prices, demand for certified product, limited supply): This affects supplies of timber materials to the villages delayed delivery that some of the Villages were unable received there materials and to request again for the next financial request. 2. Socio-Cultural Dynamics and Community: Resistance Inadequate understanding of local customs, land tenure systems, power dynamics, or existing conflicts within communities can lead to resistance, non-participation, and ultimately, failure to implement activities or sustain outputs. This issued experienced at Narocake village on cooperative training that was supposed to to complete the last financial year. Due the difference between village and the District administrator (Who also have run his won store at the Village), the training was put on hold until the next financial year. 3. Climatic Variability and Expected Environmental Conditions: The unfavourable weather condition at Rewa delta is one the biggest challenge to implement the project especial on trainings and meetings or any work need to implement during the period of the project. This also delays the project implementation and cannot be controlled as happens unexpectedly.

	<p>4. Village Occasion: Such Funerals or Marriage etc at the village, all activities will have to be cancelled until further notice.</p> <p>5. New Financial Data system: The financial team adapted the FMIS which took months for Finance team at HQ to familiarize and still delay most of the project implementation in the ministry till today.</p> <p>Most of this EF are Natural impacts and difficult to trigger, Some can be controlled through scenario planning and must discussed at the initial stage of the project implementation.</p> <p>By rigorously documenting and analysing these external influences on the delivery of the four outputs, an ITTO project can contribute significantly to organizational learning, improving the robustness of future project designs and implementation strategies in similar contexts.</p>
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7. CONCLUSION AND RECOMMENDATION:

N0	Topics	CONCLUSION	RECOMMENDATION
1	Identification	<p>1.1 A successful project is determined by the clear clarification of the problem root cause and the need require in a particular community. What is the level percentage of the problem and the severity of the impact that is affecting the communities? How long the severity affects the community and how worse and into what other parts of life is will affect the impact. The location of the identified site must have a history information that tie up with current situation.</p>	<p>1. Recognizing a Need or Opportunity: It begins with identifying a problem that needs solving, a gap that needs filling, or an opportunity that can be leveraged. This could come from community needs, government priorities, market demands, or observed inefficiencies.</p> <p>2. Formulating an Initial Idea: Once a need or opportunity is identified, an initial project idea or concept is formed. This is often a broad outline of what might be done.</p>

			<p>3. Preliminary Assessment: This phase involves a high-level assessment to determine if the idea is worth pursuing further. This includes:</p> <p>4. Relevance: Does it align with strategic goals or address a genuine need?</p> <p>5. Feasibility: Is it potentially achievable given available resources, technology, and context?</p> <p>Stakeholder Interest: Is there initial support or interest from key stakeholders and potential beneficiaries?</p> <p>Problem Clarification: A core activity is to clearly define the problem or opportunity, often exploring its root causes, scope, and initial understanding of its impact.</p> <p>The outcome of this phase is typically a concept note, a pre-feasibility study, or a project brief that outlines the proposed project idea, its rationale, preliminary objectives, and expected benefits, setting the stage for more detailed planning. Some of the components that were not addressed during the planning of the phase two project must ensure to be implemented in the future.</p> <p>It's a filtering process to ensure that only the most relevant and potentially viable ideas proceed to the more resource-intensive design and planning stages.</p>
2	Design	<p>The designing of a Project must identify its purpose to solve an impact problem and the best solution requires to retain back its normal situation and create a sustainability system to mitigate the problem and build adaptation measures to improve live hood and lifestyle.</p>	<p>Some of the following list were not addressed properly on phase two and which must ensure to be considered when designing phase three MOF the ITTO project.</p> <p><u>1. Refined Problem & Needs Definition:</u></p> <p>Deepen Root Cause Analysis: Conduct a more rigorous and validated root cause analysis of the problem, incorporating lessons from Phase Two's implementation. Ensure the problem statement for Phase Three is even more precise and universally understood by all stakeholders.</p> <p>Validate Evolving Needs: Re-engage with beneficiaries and stakeholders to validate their current needs and priorities. Needs may have shifted or become clearer after Phase One's interventions and external influences. Ensure the design is genuinely needs-driven, not just a</p>

