blue ventures
beyond conservation

UK International Development
Partnership | Progress | Prosperity

NIRAS

BLUE FORESTS SUMMATIVE EVALUATION

blue ventures
beyond conservation

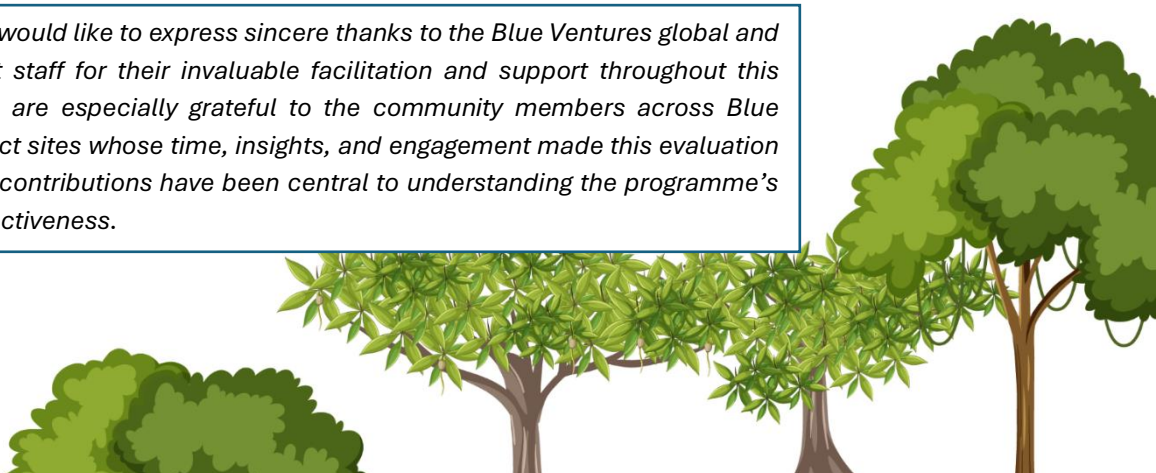
13 August 2025

Cover page photo: Nosy Fala fishing village, Madagascar. Source: NIRAS evaluation team

ACRONYMS

BF	Blue Forests
BPF	Blue Planet Fund
BV	Blue Ventures
Defra	Department for Environment, Food and Rural Affairs
EQs	Evaluation Questions
FCDO	Foreign, Commonwealth and Development Office
FGD	Focus Group Discussion
GESI	Gender, Equality and Social Inclusion
ICF	International Climate Finance
Inhil	Indragiri Hilir
KII	Key Informant Interviews
KPI	Key Performance Indicators
LPHD	Lembaga Pengelola Hutan Desa
MEL	Monitoring, Evaluation and Learning
MMP	Masyarakat Mitra Polhut
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
POKMASWAS	Kelompok Masyarakat Pengawas
ToC	Theory of Change
UK	United Kingdom
VfM	Value for Money (VfM)
VSLA	Village Loans and Savings Associations
YHB	Yayasan Hitan Biru
YMI	Yayasan Mitra Indonesia
YPI	Yayasan Planet Indonesia

The evaluators would like to express sincere thanks to the Blue Ventures global and country project staff for their invaluable facilitation and support throughout this evaluation. We are especially grateful to the community members across Blue Ventures' project sites whose time, insights, and engagement made this evaluation possible. Their contributions have been central to understanding the programme's impact and effectiveness.



EXECUTIVE SUMMARY

The Blue Forests (BF) programme, led by Blue Ventures (BV) and funded by the UK's Department for Environment, Food and Rural Affairs (Defra), aimed to protect and sustainably manage mangrove ecosystems while improving the livelihoods and health of coastal communities in Madagascar and Indonesia. Spanning 2017–2024, the programme was delivered across five sites and supported by £11.16 million in funding, 90% of which was attributed to International Climate Finance (ICF).

The NIRAS Evaluation team was contracted by BV to deliver evaluation services related to the implementation period of the programme (2021–2024). The overall purpose of the summative evaluation is to assess the impact of the BF programme and provide a synthesis of the lessons learned and recommendations for future programming. The implementation of the summative evaluation follows the framework as outlined in the BF evaluation inception report, produced by NIRAS in June 2022. The evaluation examined the BF programme achievements based on the six Organisation for Economic Co-operation and Development Assistance Committee (OECD-DAC) criteria: relevance, coherence, efficiency, effectiveness, impact and sustainability. These aspects are analysed using targeted evaluation questions (EQs). EQs were first reviewed by both Defra and BV and then approved by Defra in 2024, prior to the start of the summative evaluation, to ensure that the evaluation is exploring the right questions for the contexts of the BF programme in Madagascar and Indonesia.

Methods

The evaluation used a mixed-methods, theory-based approach to assess the primary programme change pathways by testing the programme's Theory of Change (ToC) using contribution analysis. Through this analysis, we assessed the degree to which activities have been completed, and whether the interventions and conditions identified were necessary and sufficient to create change on different levels of the intervention. The target audiences for this summative evaluation are BV, Defra and the wider UK's Official Development Assistance (ODA) teams, with the intent that the findings and recommendations are also informative to wider stakeholders. This includes the local implementing partners and, where appropriate, the programme beneficiaries.

The summative evaluation drew on the following key data sources: primary and secondary documents, including annual reviews, the programme logframe and workplans; learning event reports produced by NIRAS; and qualitative primary data sources from Focus Group Discussion (FGD) and Key Informant Interviews (KIIs). A case-based approach was used as the basis for this evaluation to describe and analyse BF's work in Madagascar and Indonesia. The unit of analysis for the case studies was the site level, with the assessment covering all BF interventions being delivered in that specific BF site. Case studies have been developed for two BF sites in Ambanja, Madagascar and Inhil (Indragiri Hilir), Indonesia. Field trips to each case study site were carried out between March and April 2025, with consultants carrying out in-person KIIs and FGDs, as well as participatory observation. A total of 169 individuals were interviewed across the main stakeholder groups: the UK government, global BV staff, in-country BV staff in Madagascar and Indonesia, technical and implementing partners within the two countries, government stakeholders and community members.

The primary limitation of this evaluation is its relatively narrow scope of assessment designed in 2021 compared to the scale of Defra's £11.16 million investment. To help remedy this, the ToR was updated in 2023 to include the provision of an additional site visit to Indonesia.

Presentation of speed boat used in conservation in Nosy Fala, Madagascar provided by Blue Forests programme. Source: NIRAS evaluation team

Key Findings by Evaluation Criteria

Relevance

FINDING 1: There is strong evidence that the BF programme design is effectively building on lessons learned from previous experiences and is responding to the needs and priorities of beneficiaries. BF's primary target beneficiaries are key actors in coastal fisheries and mangrove resource use/preservation in communities. In Madagascar, focus is on coastal community stakeholders related to fisheries exploitation. In Indonesia, focus is on key actors in mangrove preservation as identified by the scoping study, including regional and district government, village leaders, community patrol groups and fishers.

FINDING 2: The 'Community First' Approach at the core of the BF work is effective in engaging and empowering stakeholders to achieve change. Across the BF portfolio, a 'community first' approach is at the core of the project's design, ensuring the intervention is led by what the community wants and creates effective buy-in. This model prioritises training and peer learning, equipping communities with the skills and knowledge needed to drive change through tailored capacity-building and shared experiences. Staff are deeply embedded within the target communities and know the local context well.

FINDING 3: The project is effectively targeting some aspects of the problems identified, though there are gaps, including at a strategic level. The BF programme seeks to address a range of problems including mangrove harvesting, fisheries exploitation, lack of local governance, overdependence on vulnerable resources, access to health services, gender equity and social and financial inclusion. Interventions often address overlapping problems and are complementary across pillars. While the problems being addressed were clear, there were some strategic gaps in terms of targeted interventions to address the drivers of change, resource users and beneficiaries.

FINDING 4: The project has effectively incorporated consideration of women and gender inclusion in design, though mechanisms vary and have been tailored to cultural circumstances (i.e. responsive but not transformative), and some barriers remain. Women have been actively targeted to take part in the project and are currently participating in many activities, including fish processing, community health, mangrove patrolling, catch enumeration and alternative livelihoods. There are differences across sites in terms of gender inclusion in design. In more mature sites in Madagascar, female participation is felt to be relatively even and contextually relevant, tailored to the cultural norms of communities. In Indonesia, the male-dominated environment was highlighted as a safeguarding challenge and as a barrier to engagement.

Coherence

FINDING 5: There is strong evidence that the BF programme has clear overall community buy-in, as well as support from local and regional government. The programme has established strong community buy-in and has sustained this through various mechanisms, such as the 'community first' approach, as well as technical expertise from BV and partner staff from the local area who bring an understanding of context/issues. Buy-in is further strengthened by the success and ownership of activities by community members.

FINDING 6: Some challenges exist regarding wider stakeholder engagement and coordination. Although there is clear evidence for strong community buy-in, coordination across other stakeholders has been a challenge for BF, particularly in Indonesia. In Inhil, the programme's success is tempered by coordination challenges within government and between villages and sub-districts, conflicts over territorial fishing rights and inconsistencies in land use planning. In Madagascar, there have also been some difficulties in government coordination, especially early on in the programme.

FINDING 7: The BF programme is felt to be coherent with local, regional and national priorities, though complexities exist in implementation. In both Madagascar and Indonesia, stakeholders recognised that government departments lacked the financial means and human capacity to support many activities, so BF programme support was felt to be crucial and mutually beneficial. The national law in Madagascar prohibiting mangrove harvesting came into force partway through the programme, creating mixed results as it varies by region within the country. In Indonesia, needs assessments and training activities were undertaken with the regional government to ensure interventions were appropriate. Throughout implementation, local government partners have

been engaged in BF activities, and the programme is recognised as filling critical gaps in local government capacity by supporting ecosystem restoration efforts that align with regional development priorities.

Efficiency

FINDING 8: Based on the available data, there is some evidence that the programme delivers fair Value for Money (VfM) overall, achieving results and adapting to challenging contexts to improve delivery and obtain results. However, challenges to VfM exist in Indonesia, specifically under economy ('inputs at the right price') and efficiency ('converting inputs to outputs'). While Madagascar also experienced challenges to efficiency at certain points, overall the country has delivered better VfM than Indonesia. Specific VfM indicators were not set in the lifetime of the programme and, according to programme documentation, not requested by Defra. According to Defra, there will be a monetary benefit analysis to mark programme closure to compare against the original business cost ratio set out in the Blue Forests Business Case, once validated impact indicator results are available. This is needed to help strengthen the evidence base for the Blue Planet Fund (BPF) as a whole and provide contribution and accountability of the BF's VfM.

Effectiveness

FINDING 9: There is strong evidence that the BF programme has achieved its higher-level outcomes across the mangrove, fisheries management and community governance pathways, while making progress towards programme outcomes in community health. Livelihood diversification has had mixed success and activities remain limited in scale. The programme has supported activities that have resulted in enhanced mangrove protection across all sites through the development and implementation of local management plans. These efforts have been driven by cross-cutting interventions addressing multiple pathways. This initiative has expanded mangrove coverage, fostered community appreciation and ownership of the restored areas and strengthened local livelihoods by introducing sustainable economic opportunities. The programme has made significant contributions to improving value, protection and benefits to fishers. Community health interventions have also yielded success. However, there have been notable challenges surrounding the livelihoods pathway. Across all sites, activities struggled to find suitable markets to allow for scaling, resulting in limited income from these interventions. In 2022, BV expanded the livelihoods pathway to include a greater focus on financial inclusion, value chains and improvements to existing livelihoods.

FINDING 10: Strong stakeholder engagement through the community first approach has been key in contributing to project outcomes. This was found to be a key change mechanism. Blue Ventures' community-first model is grounded in the principle of local leadership and ownership, empowering coastal communities to take the lead in managing and protecting their marine environments. This stakeholder-led approach enables the project to draw on local knowledge and expertise of community members, which is often critical in understanding environmental, social and economic dynamics.