			<p>continuation of Phase One's approach if it proved less effective.</p> <p>Quantify Problem & Impact (Baselines): Establish clear, measurable baselines for the problem's prevalence and severity of impact. This is critical for demonstrating Phase Two's contribution to change.</p> <p><u>II. Enhanced Scope & Objectives for Phase Three:</u></p> <p>SMARTer Objectives & Outputs: Ensure all objectives and the four key outputs for Phase Two are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART). Avoid vague language that hinders progress tracking.</p> <p>Clear Linkage to Outcomes: Explicitly define the logical pathway (Theory of Change/Logical Framework) demonstrating how Phase Two's outputs will lead to desired short-term outcomes and contribute to longer-term impact.</p> <p>Realistic Scope: Set a realistic scope for Phase Two, learning from any over-ambition or underestimation of challenges in Phase One. Break down the scope into manageable components.</p> <p><u>III. Strengthened Monitoring & Evaluation (M&E) Framework:</u></p> <p>Integrated M&E Plan: Develop a comprehensive M&E plan during the design phase, not as an afterthought. This plan must detail:</p> <p>Specific indicators for each output and objective.</p> <p>Data collection methodologies, tools, and frequency.</p> <p>Clear responsibilities for data collection, analysis, and reporting.</p> <p>Data quality assurance mechanisms.</p> <p>Utilisation-Focused M&E: Design M&E to be a management tool, not just a reporting requirement. Plan for regular review meetings where M&E data is actively used for adaptive management and decision-making.</p>
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			<p>Learning Agenda: Incorporate a dedicated "learning agenda" into the M&E framework, explicitly identifying key questions to be answered during Phase Two to inform future programming.</p> <p><u>IV. Proactive Risk & External Factor Integration:</u></p> <p>Comprehensive Risk Assessment: Conduct a thorough risk assessment specific to Phase Two, identifying potential external factors (political, economic, social, environmental, technological, legal) that could influence implementation.</p> <p>Detailed Mitigation Strategies: For each identified risk, develop concrete and actionable mitigation strategies. This includes contingency plans for both foreseeable (e.g., seasonal weather) and potentially unforeseen (e.g., major policy shifts, economic shocks) external factors.</p> <p>Contingency Budget & Time: Allocate appropriate contingency reserves (both financial and time) in the Phase Two budget and schedule to absorb unforeseen challenges.</p> <p>External Context Monitoring: Design a mechanism for continuous monitoring of relevant external factors throughout Phase Two's implementation.</p> <p><u>V. Improved Stakeholder Engagement Strategy:</u></p> <p>Refined Stakeholder Analysis: Update the stakeholder analysis based on Phase two's experiences, identifying new stakeholders, shifting power dynamics, and refining engagement approaches.</p> <p>Tailored Communication Plan: Develop a communication plan that outlines how, when, and what information will be shared with different stakeholder groups, ensuring transparency and fostering ownership.</p> <p>Formalized Partnership Agreements: For key implementing partners, ensure clear, formal agreements (e.g., MOUs) that define roles, responsibilities, and accountability mechanisms.</p>
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			<p>Community Feedback Loops: Design explicit mechanisms for capturing and responding to community feedback throughout Phase Two, ensuring their voices genuinely influence implementation.</p> <p><u>VI. Integrated Capacity Building & Sustainability Planning:</u></p> <p>Targeted Capacity Development: Based on Phase One's challenges (e.g., staff deployment, driver contracts), design specific capacity building components for local partners and Ministry staff, focusing on skills needed for output delivery and long-term sustainability.</p> <p>Clear Exit Strategy & Handover: Incorporate a clear plan for the sustainability of Phase Two's outputs beyond project completion, including handover strategies to local institutions and communities.</p> <p>Resource Mobilization for Sustainability: Explore and integrate strategies for local resource mobilization or alternative funding streams to support the continued operation and maintenance of outputs.</p> <p><u>VII. Financial Management & Audit Preparedness:</u></p> <p>Robust Internal Controls: Design Phase Three with strengthened internal financial controls and clear procedures for fund management, especially given the "misposting of ITTO funds" issue.</p> <p>Audit-Ready Documentation: Embed practices for meticulous record-keeping and financial documentation throughout Phase three to facilitate smooth and timely audits.</p> <p>System Contingency: While FMIS outages are external, the design should include manual backup procedures or alternative data capture methods for critical financial information to avoid future delays.</p> <p>By focusing on these areas during the design phase, Phase Three of the ITTO project can significantly enhance its chances of achieving its outputs efficiently, effectively, and sustainably,</p>
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			learning from the valuable experiences of Phase Two.
3	Implementation	<p>Effective project implementation is contingent upon the clear identification of all key activities and their associated sub-activities, each meticulously tied to the approved project documentation and budget. It is crucial to recognize that project budgets often encompass distinct components, such as consumable items and capital expenditures. These varied financial classifications demand specific and diligent consideration throughout the execution phase, as it is during implementation that the practicalities and accuracy of initial planning are rigorously tested against real-world conditions.</p> <p>Key observations from the implementation phase include:</p> <ol style="list-style-type: none"> 1. <u>Timeline Adherence</u>: The initial project timeline proved to be unrealistic, leading to continuous requests for extensions, which complicated planning and resource allocation. 2. <u>Operational Bottlenecks</u>: Significant delays were experienced in critical administrative processes, particularly in procurement, training approvals, and general implementation activities. 3. <u>Impact of External Factors</u>: Unfavourable weather conditions, unforeseen village commitments, internal Ministry program conflicts, and protracted approval processes for funds and extensions notably disrupted planned activities. 3. <u>Human Resource Instability</u>: Staff redeployments within the Ministry and the cessation of contracts for key personnel (e.g., ITTO drivers) strained human resources and created additional burdens on the remaining team. 4. <u>Stakeholder Engagement</u>: A lower-than-anticipated level of community interest and limited responsiveness from certain 	<p>Based on the lessons learned from the implementation of Phase Two, the following recommendations are crucial for improving the design and execution of subsequent projects or phases:</p> <p>Based on the lessons learned from the implementation of Phase Two, the following recommendations are crucial for improving the design and execution of subsequent projects or phases:</p> <p>I. Strengthen Project Planning and Baselines:</p> <p><u>Realistic Timelines</u>: Develop project timelines with greater realism, incorporating buffer periods for administrative processes and potential external disruptions.</p> <p><u>Streamlined Procurement</u>: Advocate for and establish more efficient and predictable procurement processes, potentially through pre-qualified vendor lists or simplified procedures for common items.</p> <p><u>Comprehensive Risk Assessment</u>: Conduct a more granular and proactive risk assessment during the design phase, explicitly identifying and planning for foreseeable external factors (e.g., climate patterns, governmental approval cycles) and developing robust contingency plans for unforeseen events.</p> <p>II. Enhance Human Resource Management:</p> <p><u>Dedicated Staffing</u>: Ensure dedicated project staff are secured for the full duration of the project, with clear agreements to minimize unforeseen redeployments.</p> <p><u>Capacity Building & Succession Planning</u>: Invest in internal capacity building for local staff and partners, and develop succession plans for key roles to mitigate impacts from staff turnover.</p> <p><u>Contract Management</u>: Improve contract management for critical support roles (e.g., drivers) to prevent service disruptions.</p>