FINDING 11: The social capital, built through trust and collaboration with BV (Madagascar) and its implementing partners (Indonesia) has been instrumental to the project's ability to carry out its work effectively. In Madagascar, continuity has fostered deep trust and strong relationships with communities and stakeholders at the Ambanja site. The programme's flexibility—such as pausing or stopping interventions like sea cucumber farming—was enabled by open dialogue and trust between BV and the community, allowing for responsive and context-sensitive decision-making. At Inhil, BV worked through trusted local NGOs (YHB and YMI) who had long-standing relationships with communities. This pre-existing social capital enabled rapid engagement and effective delivery.

FINDING 12: Learning, adaptability and flexibility from partners, stakeholders and the funding mechanism have established a solid foundation for effective delivery by ensuring responsiveness to local contexts and emerging challenges. These attributes of the programme enabled the project teams to address community-specific needs efficiently, ensuring interventions remain relevant and well-targeted. Stakeholder feedback was used to reveal barriers that require modifications to planned activities. When alternative livelihoods proved difficult to scale due to market and permitting challenges, BV pivoted in 2022 to focus on value chains and financial inclusion, showing responsiveness to both community needs and feasibility constraints.

FINDING 13: The programme has continuously evolved, responding to emerging challenges and refining its approach to better serve community needs. This adaptability is evident across different scales, from high-level strategy shifts to more localised refinements. The Covid-19 pandemic required a fundamental reassessment of delivery methods, leading to new solutions such as remote engagement and modified field activities. These changes ensured that key programme objectives remained achievable despite restrictions, highlighting the programme's ability to pivot in response to external disruptions.

FINDING 14: The programme has been designed to integrate communities that depend on mangrove environments for their livelihoods and those actively involved in managing these ecosystems as beneficiaries. Engagement has been structured to ensure involvement at multiple governance levels, from local decision-making processes to broader policy discussions, reinforcing inclusive and sustainable management.

FINDING 15: Despite success in activities across the BF strategic pathways, wider community integration has remained limited in Indonesia. There are opportunities to enhance crossover, such as incorporating more women from business groups into community surveillance initiatives. This is most strongly illustrated with the gender disparity experienced at Inhil. Men and women participated differently across the activities, with men more engaged in management and governance activities and women in the livelihoods and community health pathways. Women interviewed at the Inhil site expressed interest in engaging more with this work. Hence, opportunities for greater cross-over could be experienced by incorporating women into governance activities.

FINDING 16: Logframe indicators and targets have been periodically reviewed and updated to maintain relevance and alignment with evolving priorities. As programme activities have progressed, certain indicators have required recalibration to ensure they accurately track outcomes progress, reinforcing the commitment to meaningful evaluation. This is best demonstrated by the challenges with the establishment of the blue carbon strategic pathway, which instigated its removal from the logframe in 2022. In addition, multiple health-related indicators were adjusted or replaced/removed to better reflect the contextual relevance in Indonesia.

FINDING 17: Gender participation has been evident across various roles, with women actively contributing to programme activities. However, their engagement differs from men's, often aligning with specific responsibilities or sectors. There is an opportunity to adopt more intentional gender-responsive approaches rather than relying on existing frameworks. While there have been efforts made throughout programme delivery to achieve equitable gender balance, traditional roles and social norms have shaped participation dynamics, sometimes resulting in subtle imbalances.

Impact

FINDING 18: There is some evidence that the Blue Forests programme has contributed to significant impacts across multiple dimensions, contributing to local management, protection and restoration of mangrove forests. There is some evidence the programme influenced community livelihoods to a limited extent. Across the five project sites, mangrove management has played a critical role in both preventing degradation and advancing restoration. At the portfolio level, BF has facilitated the establishment of 12 fishery monitoring activities and five management plans and five locally relevant closures or gear restrictions. These combined efforts have resulted in the removal or avoidance of over five million tonnes of carbon dioxide emissions and the preservation of 2,413 hectares of forest that would otherwise have been lost. There is some evidence on the extent to which the programme has made improvements to livelihoods. Though the programme achieved many of their indicators within this pathway, the evaluation revealed the impact of those output and outcome indicators does not automatically result in improved livelihoods for community stakeholders.

Photo: Local community members enumerating Mahaloky catch, Nosy Fala, Madagascar. Source: NIRAS evaluation team

Sustainability

FINDING 19: There is some evidence that the Madagascar site has potential for medium-term sustainability. At the Indonesia site, sustainability is limited and continued support is needed. At both sites, financial sustainability is not assured. The key enabling factors that strengthened sustainability in Ambanja include: the sub-granting model; community buy-in; and institutional support. In Indonesia, sustainability challenges are more prevalent and continued support is needed for results in the country to continue and further develop, even with some elements of sustainability in place. Key challenges identified at the Inhil site that influence sustainability include: high dependency on financial and technical support from BV and partners; local government lacks budget, capacity and capability to sustain activities independently; short project duration (only two years); and no clear exit strategy in place.

FINDING 20: Sustainability per strategic pathway is only assured at both sites for Community Governance. Neither site had developed exit strategies for the end of the programme, which could have strengthened the sustainability of the strategic pathways with weaker sustainability. In Madagascar, some of the strategic pathways demonstrate resilience and a degree of self-sufficiency while others remain dependent on continued support from BV. Three of the five pathways were graded positively for sustainability: blue carbon and forestry management; fisheries management; and community governance. A majority of activities within these pathways are completely self-managed, such as fish enumeration, community meetings and reforestation activities. At the Inhil site a strong regulatory framework (the village forest management rights) exists which helps support programme sustainability. The programme has also helped develop and implement the management plan for the Inhil marine protected area (MPA) as well the creation of a Strategic Unit of Operation to govern this area. Other pathways, such as community health, exhibit strong sustainability due to community engagement, institutional support and management, equipment and its backed by law/policy, but is less assured in finance availability.

Contribution to transformational change (ICF KPI15)

The programme's business case describes transformational change as "successful interventions to reduce deforestation can transform rural governance and economies at national and international scales". **From the aggregated scores across the six ICF criteria, the evaluation has assessed the Blue Forests programme with an ICF KPI15 score of 4: there is partial evidence to suggest that transformational change is likely to occur from the programme.** Certain criteria, such as political will and local ownership, increasing capacity and capability and scalability, are already demonstrating evidence of this change occurring. Evidence of the intervention's effectiveness being shared, leveraging others to act and scalability of the programme demonstrates partial evidence of transformational change. Sustainability, while strong for some strategic pathways in the programme and particularly in Madagascar, is inconclusive when considering both Madagascar and Indonesia.

Conclusion

The BF programme has demonstrated a significant and multifaceted contribution to the sustainable management of mangrove ecosystems and the wellbeing of coastal communities in Madagascar and Indonesia. The programme is overall addressing the right problems and has targeted the relevant beneficiaries across sites, while also being inclusive of wider stakeholders. However, some strategic gaps remain in terms of addressing drivers of change, resource users and beneficiaries. BF targets women's participation and actively seeks to include women in activities, but challenging gender contexts were found to affect certain aspects of delivery.

Through its integrated, community-first approach, the programme has achieved notable outcomes across its five strategic pathways—mangrove and blue carbon management, small-scale fisheries, community governance, livelihoods and community health. Most indicators have been achieved across the logframe with a relatively high level of contribution from the BF programme. Delivery has benefitted from its community-led design and the flexibility of both its implementation and funding, while the long-term nature of funding has provided stability.

While the BF programme has laid a strong foundation for transformational change to potentially occur, particularly in terms of political will, local ownership and capacity building, the sustainability of project outcomes is at risk post-funding with no clear exit strategy in place. For some strategic pathways at the two sites, without continued support from the programme/BV, many activities would be unlikely to persist due to resource and capacity constraints. There is need for clearer exit strategies, improved financial sustainability and more intentional gender-responsive

approaches, particularly in Indonesia. The programme's long-term impact will depend on continued investment, strategic scaling and the resolution of systemic barriers, such as the operationalisation of blue carbon finance.

Key Lessons

The success of certain strategic pathways depended heavily on partner engagement, with isolated activities requiring stronger coordination mechanisms to maintain coherence. The strategic pathways, livelihood diversification and blue carbon faced considerable challenges. External factors disrupted intended outcomes, while in some instances, the groups receiving support were not necessarily those best positioned to drive long-term impact.

Successful interventions require balancing economic opportunity with long-term sustainability and local buy-in. The programme's pivot towards a more holistic approach to reducing the reliance on unsustainable practices has allowed the programme to be more effective. The livelihood diversification, value chains and savings groups pathway has been particularly challenging for the programme. Rather than shifting entirely away from fishing, strengthening value chains improves incomes while maintaining traditional practices. Savings groups and cooperatives offer financial stability but must be carefully targeted to ensure they engage those whose activities impact mangrove health.

While carbon finance offers a promising pathway for sustainability, its implementation is highly dependent on regulatory clarity, political will and bureaucratic efficiency, factors that were beyond the control of implementing organisations. While carbon finance holds great potential, at present its viability depends too much on unpredictable external processes, risking long-term sustainability.

Building the BF programme from the foundations of previous work (Madagascar) or through pre-existing relationships (Indonesia) has contributed to buy-in and engagement from the outset. Without these foundational relations, it is likely the lead time to implementing activities would have been longer, and buy-in not so assured.

The community-first approach adopted across the BF programme has proven effective and key to engaging and empowering stakeholders to achieve change, ensuring the intervention is led by what the communities want and need and by having BV/local partner team members embedded within the communities and understanding local contexts well.

The programme has been able to be responsive and adaptive due to the flexibility of partners and the funding mechanism, highlighting the importance of such flexibility for enabling local BV and partner team members to optimise programme delivery, deal with emerging challenges and adapt to context as needed.

Recommendations

1: The programme should revisit expectations under the livelihood diversification, value chains and savings groups pathway and continue to update or adapt according to the challenges observed and solutions already being tested on the ground.

2: Defra should continue to enable flexible funding of delivery partners so that they may adapt according to the challenges observed and contexts on the ground. Flexible funding allowed local BV and partner teams to deliver effectively when faced with programmatic challenges or external challenges that were hindering results.

3: Ensure appropriate mechanisms for women to engage proactively in all programmatic implementation activities (including, for example, governance), not just those that align with existing cultural norms and perceived gender roles. This is particularly the case in Indonesia where women voiced interest for wider engagement in patrol activities.

4: There is an opportunity to better integrate activities across sectors, allowing all community stakeholder groups to reinforce a unified message that protecting mangroves is directly linked to sustaining fish stocks and improving community livelihood and health.

5: Defra should require VfM reporting to ensure accountability and value of ODA-spend.

6: A transition strategy/plan is needed to plan per site more explicitly for future sustainability of the programme.

7: In the event of BF programme replication at new sites, it will be a valuable exercise to pre-identify the key drivers of mangrove habitat loss or impacts and ensure the strategic approach adopted effectively targets the stakeholders involved in those drivers.

1. PURPOSE, SCOPE AND OBJECTIVES

1.1. Introduction

The Blue Forests (BF) programme seeks to protect and sustainably manage mangrove forests while reducing the poverty of the coastal communities that rely on them. The programme was delivered independently by the non-governmental organisation (NGO) Blue Ventures (BV) from January 2017 to September 2025. The United Kingdom (UK) government's Department for Environment, Food and Rural Affairs (Defra) provided £11.16 million of funding to the BF programme from the UK's Official Development Assistance (ODA) budget, of which 90% is attributable to International Climate Finance (ICF). The BF programme is aligned with the objectives of the Blue Planet Fund's (BPF) and reflects the UK's commitment to addressing global environmental challenges through locally driven solutions.

This report presents the summative evaluation of the BF programme. The report is structured into six sections, with two additional technical annexes on the programme's delivery in two sites in Madagascar and Indonesia provided in Annexes 4 and 5:

- **Section 1** introduces the programme, the evaluation's scope and target audience.
- **Section 2** describes the evaluation approach and methods used.
- **Section 3** sets out the findings from the assessment, aligned to the six Organisation for Economic Co-operation and Development – Development Assistance Committee (OCED-DAC) criteria of relevance, coherence, efficiency, effectiveness, impact and sustainability.
- **Section 4** provides an assessment of transformational change.
- **Section 5** presents conclusions, lessons and recommendations.

1.2. Overview of Blue Forests

Mangroves provide an extensive range of ecosystem services that are of vital importance to communities, inhabiting low-lying coastal areas in the tropics, particularly those communities that rely on marine and coastal ecosystems for their social and economic wellbeing. Mangrove ecosystems provide valuable resources to local communities, such as timber, fuel, fish, crabs, nipa palms and honey, offering direct economic benefits and opportunities for sustainable livelihoods.[1] They are also critical habitats for various animal species, while also acting as natural repositories for sediments and nutrients.[2] Furthermore, they play a vital role in mitigating climate change and reducing the impacts of natural disasters on coastal areas.[3] Mangroves provide protection to shorelines and coastal communities during storm surges, cyclones and tsunamis, and their rate of carbon sequestration can be greater than that of comparable terrestrial systems. This makes them central to efforts to develop climate mitigation and adaptation approaches that harness nature and ecosystem services to enhance climate resilience. However, due to

[1] Getzner M, Islam MS. Ecosystem Services of Mangrove Forests: Results of a Meta-Analysis of Economic Values. Int J Environ Res Public Health. 2020 Aug 12;17(16):5830. doi: 10.3390/ijerph17165830. PMID: 32806567; PMCID: PMC7459810, and Kusmana, Cecep & Sukristijiono, Sukristijiono. (2016). MANGROVE RESOURCE USES BY LOCAL COMMUNITY IN INDONESIA. Journal of Natural Resources and Environmental Management. 6. 217-224. 10.19081/jpsl.2016.6.2.217.

[2] Nagelkerken, Ivan & Blaber, S. & Bouillon, Steven & Green, P. & Haywood, Michael & Kirton, L.G. & Meynecke, Jan-Olaf & Pawlik, Joseph & Penrose, Helen & Sasekumar, A. & Somerfield, Paul. (2008). The habitat function of mangroves for terrestrial and marine fauna: A review. Aquatic Botany. 89. 10.1016/j.aquabot.2007.12.007.

[3] Qiang Chen, Yuepeng Li, David M. Kelly, Keqi Zhang, Brian Zachry, Jamie Rhome (2021) Improved modeling of the role of mangroves in storm surge attenuation, Estuarine, Coastal and Shelf Science, Volume 260, 2021, 107515, ISSN 0272-7714, https://doi.org/10.1016/j.ecss.2021.107515.

a range of man-made pressures, mangrove ecosystems are in decline worldwide at an estimated rate of 0.13 percent per year globally[4] (0.19 percent per year in Indonesia[5] and 0.85 percent in Madagascar[6]).
The BF programme seeks to protect and sustainably manage mangrove forests through community-led initiatives that support improved management and sustainability of small-scale fisheries and develop sustainable livelihoods of coastal communities. By fostering local ownership and building the capacity of stakeholders, the programme aims to create lasting positive impacts on both the environment and the communities that depend on it. The BF programme was an 8-year (2017–2024) programme that was implemented at five sites, three in Madagascar and two in Indonesia (Figure 1).

Figure 1: BF sites in Madagascar and Indonesia. Source: Blue Ventures

The programme delivered outcomes across five strategic pathways:

1) **Blue carbon sequestration and forestry management:** Enhancing the capacity of local communities to manage and protect mangrove forests, thereby increasing carbon sequestration and contributing to climate change mitigation.
2) **Small-scale fisheries management and improvement:** Supporting the sustainable management of small-scale fisheries to ensure long-term food security and economic stability for coastal communities.
3) **Community governance:** Helping put in place the organisational and financial structures that will support sustainable management.
4) **Livelihood improvements:** Developing and improving livelihoods to reduce pressure on marine resources and provide economic opportunities for local populations.
5) **Community health:** Promoting community health initiatives and empowering women to take active roles in conservation and sustainable development efforts.

[4] Goldberg L, Lagomasino D, Thomas N, Fatoyinbo T. Global declines in human-driven mangrove loss. Glob Chang Biol. 2020 Oct;26(10):5844-5855. doi: 10.1111/gcb.15275. Epub 2020 Aug 3. PMID: 32654309; PMCID: PMC7540710.

[5] Yuki Yamamoto (2023) Living under ecosystem degradation: Evidence from the mangrove–fishery linkage in Indonesia, Journal of Environmental Economics and Management, Volume 118, 2023, 102788, ISSN 0095-0696, https://doi.org/10.1016/j.jeem.2023.102788.

[6] Ivan Scales (2019) Patterns of mangrove forest disturbance and biomass removal due to small-scale harvesting in southwestern Madagascar, 2019, Wetlands Ecology and Management, https://doi.org/10.1007/S11273-019-09680-5

The BF Theory of Change (ToC; Figure 2) outlines activities across these strategic pathways and intended outputs, outcomes and impact. The ToC was updated in 2024 in collaboration with NIRAS and serves as the theoretical basis to test for this evaluation.

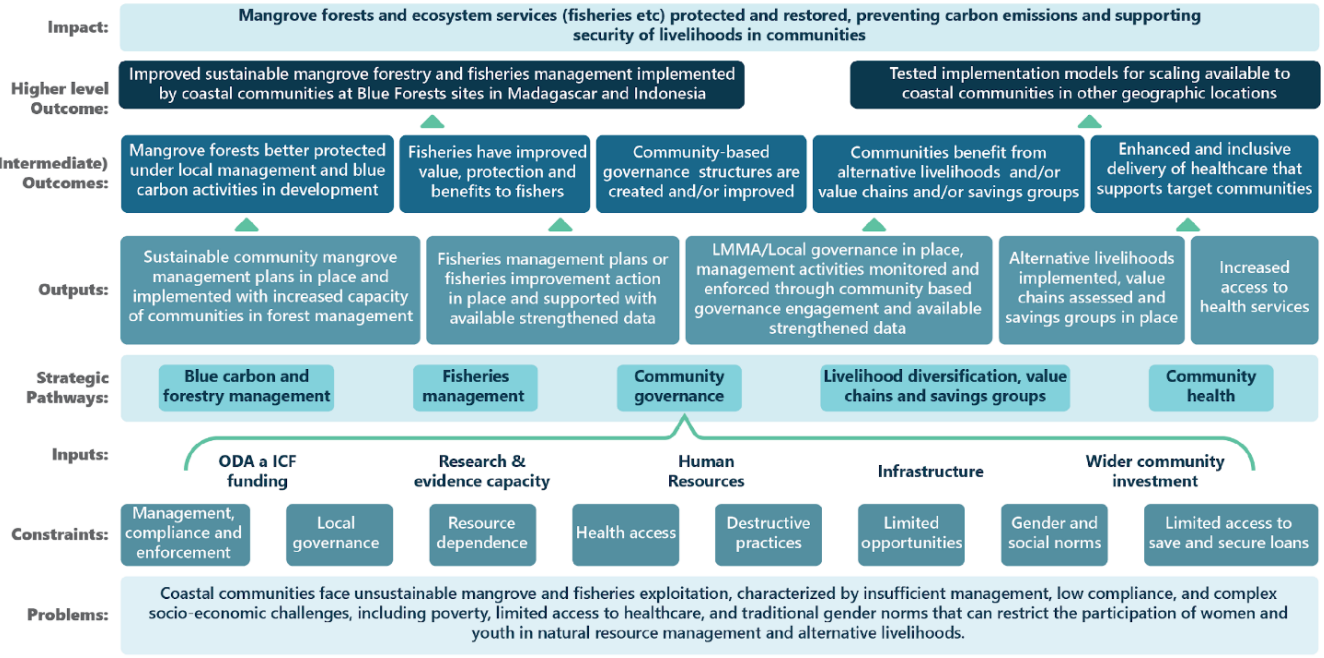


Figure 2: Blue Forests programme Theory of Change

Annex 1 provides the programme's ToC narrative, which details the activities, interventions and impact pathways.

1.3. Purpose and Scope of the Summative Evaluation

The NIRAS Evaluation team was contracted by BV to deliver evaluation services related to the implementation period of the programme (2021–2024). The overall purpose of the summative evaluation is to assess the impact of the BF programme and provide a synthesis of the lessons learned and recommendations for future programming. The implementation of the summative evaluation follows the framework as outlined in the BF evaluation inception report, produced by NIRAS in June 2022.

The evaluation examined the BF programme achievements based on the six OECD-DAC criteria: relevance, coherence, efficiency, effectiveness, impact and sustainability. These aspects are analysed using targeted evaluation questions (EQs) to ensure a thorough assessment. EQs (Annex 2) were drafted and finalised in collaboration with BV and Defra. Additionally, the findings are assessed against the Foreign, Commonwealth & Development Office's (FCDO) 4Es Value for Money (VfM) framework to determine the programme's effectiveness, efficiency, equity and economy.

The evaluation also specifically focussed on the programme's sustainability and scalability, considering its long-term viability and potential for wider application, using a rubric-based assessment. These assessments contribute to an evaluation of the programme's contribution to transformational change, in line with ICF's Key Performance Indicator (KPI) 15 criteria, highlighting its potential for broader impact.

Between 2022 and 2024 ahead of the summative evaluation, the NIRAS evaluation team completed three reviews of different elements of the programme's monitoring, evaluation and learning (MEL) systems and specific strategic pathways, including:

- Log frame review and revision, to bring it more in line with what the programme was delivering and adjust targets;
- Community Health pathway review and update, to create more specific and tailored indicators applicable to this pathway being delivered within different countries and site contexts; and
- A programme Theory of Change review and update to ensure it accurately reflected what the programme was delivering and update underlying assumptions.

1.4. Target audience and stakeholders

The target audiences for this summative evaluation are BV, Defra and the wider UK ODA teams, with the intent that the findings and recommendations are also informative to wider stakeholders. This includes the local implementing partners and, where appropriate, the programme beneficiaries.

2. EVALUATION APPROACH AND METHODS

2.1. Overview

The evaluation used a mixed-methods, theory-based approach to assess the primary programme change pathways by testing the programme's ToC using contribution analysis. Through this analysis, we assessed the degree to which activities have been completed, and whether the interventions and conditions identified were necessary and sufficient to create change on different levels of the intervention. Programme-level data was collected to assess overall progress against the indicators and milestones in the programme logframe. This twin-track approach allowed for triangulation and validation of evidence from different sources. This theory-based approach is suited for testing and validating intervention models as set forth in the BF business case and operating in diverse and complex contexts.

2.2. Evaluation Questions

EQs were first reviewed by both Defra and BV and then approved by Defra in 2024, prior to the start of the summative evaluation, to ensure that the evaluation is exploring the right questions for the contexts of the BF programme in Madagascar and Indonesia. EQs are presented in the Evaluation Matrix (Annex 2) by OECD-DAC criteria and focus on the relevance, coherence, efficiency, effectiveness, impact and sustainability of the programme.

2.3. Data Sources and Collection

The summative evaluation drew on the following key data sources:

- **Primary and secondary documents —** BF programme documents, including annual reviews, quarterly reports, strategic pathway reporting and programme datasets, workplans and site-specific management plans, as well as BF profiles from secondary sources and related government policy documents. See Annex 3 for list of documents reviewed.
- **Learning event reports —** NIRAS produced documents from the results of learning event/ToC workshops held in 2022–2024 and distributed to BF programme stakeholders.
- **Qualitative primary data —** Through key informant interviews (KIIs) with a total of 169 BV portfolio and site-based staff, implementing partners, government partners and community members interviewed; focus group discussions (FGDs) at the site level (with a total of 10 FGDs conducted involving 123 stakeholders); and participatory observation during visits to BF sites in Madagascar and Indonesia in March and April 2025. See Table 1.

Table 1: Stakeholder groups and numbers of individuals engaged in the evaluation. N.B. – 'technical partners' are organisations who work with BV; 'implementing partners' are partners delivering on behalf of BV.