	<p>government stakeholders posed challenges to full participation and smooth execution.</p> <p>5. <u>Financial Management</u>: Issues with the misposting of ITTO funds created delays in audit processes and the finalization of the completion report, highlighting a need for more rigorous financial controls.</p> <p>6. Despite these impediments, the project team demonstrated resilience in navigating complex operational environments to achieve the specified outputs. These experiences offer invaluable lessons for enhancing the effectiveness of future project phases and similar initiatives.</p>	<p>III. Optimize Stakeholder Engagement:</p> <p><u>Proactive Community Mobilization</u>: Implement more intensive and sustained community mobilization strategies from the project's inception to foster genuine interest and ownership.</p> <p><u>Formalized Government Buy-in</u>: Secure formal commitments and clear lines of communication with relevant government ministries and departments early in the project lifecycle to ensure timely responses and support.</p> <p><u>Joint Planning & Review</u>: Increase opportunities for joint planning and regular review meetings with all key stakeholders to enhance collaboration and address issues collectively.</p> <p>IV. Improve Financial Management and Audit Preparedness:</p> <p><u>Robust Internal Controls</u>: Implement strengthened internal financial controls, including clear reconciliation procedures and regular internal audits, to prevent mispostings and ensure accountability.</p> <p><u>Audit Readiness</u>: Integrate "audit-ready" practices into daily financial management, ensuring all transactions are meticulously documented and easily traceable.</p> <p><u>System Contingency</u>: Develop manual backup procedures or alternative data management systems for critical financial operations to mitigate the impact of system outages.</p> <p>V. Foster Adaptive Management and Learning:</p> <p><u>Flexible Design</u>: Design future projects with inherent flexibility, allowing for adaptive adjustments in response to monitoring data and changing external circumstances.</p> <p><u>Continuous Learning</u>: Establish a formal mechanism for continuous capture, analysis, and dissemination of lessons learned throughout the project lifecycle, not just at completion.</p> <p><u>Knowledge Management</u>: Systematically integrate lessons learned into organizational</p>
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			<p>knowledge management systems to inform the design and implementation of all future ITTO initiatives.</p> <p>By implementing these recommendations, future ITTO projects can build upon the achievements of Phase Three while significantly mitigating operational risks and maximizing their potential for sustainable impact.</p>
4	Organization	<p>The completion of Phase Two of the ITTO project, and the delivery of its four intended outputs, highlights the organization's capacity to achieve project deliverables even amidst significant operational complexities. While the outputs were ultimately realized, the implementation journey revealed several systemic and operational vulnerabilities that impacted efficiency, resource optimization, and overall project momentum.</p> <p>Specifically, the experience underscored:</p> <p><u>Planning Realism:</u> An optimistic initial timeline and insufficient contingency planning led to a reactive approach to extensions, indicative of a need for more robust upfront assessments.</p> <p><u>Administrative Efficiency:</u> Bottlenecks in internal approval processes for procurement and activities created preventable delays, straining project resources and staff morale.</p> <p><u>External Factor Responsiveness:</u> While some external factors were unforeseen, the project's susceptibility to predictable external influences (e.g., weather, local commitments, and Ministry programs) suggests a need for more sophisticated environmental scanning and adaptive strategies.</p> <p><u>Human Resource Management:</u> The impact of staff redeployments and contract expirations on project continuity points to a gap in strategic human resource planning</p>	<p>To leverage the valuable lessons from ITTO Project Phase Two and enhance future project performance, the following organizational recommendations are put forth:</p> <p>VI. Strengthen Project Planning and Design Frameworks:</p> <p><u>Mandate Realistic Planning:</u> Implement a policy requiring more rigorous and realistic project planning, incorporating proven methodologies for timeline estimation, risk assessment, and contingency budgeting.</p> <p><u>Integrate Adaptive Management:</u> Develop and institutionalize frameworks for adaptive project management, allowing for planned flexibility and course correction in response to monitoring data and evolving external contexts.</p> <p><u>Pre-Project Environmental Scans:</u> Establish a formal process for comprehensive environmental scanning during project identification and design to better anticipate and integrate foreseeable external factors.</p> <p>VII. Optimize Operational Processes and Systems:</p> <p><u>Streamline Administrative Procedures:</u> Conduct an internal review of procurement, approval, and financial disbursement processes to identify and eliminate bottlenecks, ensuring more agile project support.</p> <p><u>Enhance Financial Controls:</u> Implement more robust internal financial controls, regular reconciliations, and training for project staff on financial management best practices to prevent mispostings and ensure audit readiness.</p> <p><u>Develop System Outage Protocols:</u> Establish clear contingency plans and manual backup</p>