Evaluation Stakeholder Groups	Men	Women	Total
UK Government: Defra, FCDO	4	3	7
Global Blue Ventures Staff	2	4	6
BV Staff - Madagascar	12	6	18
BV Staff - Indonesia	1	3	4
Technical partners - Madagascar	1	1	2
Implementing partners (YHB and YMI) - Indonesia	13	4	17
Government - Madagascar	1	1	2
Government - Indonesia	10	1	11
Community Members - Madagascar	32	14	46
Community Members - Indonesia	37	19	56
Total	**113**	**56**	**169**

2.4. Case Studies

A case-based approach was used as the basis for this evaluation to describe and analyse BF's work in Madagascar and Indonesia. The unit of analysis for the case studies was the site level, with the assessment covering all BF interventions being delivered in that specific BF site. Case studies have been developed for two BF sites in Ambanja, Madagascar and Inhil (Indragiri Hilir), Indonesia (Figure 1). These sites were chosen on the recommendation of BV, based on factors such as accessibility to the sites, site implementation maturity, seasonal weather patterns and observance of religious holidays. The case studies serve as part of our evidence base to answer the EQs. Technical reports for the case studies can be found in Annex 6.

Field trips to each case study site were carried out between March and April 2025, with consultants carrying out in-person KIIs and FGDs, as well as participatory observation.

2.4.1. Strength of Evidence

The strength of evidence used in the analysis was assessed for each EQ in order to provide a transparent reflection on the evidence base for the analysis. The strength of evidence was assessed against the scale below (Table 2), using a Red-Amber-Green (RAG) rating, with three possible ratings, statements of the evidence strength and definitions. Descriptions of the assessed strength of evidence have been provided for each EQ.

Table 2: Strength of Evidence Scale

Rating	Statement	Definition
Strong evidence	There is clear and corroborative evidence to make a judgement	Evidence can be corroborated via monitoring data, programme documents and primary data to support a judgement
Some evidence	There is some evidence to make an estimated judgement	Some evidence amongst monitoring data, programme documents or primary data supports a judgement
Limited evidence	Insufficient evidence to make a judgement	Evidence is singular and while may suggest a claim, is insufficient to support a judgement

2.5. Evaluation methods

The evaluation of the BF programme employed a theory-based, mixed methods approach to understand how and in what ways the programme delivered results across its strategic pathways. A central method used was contribution analysis, which applied the programme's ToC to assess BF's contribution to observed outcomes and impacts. This method was implemented at both the programme level and within site-level case studies (Madagascar and Indonesia), using contribution hypotheses to trace change from outputs and intermediate outcomes through to final

outcomes. The evaluation team utilised contribution analysis templates (Annex 4) to capture key changes occurring within the programme.

There are many conservation and development actors active in the same space as BF, delivering programmes focussed on improving communities' livelihoods and wellbeing and the coastal environment. To avoid BF claiming results also claimed by other similar programmes, we utilised a strength of contribution scale, presented below (Table 3), for each identified outcome-level change. For each key outcome-level result, the evaluation team assessed the significance of the change, the level of BF's contribution and its alignment with the ToC pathways, while also accounting for the influence of other actors operating in similar contexts.

Table 3: Extent of contribution rubric

	Extent of Contribution			
Strength of evidence	**Critical contribution**	**Important contribution**	**Some contribution**	**Negligible contribution**
Strong evidence	**Very confident** that BF made a **critical** contribution to the outcome	**Very confident** that BF made an **important** contribution to the outcome	**Very confident** that BF made **some** contribution to the outcome, alongside other factors, but was not the most important cause	**Very confident** that BF contribution to the outcome was **negligible**
Some evidence	More confident than not that BF made a **critical** contribution to the outcome	More confident than not that BF made an **important** contribution to the outcome	More confident than not that BF made **some** contribution to the outcome, alongside other factors, but was not the most important cause	More confident than not that BF contribution to the outcome was **negligible**
Limited evidence	Insufficient evidence to support a contribution judgement			

Complementing this, VfM analysis was carried out by comparing budgeted versus actual spend and identifying key cost drivers. In addition, the evaluation assessed the programme's potential for sustainability and scalability through dedicated rubrics that examined the likelihood of continued outcomes and the feasibility of replicating the model in other coastal contexts. An adapted transformational change scorecard was also used to provide a preliminary assessment against ICF's KPI 15. Evidence from qualitative and quantitative sources was systematically aggregated using contribution analysis templates and sustainability and scalability rubrics (Annex 5), ensuring triangulation of findings and identification of divergent perspectives, thereby strengthening the robustness of the evaluation conclusions.

2.6. Limitations

The primary limitation of this evaluation is its relatively narrow scope of assessment designed in 2021 (see Annex 8 for the full Terms of Reference (ToR) for this evaluation) compared to the scale of Defra's £11.16 million investment. The programme was implemented across five geographically dispersed sites in Madagascar and Indonesia. However, the original ToR limited the ability of the evaluation to investigate the breadth and depth of the entire portfolio. To help remedy this, the ToR was updated in 2023 to include the provision of an additional site visit to Indonesia. As a result, the evaluation adopted a case-based approach to extrapolate findings to the broader Blue Forests programme portfolio where possible. The evaluation includes assessments of the strength of evidence and confidence in contribution and clearly distinguishes, where possible, between site-specific and Blue Forests portfolio-level findings. Due to the site-based approach and limited scope available for the evaluation, one delivery partner in Indonesia, Yayasan Planet Indonesia (YPI), was not consulted during evaluation activities.

There was a notable gender imbalance among KIIs, particularly with respect to in-country interviewees. This is due to several factors:

- Women are generally under-represented at government level, in both Madagascar and Indonesia.
- Women were under-represented among the implementing partner NGOs in Indonesia. However, YMI has taken steps to address this imbalance, achieving a male-to-female interview ratio of 6:4.
- During the community surveys in Inhil, women were only present in small numbers in the fishing and community governance groups. The majority of women (15) were surveyed as part of the business and health groups. As a result, the feedback we have received is likely to be dominated by the male perspective and may have hindered our ability to identify how the project is addressing certain GESI criteria.

Photo: Local fishing village in Nosy Fala, Madagascar. Source: NIRAS evaluation team

3. KEY FINDINGS BY EVALUATION CRITERIA

Here we present the key findings against the evaluation criteria.

3.1. Relevance

EQ1:	Has the project targeted the relevant beneficiaries inclusively?		
EQ2:	To what extent has the project design responded to the needs and priorities of beneficiaries?		
Rating	**Statement**	**Definition**	**Description**
Strong evidence	There is clear and corroborative evidence to make a judgement	Evidence is able to be corroborated amongst monitoring data, programme documents and primary data to support a judgement	The evaluation team gathered relevant data from programme documentation and KIIs, including with in-country stakeholders (n=32) and local communities (n=102). The coding process on MAXQDA resulted in over 180 codes allocated to relevance to support the analysis that provided clear and corroborative evidence to make a judgement.

FINDING 1: There is strong evidence that the BF programme design is effectively building on lessons learned from previous experiences and is responding to the needs and priorities of beneficiaries.

The BF programme was initially implemented in Madagascar, building on BV's long-standing presence in the country (since 2003) and its previous initiatives focussed on mangrove biodiversity, poverty alleviation and rights-based fisheries management (supported from 2012 to 2017 by the Darwin Initiative). Lessons learned from these initiatives, such as the importance of community-ownership and participation, informed and guided the programmatic design of the BF work, which was launched in two active sites in 2017—Ambanja and Velondriake—and expanded to a third site (Mahajamba) later in 2017. Site set-up in Mahajamba was informed through a needs assessment as BV had not previously conducted activities in this area and was supported through partnership with the sustainable seafood company UNIMA.

In 2017/2018, the programme conducted a scoping mission to explore the expansion of the model developed in Madagascar to other countries such as Myanmar, the Solomon Islands and Indonesia. A scoping study was used to identify sites in Indonesia with large areas of mangrove that were under threat from unsustainable activities, that had local NGOs well-positioned to implement the BF programme activities and an engaged stakeholder community. This resulted in the selection of two sites—Indragiri Hilir (Inhil), Riau Province and Kubu Raya, West Kalimantan[7]. In Kubu Raya, two local partners were engaged for implementation—Yayasan Planet Indonesia (YPI) and Yayasan Hutan Biru (YHB). In Inhil, two local partners were engaged for implementation—Yayasan Hutan Biru (YHB) and Yayasan Mitra Insani (YMI). The strong foundation laid by this scoping study allowed the programme to target the relevant beneficiaries from the outset, while relying on a trusted and embedded local NGO (YMI) to identify and adapt the programme activities to the emerging needs of the beneficiaries.

BF's primary target beneficiaries are key actors in coastal fisheries and mangrove resource use or preservation in communities. In Madagascar, focus is on coastal community stakeholders related to fisheries exploitation. In Indonesia, focus is on key actors in mangrove preservation as identified by the scoping study, including regional and district government, village leaders, community patrol groups and fishers.

[7] Scoping initially led to the selection of Sembilang National Park as a BF site. However, as BV were unable to acquire the necessary permits to operate at the site, focus moved to Inhil in 2021 (a site that had also been a part of the initial scoping study). More information on this is available in Sections 3.3.1 and 3.3.2.

FINDING 2: The 'Community First' Approach at the core of the BF work is effective in engaging and empowering stakeholders to achieve change.

Across the BF portfolio, a 'community first' approach is at the core of the project's design, ensuring the intervention is led by what the community wants and creates effective buy-in. This model prioritises training and peer learning, equipping communities with the skills and knowledge needed to drive change through tailored capacity-building and shared experiences. Staff are deeply embedded within the target communities and know the local context well. Throughout Madagascar, many BV staff are local to the region and know the context well. Similarly, many staff within YHB, YPI and YMI in Indonesia are local to the area, enabling a strong understanding of context and adaptation of efforts for optimal results. Priorities are identified and addressed through consultative processes using needs assessments and interviews. A major benefit of the funding was the opportunity to be flexible, trialling different interventions and delivery approaches that could be adjusted and responsive to needs. This is discussed further in Efficiency, Section 3.4.

FINDING 3: The project is effectively targeting some aspects of the problems identified, though there are gaps, including at a strategic level.

The BF programme seeks to address a range of problems, including mangrove harvesting, fisheries exploitation, lack of local governance, overdependence on vulnerable resources, access to health services, gender equity and social and financial inclusion. Interventions often address overlapping problems and are complementary across pillars (e.g. mangrove restoration can result in increased fishing stocks).

While the problems being addressed were clear, there were some strategic gaps in terms of targeted interventions to address the drivers of change, resource users and beneficiaries. For instance, in Indonesia, the programme has focussed on mangrove restoration and the promotion of conservation efforts, leading to the rehabilitation and community-led monitoring of small mangrove areas. However, according to government officials, conserving these areas has displaced logging to nearby locations, as the underlying drivers of mangrove loss (timber harvesting and urban development) have received little attention under BF. Currently, no legal framework exists for sustainable mangrove harvesting in the region, despite YHB's efforts to lobby for legislation establishing managed timber-harvest areas.

The use of local NGOs as implementing partners in Indonesia has also resulted in some strategic merging of institutional agendas. While the project set out to strengthen community livelihoods, it has focussed on business groups with which YMI already had established ties, rather than on those most directly engaged in mangrove-based activities. As a result, it is difficult to point to any immediate, measurable reduction in environmentally damaging practices (noting that Inhil is still in the relatively early stages of development, which may also be impacting results at this time).

Strengthening diversified income streams and building entrepreneurial capacity among these groups has developed the foundations for diversified livelihood models in the community. This intervention could relieve pressure on mangrove resources in the future through indirect routes. For example, increased household income can allow the purchase of liquified gas for cooking, rather than mangrove timber. Households less dependent on forest products may gradually shift away from unsustainable extraction, while successful enterprises can encourage others to follow suit.

This contrasts with Madagascar, where charcoal producers (direct mangrove resource users) are effectively targeted and interventions to address unsustainable resource use are complemented with other activities. In Ambanja the regional government is also highly engaged and aligned with activities, which is important in addressing the problems BF is targeting. However, they lack capacity and means to deliver their own activities (either as part of or in extension to BF), and the building of government capacity is not currently undertaken as part of this programme.