	<p>and retention mechanisms for project-critical roles.</p> <p><u>Stakeholder Engagement & Responsiveness</u>: Challenges in maintaining consistent community interest and securing timely responses from government stakeholders indicate a need for more dynamic and formalized engagement protocols.</p> <p><u>Financial Oversight</u>: The misposting of funds, leading to audit and reporting delays, signals a critical area for strengthening internal financial controls and accountability frameworks.</p> <p>In essence, while the organization demonstrated commitment to achieving its project outputs, the operational friction encountered during Phase Two suggests that the existing project management frameworks and institutional capacities require significant enhancement to ensure more predictable, efficient, and resilient project delivery in the future.</p>	<p>procedures for critical administrative and financial systems to minimize disruption during outages.</p> <p>VIII. Invest in Human Resource Strategy for Projects:</p> <p><u>Dedicated Project Roles</u>: Prioritize securing dedicated personnel for critical project roles for the full project duration, potentially through specific project-based contracts or internal secondment agreements.</p> <p><u>Talent Development & Retention</u>: Develop and implement strategies for capacity building, professional development, and retention of project management and technical staff, focusing on skills relevant to ITTO's mandate.</p> <p><u>Succession Planning</u>: Introduce succession planning for key project positions to ensure continuity and minimize impacts from staff transitions.</p> <p>IX. Formalize and Elevate Stakeholder Management:</p> <p><u>Proactive Engagement Protocols</u>: Develop standardized protocols for proactive and sustained engagement with all stakeholder groups (communities, government, partners) from project inception through closure.</p> <p><u>Clear Communication Channels</u>: Establish and maintain clear, consistent, and multi-directional communication channels to ensure all stakeholders are informed and their feedback is integrated.</p> <p><u>Joint Ownership Mechanisms</u>: Design projects with explicit mechanisms for fostering joint ownership and shared responsibility with local communities and government entities.</p> <p>X. Cultivate a Learning and Knowledge Management Culture:</p> <p><u>Systematic Lessons Learned</u>: Institutionalize a systematic approach to capturing, analysing, and disseminating lessons learned across all project phases, ensuring insights are actionable and accessible.</p>
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			<p><u>Knowledge Repository</u>: Develop a centralized, accessible knowledge management system to store project documentation, best practices, and evaluation findings for future reference and organizational learning.</p> <p><u>Cross-Project Learning</u>: Facilitate regular forums or platforms for project teams to share experiences, challenges, and solutions, fostering a culture of continuous improvement across ITTO's portfolio.</p> <p>By strategically addressing these organizational recommendations, ITTO can significantly enhance its operational effectiveness, strengthen its project delivery capabilities, and ultimately maximize the sustainable impact of its vital work in tropical forest management.</p>
5	Management	<p>The management of Phase Two of the ITTO project successfully navigated a complex operational environment to deliver its four intended outputs. This achievement reflects the management team's commitment to project objectives. However, the implementation process also exposed critical areas where management oversight, strategic foresight, and operational efficiency require substantial improvement.</p> <p>Specifically, the management's performance was characterized by:</p> <p><u>Initial Planning Deficiencies</u>: The setting of an overly ambitious initial timeline and insufficient contingency planning by management led to a cycle of reactive extension requests, undermining planning credibility and resource predictability.</p> <p><u>Operational Control Gaps</u>: Management's oversight of critical administrative and logistical processes, particularly procurement, training approvals, and general implementation, proved inadequate, resulting in significant and avoidable delays.</p> <p><u>Limited Adaptive Capacity</u>: While external factors were impactful, management's ability to proactively anticipate, mitigate, and adapt to foreseeable external</p>	<p>To enhance the effectiveness and efficiency of future project phases and similar initiatives, the following recommendations are directed at the project management team:</p> <p>1. Prioritize Realistic and Integrated Planning:</p> <p><u>Enforce Rigorous Baselines</u>: Management must ensure that all future project plans, including timelines, budgets, and resource allocations, are based on comprehensive, realistic assessments and validated data, incorporating lessons from past challenges.</p> <p><u>Integrate Risk Management</u>: Elevate risk management from a compliance exercise to a core management function. Proactively identify, assess, and develop detailed, actionable mitigation and contingency plans for all foreseeable (and potentially unforeseen) external and internal risks.</p> <p>2. Strengthen Operational Control and Oversight:</p> <p><u>Process Optimization</u>: Management should lead an initiative to review and streamline internal administrative, procurement, and approval processes, identifying and eliminating bottlenecks to enhance operational agility.</p> <p><u>Enhanced Financial Governance</u>: Implement stricter internal financial controls, conduct regular internal reconciliations, and ensure all financial</p>

	<p>influences (e.g., weather, village commitments, Ministry program conflicts) was constrained, leading to disruptions rather than smooth adjustments.</p> <p><u>Human Resource Management Weaknesses:</u> Management decisions regarding staff deployment and the handling of critical support contracts created instability in human resources, placing undue pressure on remaining personnel and impacting project momentum.</p> <p><u>Stakeholder Relationship Management:</u> Management faced challenges in consistently fostering high levels of community interest and securing timely, decisive responses from key government stakeholders, indicating a need for more robust and formalized engagement strategies.</p> <p><u>Financial Accountability Lapses:</u> The occurrence of misposted funds and subsequent delays in audit and reporting processes highlighted a significant weakness in management's financial control and oversight mechanisms.</p> <p>In summary, while the project outputs were ultimately achieved, the operational inefficiencies and reactive management responses observed in Phase Two underscore a need for a more proactive, integrated, and robust management approach to ensure future project success and sustainability.</p>	<p>transactions are meticulously documented to guarantee audit readiness from project inception.</p> <p><u>System Contingency Planning:</u> Develop and regularly test contingency plans for critical IT systems (like FMIS) to ensure business continuity and minimize disruptions to reporting and financial operations during outages.</p> <p>3. Implement Proactive Human Resource Strategies:</p> <p><u>Dedicated Resource Allocation:</u> Management must advocate for and secure dedicated, long-term commitments for key project personnel, minimizing the impact of internal redeployments.</p> <p><u>Strategic Capacity Building:</u> Invest in targeted capacity building for project staff and partners, focusing on identified skill gaps in project management, financial oversight, and adaptive planning.</p> <p><u>Contract Management Excellence:</u> Improve the management of external contracts (e.g., for drivers, consultants) to ensure continuity of critical support services.</p> <p>4. Cultivate Proactive Stakeholder Engagement:</p> <p><u>Formalized Engagement Plan:</u> Develop and strictly adhere to a comprehensive stakeholder engagement plan that outlines clear roles, responsibilities, communication frequencies, and feedback mechanisms for all key groups.</p> <p><u>Build Strategic Alliances:</u> Actively cultivate stronger relationships with government ministries and local communities, ensuring their early and continuous involvement in decision-making and problem-solving.</p> <p>5. Champion Adaptive Management and Organizational Learning:</p> <p><u>Data-Driven Decision Making:</u> Management must champion the consistent use of monitoring and evaluation data for real-time decision-making and adaptive adjustments to project strategies.</p>
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			<p><u>Institutionalize Lessons Learned:</u> Establish a robust system for capturing, analysing, and disseminating lessons learned throughout the project lifecycle, ensuring these insights directly inform the design and management of future ITTO initiatives.</p> <p><u>Foster a Learning Culture:</u> Promote a blame-free environment where challenges are viewed as learning opportunities, encouraging open communication and continuous improvement among all project personnel.</p> <p>By adopting these recommendations, project management can transform challenges into opportunities for growth, leading to more efficient, impactful, and sustainable outcomes for future ITTO projects.</p>
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7.1. The completion of Phase Two of the ITTO project, and the successful delivery of its four outputs, presents a valuable opportunity to assess the potential for both **replication** (implementing similar interventions in new, comparable contexts) and **scaling up** (expanding the scope, reach, or intensity of the project within the current or similar contexts).