Some differences of opinion also emerged regarding types of assistance being provided. In Ambanja, some interviewees noted their desire for more tangible support in terms of equipment and materials provision, such as canoes and cold storage for fish. However, others noted that there needs to be a strong business case to procure physical items, in order to ensure they meet community demand and will be utilised correctly.

FINDING 4: The project has effectively incorporated consideration of women and gender inclusion in design, though mechanisms vary and have been tailored to cultural circumstances (i.e. responsive but not transformative), and some barriers remain.

Women have been actively targeted to take part in the project and are currently participating in many activities, including fish processing, community health, mangrove patrolling, catch enumeration and alternative livelihoods. There are differences across sites in terms of gender inclusion in design. In more mature sites in Madagascar, female participation is felt to be relatively even and contextually relevant, tailored to the cultural norms of communities. For instance, women in Madagascar traditionally manage the household finances, so women are actively involved in village loans and savings associations (VSLAs) and value chain activities, and initiatives are tailored around women's schedules so they can manage household activities and childcare. In Indonesia, the male-dominated environment was highlighted as a safeguarding challenge, and as a barrier to engagement. Ensuring women's participation in project meetings required additional effort, and even when present, they were often less inclined to speak. To address this, implementing partner staff created informal spaces after meetings where women could share their views more comfortably. During interviews at the Inhil site, several women expressed interest in playing a more active role in surveillance groups. This came as a surprise to the men present, perhaps because women had not previously had the opportunity or confidence to voice such aspirations. Encouragingly, this was received positively. There are two women currently participating in the surveillance groups and they discussed their experience positively, with no safeguarding concerns. This underscores the need for continued efforts in Indonesia to integrate women fully into such projects, ensuring their representation across all activities.

3.1.1. Managing safeguarding risks

The programme's approach to safeguarding (e.g. the measures that address exploitation, harassment and abuse) has evolved over time, reflecting a growing awareness of the importance of safeguarding in all aspects of delivery. A programme-level Safeguarding Group was established to coordinate efforts across all BV, including Blue Forests sites and countries. Each country had a Health, Safety and Safeguarding lead responsible for training all staff in mandatory safeguarding training. There are three main policies of BV's safeguarding: a Code of Conduct; Protection Policy for Children and Vulnerable Adults; and Whistleblowing and Reporting procedures. BV also has a Policy Regarding Sexual Harassment on its intranet, according to the 2024 GESI Assessment conducted by BV.

However, the clarity and communication on health, safety and safeguarding policies was found to be disparate by the evaluation, with stakeholders holding different perceptions about safeguarding that do not always reflect the policies in place. This has resulted in some key informants noting in interviews that health and safety or safeguarding measures could feel top-down and difficult to translate into everyday practice. For instance, in Madagascar some stakeholders reported that it is expected that all BV staff have to wear seatbelts while in cars. However, BV's Road Travel Safety Protocol encourages the use of seatbelts "when available" as it is not common in Madagascar and cars with seatbelts have at times been difficult to source. It has also been suggested by some stakeholders who perceive that BV staff cannot transport community members in programme vehicles, which was noted to feel discordant at times with the casual and trusted relationships that have been fostered with communities. BV requires that each person travelling by car is covered by insurance and this requirement may have prohibited community members from receiving transportation from BV. According to BV, to ensure the highest safety standards while maintaining a good relationship with the community, the programme adopted mitigations measures such ad hoc insurance coverage and, when not applicable, liability release forms.

In Indonesia, BV and partners (YHB, YMI & YPI) each have their own safeguarding policies and procedures and have worked to ensure alignment between them. In addition, some other donors to BV have their own environmental, social and grievance mechanisms. This makes it challenging for BV to track who is aware of which processes and align them to avoid confusion. To address this, BV mapped all compliance requirements for each donor to be responsive in their safeguarding policies. Defra's consideration of safeguarding, in particular for sexual exploitation, abuse and harassment (SEAH), was delivered late in relation to the programme's life cycle: Defra and BV issued a Joint SEAH Declaration; BV and Defra collaborated to conduct a SEAH Self-Assessment and Action Plan in 2024, during the final year of the programme. As of May 2025, BV was conducting a safeguarding review of their entire organisation by a third party, which suggests a commitment to continuous improvement in this area.

3.2. Coherence

EQ3:	To what extent has the project ensured buy-in from and harmonisation between project stakeholders*? **Stakeholders include subgrantees, CSOs, networks, governments, other partners, beneficiaries*
EQ4:	In what ways has the project complemented, or undermined, policies and regulations as well as international conservation and developmental agendas, and vice versa?

Rating	Statement	Definition	Description
Strong evidence	There is clear and corroborative evidence to make a judgement	Evidence is able to be corroborated amongst monitoring data, programme documents and primary data to support a judgement	The evaluation team gathered relevant data from programme documentation and KIIs, including with in-country stakeholders, such as government officials and technical staff (n=32) and local communities (n=102). The coding process on MAXQDA resulted in over 71 codes allocated to coherence to support the analysis that provided clear and corroborative evidence to make a judgement.

FINDING 5: There is strong evidence that the BF programme has clear overall community buy-in, as well as support from local and regional government.
The programme has established strong community buy-in and has sustained this through various mechanisms, such as the 'community first' approach, as well as expertise from technical BV and partner staff from the local area who bring an understanding of context/issues. Buy-in is further strengthened by the success and ownership of activities by community members.

This was achieved through different delivery models across the two countries. In Madagascar, BV capitalised on its longstanding country presence, leaning on trust and relationships built through years of delivery and consistent staff based in the region, and building effectively from that platform at new sites established (such as Mahajamba). There have also been efforts led by communities to increase awareness and buy-in, through collaborations with youth groups and women's groups, and use of environmental education mascots at community events. One village noted that a critical success factor was the buy-in from a community leader who was a former charcoal producer. He now leads mangrove patrolling and has helped bring other community members on board.

Across Indonesia, community buy-in was achieved through the use of trusted and well-established partners. The scoping study identified Inhil as a site where stakeholders were already engaged in many of the ideas and activities proposed by the BF programme. It built on strong community engagement work of YMI and target areas where they already had an active engagement. The programme worked with government to conduct needs assessments, identifying gaps in management and capacity, then addressed them through training and support in developing the management plans. This helped foster a positive working relationship through shared goals.

FINDING 6: Some challenges exist regarding wider stakeholder engagement and coordination.
Although there is clear evidence for strong community buy-in, coordination across other stakeholders has been a challenge for BF, particularly in Indonesia. In Inhil, the programme's success is tempered by coordination challenges within government and between villages and sub-districts, conflicts over territorial fishing rights and inconsistencies in land use planning. Addressing these issues requires stronger inter-village collaboration and better alignment between spatial data and field realities. Layers of government bureaucracy have also hampered harmonisation of the project between stakeholders. While challenges coordinating between villages and sub-districts led to some conflict over rights and access with regards to the delineation of mangrove areas under different community management. In an effort to harmonise efforts across the six supported villages, YMI has initiated Integrated Area Development (IAD) and Rural Area Development (Kawasan Perdesaan) activities. These began in 2024 and were highlighted by the government as a beneficial approach that feed into the Gren Riau Province Development Plan and help with on-the-ground delivery.

In Madagascar, there have also been some difficulties in government coordination, especially early on in the programme. For instance, there were ongoing issues in establishing permits for a sea cucumber farming site in Ambanja, and the activity eventually ceased as it overlapped with a similar government intervention. However, there is broad support for BF across local and regional governments, with strong engagement from the ministers of fisheries and forests.

FINDING 7: The BF programme is felt to be coherent with local, regional and national priorities, though complexities exist in implementation.
In both Madagascar and Indonesia, stakeholders recognised that government departments lacked the financial means and human capacity to support many activities, so BF programme support was felt to be crucial and mutually beneficial. The national law in Madagascar prohibiting mangrove harvesting came into force partway through the programme, creating mixed results as it varies by region: in the north, the Regional Directorate of Environment and Sustainable Development (DREDD) allows a certain amount of mangrove harvesting. However, in the Southwest harvesting it is forbidden. At the national level, BF activities are seen as contributing to nations' 30x30/45 commitments under the Global Biodiversity Framework (GBF)[8]. At the Ambanja site, there has been strong leadership and support from regional ministers of forestry and fishery departments. The Dina (local law) has legalised management and enforcement measures, and eight groups received a 10-year renewal of their '*Transfert de Gestion des Ressources Naturelles*' (TGRNs)[9], indicating a high level of trust in community management. However, the site in Mahajamba has had challenges in approving the Dina due to the mayor's late approval. There have also been many challenges navigating the government processes around blue carbon, which is discussed further in Section 3.6.

In Indonesia, needs assessments and training activities were undertaken with the regional government to ensure interventions were appropriate. Throughout implementation, local government partners have been engaged in BF activities, and the programme is recognised as filling critical gaps in local government capacity by supporting ecosystem restoration efforts that align with regional development priorities. It is also recognised as addressing limitations in government mobility and funding while fostering collaboration among multiple stakeholders, including provincial agencies, community groups and customary leaders. The BF programme also aligns with the district's Medium-Term Regional Development Plan (*Rencana Pembangunan Jangka Menengah Daerah* - RPJMD), which prioritises environmentally-based economic growth. However, the programme's success is tempered by coordination challenges (as per Finding 6), and while government grants do exist to complement BF initiatives and support communities in implementation, these have not been forthcoming to date.

3.3. Efficiency

EQ8:	To what extent did the project deliver value for money (as defined by the FCDO 4Es framework)?		
Rating	**Statement**	**Definition**	**Description**
Some evidence	There is some evidence to make an estimated judgement	Some evidence amongst monitoring data, programme documents or primary data supports an estimated judgement	Challenges around data availability limited the strength of evidence in some areas, making a fully comprehensive assessment difficult. While the evaluation drew on a range of sources to assess performance against the 4Es, there were no VfM indicators and associated data to draw on. As a result, while indicative findings were possible, they rest on a partial evidence base in places from KIIs and programme documentation. For analysis, 162 codes were used.

FINDING 8: Based on the available data, there is some evidence that the programme delivers fair VfM overall, achieving results and adapting to challenging contexts to improve delivery and obtain results. However, challenges to VfM exist in Indonesia, specifically under economy ('inputs at the right price') and efficiency ('converting inputs to outputs'). While Madagascar also experienced challenges to efficiency at certain points, overall the country has delivered better VfM than Indonesia. This was due to: lower operational and staffing costs (Economy); more efficient and stable delivery mechanisms (Efficiency); stronger local engagement and adaptive management, and fewer bureaucratic and legal hurdles compared to Indonesia (Effectiveness); and less consistent inclusion of women in certain activities (Equity).

[8] Indonesia has agreed a 30x45 (30% by 2045) target, and is in the process of formulating the recognition of other effective area-based conservation areas (OECMs) into its target tracking.

[9] This translates to "Transfer of Natural Resource Management" and is a framework that enables the Malagasy government to delegate the management of natural resources—such as mangroves, forests and fisheries—to local communities, known as COBA (Communautés de Base). The goal is to promote sustainable use and conservation through community-led governance.

The main purpose of the summative evaluation's review of VfM is to provide a qualitative assessment and review of FCDO's 4Es, utilising expenditure and budget data, previous annual reviews on the programme's VfM and KII data to make an overall judgement. Specific VfM indicators were not set in the lifetime of the programme and, according to programme documentation, not requested by Defra. Therefore, it is difficult to reach full conclusions as there isn't trend information that VfM indicators would provide. The lack of specific KPIs causes challenges in informing a formative VfM assessment, such as undertaking a cost-benefit analysis, and is also outside the scope of this evaluation. It is understood by the evaluators that Defra will be undertaking a monetary benefit analysis to mark programme closure to compare against the original business cost ratio set out in the Blue Forests Business Case, once validated impact indicator results are available. This is needed to help strengthen the evidence base for the BPF as a whole and provide contribution and accountability of the BF's VfM.

3.3.1. 4E - Economy

Economy looks at whether or not a programme is purchasing inputs at the right price and quality. Key cost categories and the share and changes within these categories over time are important considerations for economy. Across the BF programme, there was consistent monitoring of the key cost drivers and adaptations to costs over time, primarily in salaries and activity spend with increasing inflation rates in Madagascar and Indonesia and adjusting of salaries due to rising inflation within these two countries. Figure 3 provides an overview of total reported programme costs and percentage of total per main cost categories. The top three main drivers of cost for the BF programme were:

Total site costs for Madagascar and Indonesia (71 percent of total spend): includes in-country and associated employer staff costs, cover activities, travel, equipment, site office costs and community costs (this does not include staff salaries). New region site activity accounted for 1 percent of spend overall (£73, 923).
Cross-region staff costs (9 percent of total spend): Includes staff (and associated employer) costs for UK and other cross-regional roles (e.g. project manager, monitoring and evaluation and finance).
BV global programme management and support (19 percent of total spend): Includes overheads and cross-regional travel, equipment, international travel for the project manager, consultancy, project audit, cross regional workshops.

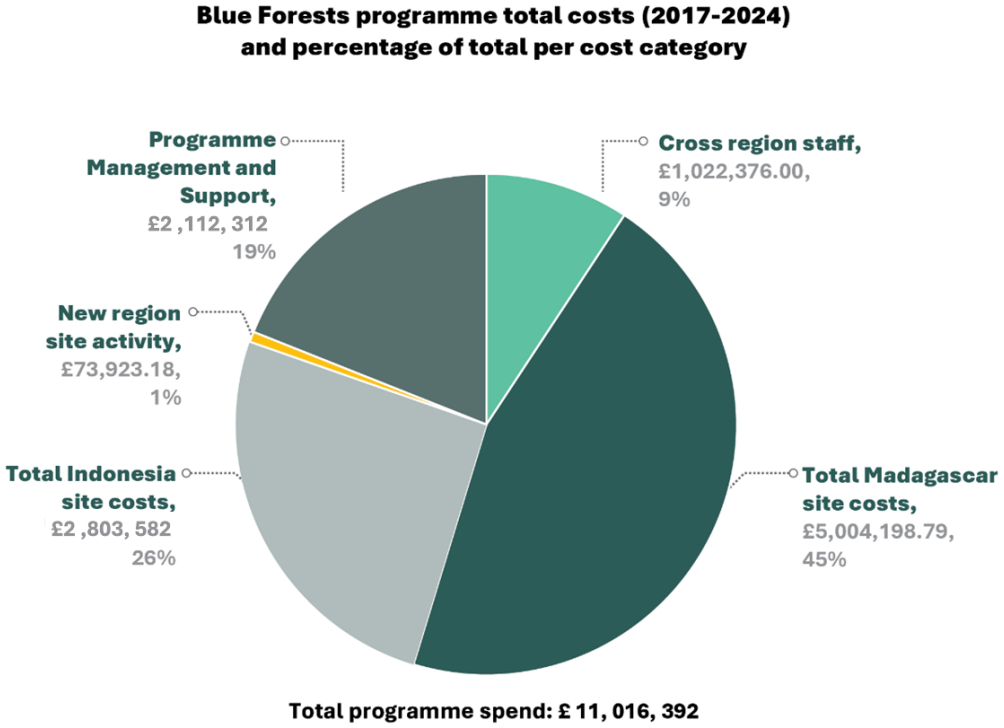


Figure 3: Blue Forests programme total costs and percentage of total per cost category. Source: Blue Ventures

Within the BF budget, 45 percent was used for Madagascar site costs, or £5,004,198.79 (rounded up to £5,004,199; Table 4). Of that amount, Ambanja activity costs were the highest of the three Madagascar sites at 36 percent, with Velondriake and Mahajamba activities costing roughly 15 percent of the country spend. Staff represent 26 percent of spend in the country.

Table 4 Madagascar site costs: percentage of key cost categories

Madagascar site costs (£5,004, 199): percentage of key cost categories against total spend in country ***Source: Blue Ventures***		
Key cost category	**Audited amount In GBP £**	**Percentage of total spend in country (£5,004, 199)**
Madagascar staff costs	1,286,937	26
Cross-site Madagascar activity	419,828	8
Site 1 Ambanja activity	1,794,515	36
Site 2 Velondriake activity	775,109	15
Site 3 Mahajamba acitivity	727,809	15

Total Indonesia site costs (Table 5) equate to 26 percent of total budget spent for the entire programme, or £2,803,582. Of that amount, costs for activities at the two sites are 30 percent for Inhil and 26 percent for Kubu Raya.

Table 5 Indonesia site costs: percentage of key costs categories against total spend in country

Indonesia site costs (£2,803,582): percentage of key cost categories against total spend in country ***Source: Blue Ventures***		
Key cost category	**Audited amount In GBP £**	**Percentage of total spend in country (£2,803,582)**
Indonesia staff costs	1,061,785	38
Cross-site Indonesia activity	154,790	6
Sembilang/Inhil Activity	852,585	30
Kubu Raya activity	734,422	26

Staff costs: It is noteworthy that percentage of spend on staff costs in Indonesia (38 percent) equate to a larger portion of the country total compared to Madagascar staff costs (26 percent). This could be due to the higher wages in Indonesia compared to Madagascar, utilisation of partners and their associated employer costs and/or the BV Indonesia staff that are based in Bali. Staff costs in Indonesia are high and potentially represent less VfM. One stakeholder suggested that expenditure as a whole in Indonesia was costly compared to other NGOs, such as Fauna and Flora, delivering similar interventions in the country. While this perspective is noted, placing the programme's delivery within context is important. NGOs such as the WCS and Fauna and Flora have the benefit of being well-established in Indonesia (though working through partner organisations, like BV). The organisation struggled with traction and establishing delivery before switching site locations to Inhil. While these NGOs are found to be delivering similar interventions within Indonesia at a lower price in general, there are examples of comparable budgets for conservation projects similar to BF.[10]

[10] Please see Darwin Initiatives' list of projects in Indonesia: Project Country Full. For example, Fauna and Flora International's 'Ridge to Reef Conservation in West Papua' grant value of £5m, delivered over five years. https://www.darwininitiative.org.uk/project/DAREX005

Site costs: Madagascar site costs accounted for 45% of the programme's total budget. Activity costs were highest in Ambanja (36 percent). These costs appear reasonable, especially given the use of local staff and adaptive delivery during Covid-19. In Indonesia, the original plan was for the programme to operate through a BV-established local entity, Yayasan Pesisir Lestari (YPL), but this approach was ultimately discontinued due to legal and bureaucratic challenges when YPL became independent. Therefore, economic investments made to secure this local entity did not yield results, hindering VfM at the time. However, the decision to switch sites from Sembilang to Inhil enabled greater VfM, according to BV, and the benefits definitely outweigh the sunk costs as the overall impact and number of beneficiaries would have been limited at Sembilang. In addition, Indonesia is recognised as a challenging country for international organisations to establish local operational entities, with the process being both costly and arduous in terms of government processes. BV's decision to ultimately transition delivery through local implementing partners with oversight from global BV was necessary and justified to avoid wastage of resources.

Travel, equipment, and management: The second highest key cost category is 'programme management and support' at 19 percent of overall expenditure. This cost covers global overheads at 15 percent, cross-regional travel (including for the project manager), equipment, cross-regional consultancies (e.g. carbon mapping), project audits and cross-regional workshops. This percentage is considered 'high' according to Independent Commission for Aid Impact (ICAI), who cite UN agencies charging overheads around 4-12 percent[11]. However, these costs covered aspects such as equipment, project audits, workshops, and travel related to direct delivery across multiple regions in complex and remote locations, for both Madagascar and Indonesia. While high, these costs appear justified by the complexity and geographic spread of the programme.

Good practice examples of VfM and adaptive management are found throughout delivery:

- Underspend in Y5 was utilised for an additional year of programming (Y8).
- The procurement of local people and organisations demonstrates good VfM, and according to stakeholders, the use of local and regional staff (Madagascar) helped keep staffing costs low. The majority of Madagascar staff are national staff, including the Country Director.
- Before Covid-19, volunteers would fly in to conduct ecological data collection and monitoring on some sites (predominantly Site 2 under BF); this shifted during the pandemic to training of local community members. This model is now widely used and represents a positive programme adaptation and strengthening of VfM and for improving programme monitoring and evaluation.
- The decision of BV to stay within the sites in Madagascar and continue delivering during Covid-19 proved to be a strong VfM good practice, as having to re-establish the programme in communities would have incurred greater costs, according to stakeholders.
- After experiencing challenges to establishing the programme at Sembilang National Park in Indonesia, BV made a decision to find and secure an alternative site, Inhil, and made significant changes to the delivery plan to make this happen.
- The standard use of translation at the point of delivery in all activities is a positive driver of economy of the programme, as this reduced time and cost associated with repeated translation efforts and strengthens inclusion.

3.3.2. 4E - Efficiency

On the whole, delivery of outputs across the years is efficient, with a majority of targets met in the logframe (Annex 9). The exception to this is for Output 2 (livelihoods) and Output 6 (evidence base for conservation models), which only partially achieved outputs across the lifetime of the programme. The blue carbon strategic pathway also encountered significant setbacks in Madagascar due to national and jurisdictional REDD+ frameworks and complete cessation in delivery in Indonesia, due to an official request from the government in 2021 to all organisations in forestry initiatives. However, the project was designed such that carbon credits were only one avenue for achieving the outcomes. Therefore, BV was able to remove it from the BF logframe without having to make significant changes across the programme. Covid-19 presented spend challenges and delays to delivery. However, continuing to deliver during Covid-19 and also pivoting the focus of the intervention (e.g. supporting the government's focus on community health in Madagascar) created greater long-term efficiencies.

[11] Blue-Planet-Fund-ICAI-review.pdf, p. 22 and also Mapping of INGOs and UN agencies | Overhead cost allocation in the humanitarian sector - Development Initiatives

At the country level, the extent to which outputs were delivered in a timely manner varied across the two countries. Madagascar experienced more efficient delivery with the exception of the livelihoods, blue carbon and in some years the health strategic pathways. One external factor cited by stakeholders at the Mahajamba site (Site 3) as a barrier to timely delivery is the seasonal cyclones, which often cause flooding and restrict site access. These cyclones frequently result in delays to activities each January, according to Site 3 stakeholders.

In Indonesia, stakeholders noted that the team struggled to "get the work off the ground" due to the organisation being new to the country. The legal process to establish BV as a registered civil society organisation was complex and hampered delivery early on. The programme struggled to work with authorities at the original site of Sembilang National Park initiated in Year 3 (2019), prior to switching sites to Inhil (Year 5/2021). As noted in the section above for 'Economy', the benefits of switching to Inhil appear to outweigh the costs, given that buy-in with stakeholders is a key condition for the programme to be delivered effectively. However, even with the switch, other factors inhibited delivery to an extent: strict hierarchies and cultural differences were also noted by some stakeholders as impacting efficient delivery, as partners would defer to senior global BV staff and not local or regional project coordinators. Finally, the absence of a dedicated Country Director in Indonesia was cited by some stakeholders as a gap in leadership that contributed to inefficiencies in delivery.

The spend utilisation of the programme overall remained healthy throughout years 1 – 8, with a majority of the years achieving 80-100 percent spend execution. The exception to this is in Year 4 (2020) where spend utilisation was reported at 90 percent and in the subsequent year (Year 5) where spend utilisation fell further to 77 percent due to delivery impacts of Covid-19. In addition, a slight overspend occurred in Year 2 specifically in Ambanja for site activities and within the cross-site Madagascar spend line. Indonesia reflects slightly less spend utilisation overall compared to Madagascar, which could be explained by challenges in delivery noted above.