7.2 Potential for Replication:

The project outputs and the methodologies employed in their delivery hold significant potential for replication in other regions or communities facing similar challenges in sustainable forest management.

7.2.1 Positive Elements for Replication: If the four outputs (e.g., specific training modules, community-based management plans, technical guidelines, or pilot demonstration sites) proved effective and relevant to the local context, their core design and content could serve as a valuable model. Methodologies that fostered local participation, built capacity, or introduced innovative techniques would be particularly strong candidates for replication.

7.2.2 Prerequisites for Successful Replication:

- **Contextual Alignment:** Replication should target contexts with similar ecological, socio-economic, and governance conditions to those of Phase Two.
- **Adaptability:** The replicated model must be flexible enough to be adapted to specific local nuances, rather than being a rigid copy.
- **Resource Availability:** Adequate human, financial, and technical resources, similar to or improved from Phase Two, would be essential in new locations.
- **Policy & Institutional Support:** Strong national and local policy frameworks, coupled with supportive institutional capacities, are critical for the sustained success of replicated initiatives.

7.3 Potential for Scaling Up:

Scaling up the project's interventions, whether by expanding the geographical coverage, increasing the number of beneficiaries, or deepening the scope of activities, is a logical next step to maximize impact.

7.3.1 Opportunities for Scaling: If the four outputs demonstrated tangible positive results (e.g., improved forest health, increased community livelihoods, enhanced governance), there is a strong rationale for expanding these successes. This could involve extending the reach of training programs, establishing more community forest management areas, or disseminating successful technical guidelines more broadly.

7.3.2 Key Considerations and Challenges for Scaling Up:

- **Operational Capacity:** The operational challenges identified in Phase Two (e.g., procurement delays, human resource instability, administrative bottlenecks) would need to be rigorously addressed and significantly improved to manage the increased complexity and demand of a larger-scale operation.
- **Financial Sustainability:** A clear strategy for sustained funding beyond external project cycles is paramount for scaling up, potentially involving government commitment, private sector investment, or community-based financing mechanisms.
- **Institutional Readiness:** The capacity of local institutions and government ministries to absorb, manage, and sustain scaled-up interventions must be thoroughly assessed and strengthened.
- **Quality Control:** Maintaining the quality and integrity of the outputs and interventions as they are scaled up will require robust monitoring and quality assurance mechanisms.
- **Community Engagement at Scale:** Strategies for maintaining deep and meaningful community engagement across a larger or more diverse beneficiary base will be crucial.

7.4 Overall Comment:

The completion of ITTO Project Phase Two provides a rich repository of lessons that are indispensable for future strategic decisions regarding replication and scaling. While the successful delivery of the four outputs demonstrates the project's potential, any future expansion must be underpinned by a **proactive and comprehensive strategy** that directly addresses the operational, management, and external factor challenges experienced in Phase Two. Without robust improvements in project planning, administrative efficiency, human resource management, stakeholder engagement, and financial oversight, the full potential for successful replication and scaling up may be significantly hindered.

for the report



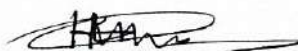
Name: Mr Elimi Kurusiga
Position held: ITTO Project Coordinator Fiji Islands.