Good practice examples of Efficiency:

- Consistent delivery of outputs: Most logframe targets were met across the programme's lifetime, showing strong output efficiency.
- Flexible programme design: Allowed for adaptive responses to challenges, such as pivoting away from sea cucumber farming to alternative livelihoods and expanding into value-chain development and savings groups.
- Healthy spend utilisation: Most years achieved 80–100% spend execution, indicating efficient budget use.
- Strategic site change in Indonesia: After challenges at Sembilang National Park, BV efficiently transitioned to Inhil, adjusting delivery plans to maintain momentum.
- Support for government priorities: In Madagascar, BV aligned with national focus on community health during Covid-19, improving relevance and efficiency.
- Long-term funding: Enabled trust-building with communities and supported sustained delivery—highlighted as a unique advantage by stakeholders.
- Strategic stakeholder engagement: Involvement of UK officials (e.g. Ambassador in Madagascar) helped foster credibility and smooth delivery.

3.3.3. Effectiveness

The programme has consistently demonstrated its ability to achieve output and outcome-level results: it consistently met or exceeded its milestones and targets, despite challenges in delivery experienced by certain pathways (blue carbon/livelihoods) and from external events, such as Covid-19. Some concerns about sustainability exist and are addressed in Section 3.6. Overall, the model delivers at the community level and seeks to hand over control to community members and BV's revised strategy places a stronger focus on moving towards a model of community empowerment and autonomy and self-sufficiency.

3.3.3.1. Factors supporting and hindering effective delivery

The programme's ability to deliver effectively across the two countries was shaped by a combination of factors and challenges. Among the most significant factors was the programme's adaptive and flexible design, which allowed teams to respond to emerging setbacks, such as the change in approach to livelihoods with the shift from sea cucumber farming to other alternative livelihoods, and the expansion of interventions into value-chain development and financial savings groups.

Another critical factor was the long-term nature of the funding, which allowed sufficient time to build trust with communities and was felt by stakeholders to be a unique factor in comparison to other funding sources with shorter timeframes. The flexibility of the Defra funding was also felt to be advantageous. There was no exhaustive/restricted staffing list and according to stakeholders, this was crucial to getting the right people in the right roles in Madagascar and contributed to getting buy-in to foster a community-first approach.

Strategic engagement with influential stakeholders and the right roles/individuals/groups fostered buy-in. For example, engagement with UK officials, including the UK Ambassador in Madagascar, helped to foster credibility and buy-in at multiple levels, according to stakeholders.

However, delivery was not without its challenges. External factors such as the Covid-19 pandemic disrupted timelines and spending, and legal and regulatory complexities—particularly around mangrove governance and blue carbon frameworks—created barriers to progressing delivery in both countries. Environmental conditions, such as prolonged rainy seasons in Madagascar, also affected access and delivery in remote areas. Meanwhile, local political dynamics sometimes hindered collaboration, with difficulties in securing buy-in from regional councils in Indonesia, for example. Internally between Defra and BV, approval processes from Defra occasionally slowed down the pace of adaptive programming, and turnover within Defra resulted in delays.

3.3.4. Equity

There is no financial/VfM data on the cost of gender, equity and social inclusion (GESI) across sites. However, there is evidence of the programme's journey toward greater equity and consideration of GESI throughout its lifecycle. While foundational structures were in place for the programme, there is scope for BV to deepen engagement within these sites, particularly by addressing cultural and structural barriers to participation of women and marginalised groups.

Programme documentation indicates that from its inception, the programme demonstrated a commitment to applying a GESI lens and actively sought to engage women and marginalised groups in both Madagascar and Indonesia. The latest GESI Assessment done by BV includes a detailed review of contextual and cultural conditions and drivers that were present within the programme's sites. The documentation states that BV applies a human rights-based approach to coastal communities and is guided by the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, an international instrument dedicated entirely to the small-scale fisheries sector.[12] There is evidence of inclusion and awareness of equity and GESI needs beyond fishers: BV recognises from research on engagement of women and youth that "Women are often marginalised from participation in community decision-making, and their participation is crucial to ensure greater success and sustainability of projects".[13]This inclusive approach has been embedded in programme design and delivery, with efforts made to ensure that participation is as equitable as possible within the constraints of local contexts. In Madagascar, women have been meaningfully involved in a range of activities, including fish processing, community health initiatives and mangrove patrolling. While the gender balance in Madagascar is perceived to be relatively even, participation often reflects traditional gender roles, with men and women engaging in different types of activities. Risks remain, particularly in areas such as fisheries patrolling, where safety concerns are more pronounced.

In Indonesia, women have played active roles in catch enumeration, community health and alternative livelihoods. Local partners, including YHB, YM and YPI, have developed their own safeguarding policies and worked collaboratively to align these with the broader programme framework. Despite these efforts, gender disparities in engagement persist. The male-dominated nature of some environments—particularly in patrol groups—has been identified as both a safeguarding concern and a barrier to broader female participation. Encouragingly, women have expressed interest in taking on more prominent roles in these areas, indicating a potential pathway for future inclusion. Finding 17 describes this in more detail.

3.4. Effectiveness

[12] The Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines), (FAO, Rome 2015) Available at: Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication

[13] The Blue Forests Project: Gender, Equality and Social Inclusion report (August 2024), p.13. Provided by the organisation.

EQ5:	To what extent has the programme achieved, or is expected to achieve its outcomes and has it generated unintended outcomes, either positive or negative?		
EQ6:	Who has benefitted from/been adversely impacted by the project and how has this been realised?		
EQ7:	How well has continuous learning contributed to adaptive programming?		
Rating	**Statement**	**Definition**	**Description**
Strong evidence	There is clear and corroborative evidence to make a judgement	Evidence is able to be corroborated amongst monitoring data, programme documents and primary data to support a judgement	The evaluation team gathered relevant data from programme documentation and KIIs, including with in-country stakeholders, such as government officials and technical staff (n=32) and local communities (n=102). The coding process on MAXQDA resulted in 361 codes allocated to effectiveness to support the analysis that provided clear and corroborative evidence to make a judgement.

FINDING 9: There is strong evidence that the BF programme has achieved its higher-level outcomes across the mangrove, fisheries management and community governance pathways, while making progress towards programme outcomes in community health. Livelihood diversification has had mixed success and activities remain limited in scale.

The programme has supported activities that have resulted in enhanced mangrove protection across all sites through the development and implementation of local management plans. These efforts have been driven by cross-cutting interventions addressing multiple pathways. At the Inhil site, for instance, mangrove reforestation has not only restored degraded areas but also created a new mud crab fishery for coconut farmers whose previously existing coconut plantations were lost to saltwater inundation. This initiative has expanded mangrove coverage, fostered community appreciation and ownership of the restored areas and strengthened local livelihoods by introducing sustainable economic opportunities. Madagascar has seen similar success across its sites, with Transfer of Natural Resource Management (TGRN)s and Vondron'Olona Ifotony (Malagasy for Local Community Association—referred to as CLBs throughout this document) established to effectively manage mangrove ecosystems. Community-led surveillance has supported sustainable mangrove harvest and a reduction in illegal cuts, leading to increased mangrove cover across all three sites.

The programme has made significant contributions to improving value, protection and benefits to fishers. At the Ambanja case study site in Madagascar, a fishery management plan has been developed for Tsimipaika Bay, with temporary closures established and community members trained to enumerate catches and support community-led management decision making. A broad community-led surveillance effort monitors the area and has reduced illegal fishing practices in the area. The marine protected area (MPA) model in Velondriake and its no-take zone has led to increased fish catches. In Inhil, mangrove reforestation has opened new mud crab fishing opportunities for the community, while temporary closures and the use of community enumerators to monitor catches are helping ensure the fishery's sustainability. Through activities supported by this project, some individuals who were formerly involved in illegal river poisoning have joined the community marine surveillance group (POKMASWAS) and even implemented their own temporary fishing closure. Additionally, the BF programme has supported the development, implementation and socialisation of an improved management plan for the Kawasan Konservasi Daerah (KKD) Inhil marine MPA.

Community health interventions have also yielded success. In Ambanja, for instance, the project has exceeded its targets for women accessing sexual and reproductive health and rights services and has worked closely with traditional midwives to improve birthing practices. In Velondriake, there have been significant challenges regarding access, as the nearest hospital to the site is an eight-hour drive. The health centres and community health workers have provided services to remote villages, improving access through provision of medication and health services. One interviewee also noted that community health workers have occasionally helped to coordinate transport to the hospital where required. In Inhil, health services have been expanded to remote villages through collaborations with the local health centre and the training of 72 health ambassadors, now placed across the programme's six target villages.

However, there have been notable challenges surrounding the livelihoods pathway. In Madagascar, there has been difficulty in implementing activities across all three sites, although for varying reasons (e.g. theft and destruction of

sea cucumbers and disease in seaweed in Velondriake; permitting challenges in Ambanja). Across all sites, activities struggled to find suitable markets to allow for scaling, resulting in limited income from these interventions. In 2022, BV expanded the livelihoods pathway to include a greater focus on financial inclusion, value chains and improvements to existing livelihoods. This sought to use VSLAs to safeguard livelihoods of fishing communities impacted by weather events or other disruptions. Early indications show positive improvements from VSLAs, with community members in Ankigabe (Ambanja) reporting improvements in their income and assets, as well as support from other members when someone is sick or cannot make the monthly payment. In Indonesia, livelihood diversification activities have focussed solely on a small number of existing women's business groups and a few men-led groups, providing resources and capacity development. While this has successfully supported their growth, its broader contribution to the programme's stated impacts remains limited. The groups targeted by the livelihood diversification activities are not those directly engaged in unsustainable activities, nor has the programme yet sought to reach those who are engaged in unsustainable activities. As Table 5 shows, overall delivery across the portfolio shows positive progress from years 1–8, with noted challenges in achievement against the logframe for livelihoods.

Table 5: Blue forests programme achievements at outcome and output level

Impact/Outcome/Output	Achievements
Outcome 1: Improved sustainable mangrove forestry and fisheries management implemented by coastal communities at Blue Forests sites in Madagascar and Indonesia where coastal communities are supported by improved livelihoods and improved access to health care	Majority indicators achieved
Outcome 2: Validated implementation models for replication provided to coastal communities in other geographic locations	All indicators achieved
Output 1: Sustainable community owned mangrove forestry management plans in place	All indicators achieved
Output 2: Mangrove fisheries improvement projects in place	All indicators achieved
Output 3: Implementation of improved livelihood mechanisms	Majority indicators achieved
Output 4: Increased access to health services	Majority indicators achieved
Output 5: Organisational and financial structures in place to support 20-year project vision	All indicators achieved
Output 6: Increased evidence base for conservation models	All indicators achieved

Output 6, with the evidence base focussed solely on Madagascar results.