Name: Sanjana Lal
Position: Permanent Secretary



Name: Tevita Bulai
Position: Acting Conservator of Forest



Name: Apisai Rinamalo
Deputy Conservator of Forest



Name: Maciu Waqa
Principal Accounts Officer



Name: Moape Drikalu
Divisional Forestry Officer Central Eastern



ANNEX 1

PROJECT FINANCIAL CASHFLOW:

		PP-A/59-351		Period ending o	30/06/2025		
Project Title:COMMUNITY-BASED RESTORATION OF CYCLONE-AFFECTED VULNERABLE MAN GROVE FORESTS THROUGH THE EMPOWERMENT OF COASTAL COMMUNITIES AND WOMEN IN THE REWA DELTA,							
						(in US Dollars)	
Funds received from ITTO		No.	Item	Date received	Amount		
		1	First Installment	28/02/2024	\$ 250,282.42		
		2	Second Installment				
		3	Third Installment				
		4	Fourth Installment				
		5	ETC.				
Total Fund received Plus Double posting amount					\$ 261,819.34		
						(in US Dollars)	
COMPONENT	Budget (Note 1)		Previously accumulated expenses	Expenses for Current Period (Note 2)	Accumulated expenses To-date	Available Budget	
	A		B	C	D {B + C}	E {A - D}	
Expenditures by Executing Agency							

Expenditures by Executing Agency						
10	PROJECT PERSONAL					
	11	National Experts (long term)				
		11.1 Government Stakeholders	\$ 24,000.00		\$ -	\$ 24,000.00
		11.2 Local Labour (Nursery attendants)	\$ 6,480.00		\$ -	\$ 6,480.00
		11.3 Finance and Administration	\$ 13,950.00	\$ 4,695.54	\$ 4,695.54	9,254
	12	ITTO Project Team				
		12.1 Project Coordinator	\$ 15,652.00	\$ 9,362.31	\$ 11,687.56	\$ 21,049.87 - \$ 5,397.87
		12.2 Project Technical Asistants	\$ 9,206.00	\$ 6,365.03	\$ 6,365.03	\$ 2,840.97
		12.3 Project Driver	\$ 5,746.00	\$ 2,146.88	\$ 3,100.21	\$ 5,247.09 \$ 498.91
	13	National Consultant(s) (short term)				
		13.1 Consultant 1-Conservation International	\$ 2,500.00			2,500
		13.2 Consultant 2-			-	-
	19	COMPONENT TOTAL:	\$ 77,534.00	\$ 22,569.76	\$ 14,787.77	\$ 37,357.53 \$ 40,176.47
20	SUB-CONTRACTS					
	21	Sub-contract (Topic e.g. mapping, etc.)- Rewa Nursery	\$ 2,500.00	\$ 998.26	998.26	1,502
	22	Sub-contract (Topic 2)			-	-
	29	COMPONENT TOTAL:	\$ 2,500.00	998.26	\$ -	998.26 \$ 1,501.74

30	TRAVEL						
	31	Daily Subsistence Allowance					
		31.1 National Expert(s)(DSA)	\$ 450.00			-	450
		31.2 National Consultant(DSA)	\$ 150.00			-	150
		31.3 Supporting staff(DSA)	\$ 450.00			-	450
		31.3				-	-
	32	International Travel					
		32.1 National Consultants(DSA)				-	-
		32.2 International Consultant(s)				-	-
		32.3 Others				-	-
	33	Local Transport Costs					
		33.1 National Expert(s)/ Consultant(s)-Forestry & Stakeholders-Fuel cost/Boat Hire	\$ 250.00			\$ -	250
		33.2 International Consultant(s)				-	-
		33.3 Others				-	-
	39	COMPONENT TOTAL:	1,300	\$ -	\$ -	\$ -	\$ 1,300.00

40	CAPITAL ITEMS						
	41	Premises-Nadave & Southern Cross	\$ 6,000.00	\$ 1,848.83		\$ 1,848.83	\$ 4,151.17
	42	4WDVehicle	\$ 42,700.00	\$ 30,086.49		\$ 30,086.49	\$ 12,613.51
		Computer and accessories	\$ 8,394.00	\$ 4,670.22		\$ 4,670.22	\$ 3,723.78
	44	Disaster improvement					
		44.1 Village Hall Improvement	\$ 45,000.00	\$ 34,894.40		\$ 34,894.40	\$ 10,105.60
		44.2 Foot Path	\$ 9,000.00	\$ 2,988.20		\$ 2,988.20	\$ 6,011.80
		44.3 Water Tank	\$ 2,208.00	\$ 2,523.25		\$ 2,523.25	-\$ 315.25
	49	COMPONENT TOTAL:	\$ 128,254.00	\$ 77,011.39	\$ -	\$ 77,011.39	\$ 36,290.61
50	CONSUMABLE ITEMS						
	51	Livelihood tools and materials	\$ 60,715.00	\$ 10,989.36	\$ 12,402.37	\$ 23,391.73	37,323
	52	Nursery Preparation tools and materials	\$ 21,510.12	\$ 8,498.86		\$ 8,498.86	13,011
		Seedling production tools and materials	\$ 3,912.88	\$ 3,827.52		\$ 3,827.52	85
	53	Planting materials and tools	\$ 1,554.00			\$ -	1,554
		Spare(Vehicle maintenance)	\$ 2,400.00	\$ 4,885.33		\$ 4,885.33	- 2,485
		Vehicle fuel	\$ 4,920.00			\$ -	4,920
		Home Biogas	\$ 14,952.00	\$ 15,403.13		\$ 15,403.13	-451.131
	54	Office Supplies	\$ 1,500.00	\$ 277.92		\$ 277.92	1,222
	59	COMPONENT TOTAL:	111,464	\$ 43,882.12	\$ 12,402.37	\$ 56,284.49	55,180

MISCELLANEOUS						
61	Printing of Guidelines	\$ 1,200.00	\$ 992.54		\$ 992.54	\$ 207.46
62	Training	\$ 8,100.00	\$ 7,909.59		\$ 7,909.59	\$ 190.41
63	Lunch & Refreshment	\$ 2,700.00	\$ 4,592.73		\$ 4,592.73	-\$ 1,892.73
	Training Materials	\$ 900.00	\$ 442.84		\$ 442.84	\$ 457.16
	Steering Committee meetings	\$ 1,000.00	\$ 345.62		\$ 345.62	\$ 654.38
	Auditing	\$ 8,000.00			\$ -	\$ 8,000.00
69	COMPONENT TOTAL:	\$ 21,900.00	\$ 14,283.32	\$ -	\$ 14,283.32	-\$ 1,494.86
National Management Costs						
71	Executing Agency Management Costs	This components are not used for ITTO budget				
72	Focal Point Monitoring					
79	Component Total:					
NATIONAL MANAGEMENT COSTS						
	Executing Agency Management Costs	\$ 10,000.00			\$ -	\$ 10,000.00
	Focal Point Monitoring	\$ 5,000.00			-	\$ 5,000.00
	COMPONENT TOTAL:	15,000	\$ -	\$ -	\$ -	\$ 15,000.00

PROJECT MONITORING AND ADMINISTRATION						
	ITTO Monitoring and review	\$ 22,500.00	\$ 1,492.36		\$ 1,492.36	\$ 23,992.36
	ITTO mid-term, final, ex-post evaluation costs	\$ 7,000.00			-	\$ 7,000.00
	ITTO Programme Support Costs	\$ 37,500.00			-	\$ 37,500.00
	COMPONENT TOTAL:	\$ 67,000.00	\$ 1,492.36	\$ -	\$ 1,492.36	\$ 68,492.36
100	GRAND TOTAL:	\$ 410,000.00	\$ 160,237.22	\$ 27,190.14	\$ 187,427.36	\$ 216,445.82
Remaining balance of funds before Exchange gain/loss					74,391.98	
	Exchange (gain)/loss */					
GRAND TOTAL			160,237.22			
	Remaining balance of funds				\$ 74,391.98	
Notes <ol style="list-style-type: none"> 1 The amount should include ITTO budget on the project agreement only. 2 The amount should include expenditure for the audit period. 						

REFERENCES:

1. Reporting Format-ITTO forth Edition format for Manual for project monitoring, review, reporting and evaluation....<https://www.itto.int/>
2. ITTO Mangrove Guideline document.
3. Phase two ITTO Project document.
4. Ministry of Fisheries: <https://www.fisheries.gov.fj/>
5. Ministry of Agriculture... <https://www.agriculture.gov.fj/>
6. Ministry of Environment <https://www.mowe.gov.fj/> (
7. Ministry of Rural and Maritime Development and Disaster Management.....<https://www.ruraldev.gov.fj/>
8. Ministry of Trade, Cooperative, Small and Medium business enterprise. <https://www.mcttt.gov.fj/>
9. Itaukei affairs Board...own website at <https://www.itaukeiaffairs.gov.fj/>.
10. Eco Grow... <https://ecogrownaturals.com/>
11. Secretariat of the Pacific Community....their website is <https://www.spc.int/>
12. Ministry of Health... <https://www.health.gov.fj/>
13. Fiji National University...: <https://www.fnu.ac.fj/>