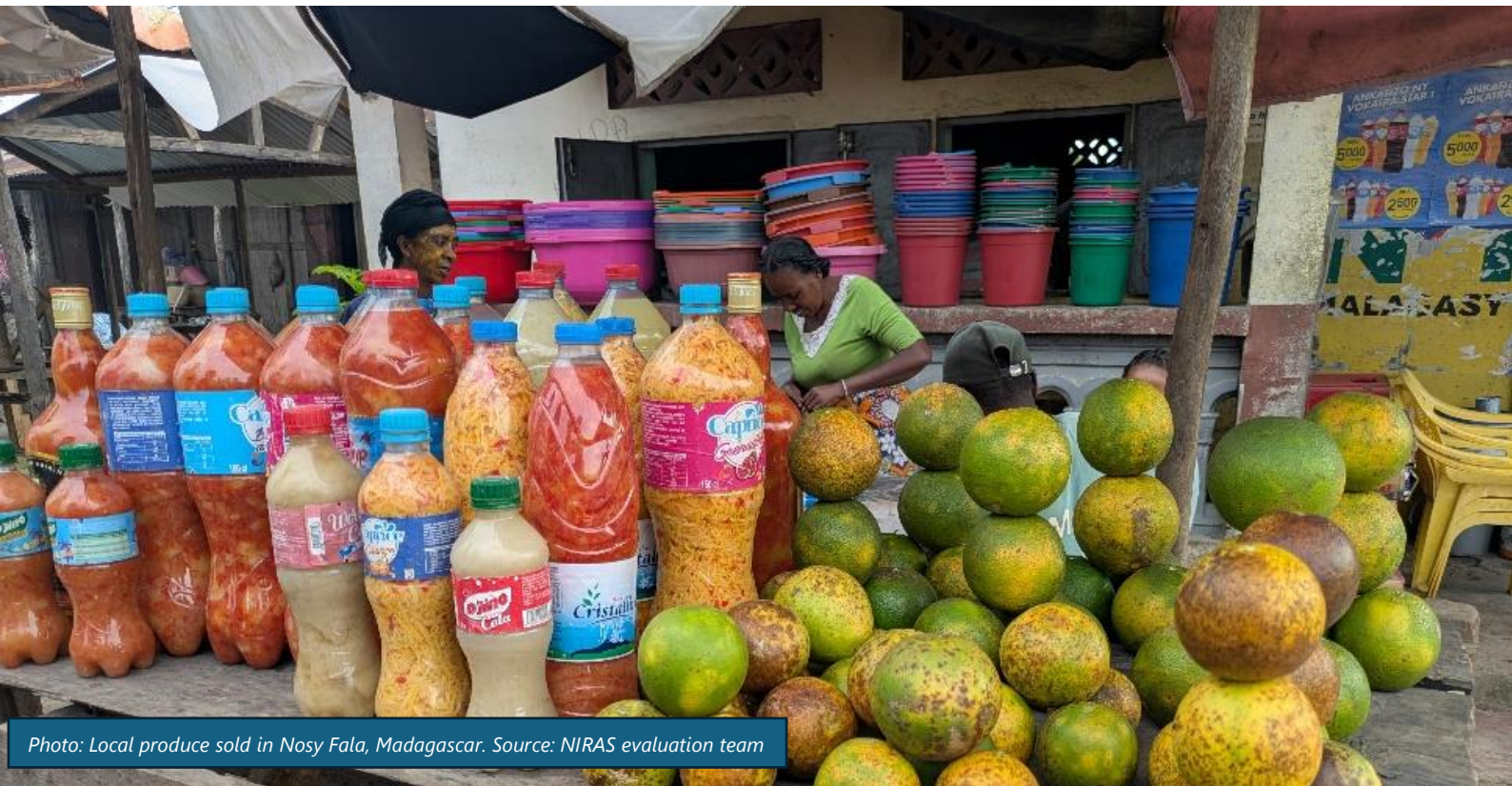


Photo: Local produce sold in Nosy Fala, Madagascar. Source: NIRAS evaluation team

The identified intermediate outcome and outcome level results of the programme are presented in Table 6. BF's contribution to change in the pathways of blue carbon and forestry management[14], small-scale fisheries management and community governance were found to be high: in many instances, BV was the only intervention cited by stakeholders and observed by evaluators as delivering this type of work in the case study sites. Contribution was medium within the livelihood diversification, value chains and savings groups, and community health pathways, as other organisations and interventions were more active. The strength of evidence (per the rubric in Table 3) was assessed for each reported result to inform how confident the evaluation could be in determining the contribution of each result. The strength of evidence for the identified outcome level results was 'strong': evidence was corroborated via monitoring data, programme documents and primary data to support the judgement for each result.

Table 6: Identified intermediate outcome and outcome level results of the programme

ToC Impact Pathway	Key Result/Outcome Change	Context within the case study sites	BF Strength of evidence and Contribution to the change at the case study sites
Blue carbon and forestry **Management:** the programme has achieved **outcome level change** with improved sustainable mangrove forestry and fisheries management implemented by coastal communities in both Madagascar and Indonesia	BF conducted collaborative consultations with communities, developed and implemented mangrove and fisheries management plans. Now approx. 79,000 ha of mangroves under sustainable management across Madagascar and Indonesia.	For example, in Madagascar, there is significant mangrove degradation in Ambanja driven by charcoal harvesting for fuel (both locally and for other regions), with about 417 ha lost between 2013-2014. No management was in place, and in some areas, mangrove forests have been completely depleted, leading to decreased crab stocks and increased flooding. At Inhil, areas of coconut plantation alongside a brackish, tidal river have increasingly suffered from salt water intrusion.	**Very confident** that BF made an **important contribution** to the outcome**:** In Ambanja, BV is the only NGO operating in this region around forestry management, so can credibly claim these outcomes. Inputs have been facilitated by the support of local governments. In Inhil, villagers noted that despite the well-known and widespread issue of saltwater inundation they received no assistance from the government or any other organisation. Both site locations now have functioning management plans to address issues in sustainable management.
Small-scale fisheries management: The programme has achieved **outcome level change** with the establishment, validation and approval of the management plan for Tsiampaika Bay that is patrolled and enforced through law.	In Madagascar, BF has facilitated establishment of a fishery management plan for Tsimipaika Bay (Ambanja), which was validated and approved by all 36 communities on the bay in 2018. Monitoring for fish, crab, shrimp and sea cucumber fisheries has been established, with community members trained to enumerate catches and support community-led decision-making and management decisions. 100	In Tsimipaika Bay, fishery stocks have been depleted due to overfishing and illegal fishing practices, with insufficient management and enforcement mechanisms in place. Now from BF's activities and the enforcement of the management plan, fishery stocks are improving according to community stakeholders.	**Very confident** that BF made an **important contribution** to the outcome: Some initial engagement and management structures in place by WCS (prior to ICF funding), but since 2017, this has been driven by BV. Inputs have been facilitated by the support of local governments.

ToC Impact Pathway	Key Result/Outcome Change	Context within the case study sites	BF Strength of evidence and Contribution to the change at the case study sites
	community surveillance patrollers use Dina for law enforcement and have reduced illegal fishing practices, although there are still some instances of this happening (in part due to government corruption and people in power 'looking the other way').		
Small-scale fisheries management and Livelihood diversification: achieved intermediate outcome level change by developing and implementing a new mud crab fishery that has improved value, protection and benefits to fishers/community members.	At Inhil, following reforestation, a mud crab fishery was developed, providing new income for the community. Fisher training, provision of cages (co-funded) and enumerator training has created a productive and sustainable fishery.	The salinisation of coconut plantations led to a decline in coconut harvest, emigration from villages and increased poverty.	**Very confident** that BF made an **important contribution** to the outcome: Villagers noted that despite the well-known and widespread issue of saltwater inundation they received no assistance from the government or any other organisation. The programme (through YMI and YHB) helped reforest the area with mangrove and develop the mud crab fishery to provide a new source of income
Small-scale fisheries management: achieved intermediate outcome level change with the temporary closures that demonstrate better mangrove forests better protected under local management.	At Inhil, fishing communities designated temporary closures of mangrove fishing at three villages, totalling approx. 65 ha. Management has been strengthened at an existing MPA. This includes socialisation of the management plan and formation of the management organisational unit. Villagers were supported through management planning and restocking of closure areas. Through assistance from YHB the Inhil MPA also received the Kawasan Konservasi Daerah (KKD) designation in recognition of improved management.	Local mangrove fisheries operated without effective local management measures, resulting in unmonitored and unsustainable fishing practices	**Very confident** that BF made an **important contribution** to the outcome: Without education and training from YMI, fishers would not have implemented temporary closures.
Community governance: achieved **higher level outcome change** with improved sustainable governance implemented by communities across all sites.	At all sites BF has facilitated active participation of communities in forest and fishery management plan development and implementation, and has provided support to community	In Madagascar, natural resource management has been largely disconnected from income generation priorities, and there previously were insufficient local governance mechanisms in place to manage	**Very confident** that BF made **some contribution** to the outcome, alongside other factors, but was not the most important cause: In Madagascar, the level of contribution is high. 5 TGRNs established prior to the start of ICF funding. Federation formed

ToC Impact Pathway	Key Result/Outcome Change	Context within the case study sites	BF Strength of evidence and Contribution to the change at the case study sites
	governance groups (e.g. CLBs[15] in Madagascar and Pokmaswas in Indonesia) ensuring effective community owned governance. Specifically in Ambanja, 17 Natural Resource Management Transfers (CLBs with mangrove management plans) have been established, with the regional Federation established as an umbrella organisation. This has facilitated more coordinated and effective governance across the region, supporting fisheries and mangroves activities.	resources in a joined-up way across the region. In Indonesia, unregulated and destructive fishing practices and illegal timber harvest were taking place in the mangrove area. Poison, used for fishing, impacted catch and environmental health. Timber is used to support the continued growth of towns and villages in the swampy, mangrove area. From the programme, community governance groups have been strengthened through the provision of training, capacity development, financial support, monitoring posts and boat and fuel access.	at the beginning of programme (2017) of 11 TRGNs. Early TGRNs established by another organisation but all ongoing support provided by BV. In Indonesia, **very confident** that BF made an **important contribution** to the outcome: Both the Kelompok Masyarakat Pengawas (POKMASWAS) and Masyarakat Mitra Polhut (MMP) predated the project but have received valuable capacity and resource assistance from BF.
Livelihood diversification, value chains and savings groups: achieved intermediate outcome level change, with communities benefiting from alternative livelihoods and/or value chains and/or savings groups.	This pathway has evolved over the programme to ensure relevance and effectiveness for communities. In Madagascar, livelihood improvement efforts have had mixed results, with success in strengthening existing livelihoods and establishing savings groups. A total of 49 savings and loans groups have been established. Communities benefit from VSLAs and there is strong engagement (1,197 people involved as of 2024). Stakeholders reported improvement in their incomes and greater purchasing power. In Indonesia, activities have reinforced local business groups and introduced several new opportunities. The programme has strengthened existing alternative livelihoods and new activities	In Madagascar, communities are dependent on mangrove and fisheries for their livelihoods (including food, income and fuel), and with few other options, these resources can be exploited. There is limited access to savings and loans, making it difficult for communities to invest in non-extractive livelihood activities. In Indonesia, there are limited livelihood options for unskilled communities in remote villages that often drive dependence on unsustainable practices such as fishing and mangrove timber harvesting. Strengthening existing livelihoods or facilitating new opportunities through targeted training	**Very confident** that BF made a **critical contribution** to the outcome in Madagascar: most activities in this pathway are paid for by BF. VSLAs are run through private-sector partner Aga Khan. Some livelihood diversification activities, such as the seaweed farming, are managed by technical partners. **Very confident** that BF made **some contribution** to the outcome, alongside other factors, but was not the most important cause at Inhil: this was an area YMI, YPI and YHB were working on before the inception of the BF programme.

[15] Community-based organisations

ToC Impact Pathway	Key Result/Outcome Change	Context within the case study sites	BF Strength of evidence and Contribution to the change at the case study sites
	have been initiated that are in early stages of progress. With project assistance these are now marketed beyond the village and into the district. These income sources provide direct economic benefits to the community.	and equipment provision can ease this pressure.	
Community health **Achieved intermediate outcome level change with enhanced and inclusive delivery of healthcare that supports target communities.**	Access to health services has greatly increased across project sites with 290 health care workers receiving additional training and over 16,000 attending community health sessions. The programme has strengthened local healthcare access and trained community members, which has built trust and led to better overall reported health outcomes by stakeholders. In Madagascar, increased access to health services through establishment of 11 BV community health centres by the programme increased capacity and training of 85 community health workers (CHWs). It works with mothers groups and youth groups to support health education across communities, including family planning and maternal/child health – enhanced and inclusive delivery of healthcare. The project has exceeded its targets for women accessing sexual and reproductive health and rights services, as well as the number of people attending community health sessions.	In Madagascar in Ambanja, there is a local hospital in Nosy Be, but for communities across Tsimipaika Bay, it is still difficult to access without adequate transport options. Health services remain low, with a lack of access to medicine and vaccinations, as well as lack of access to infrastructure. The same issues occur at Inhil in Indonesia: health services are often inaccessible to remote communities, either due to travel barriers or a lack of trust in medical professionals. This limited access contributes to poor health outcomes, particularly among vulnerable groups. Strengthening local healthcare access and training community members has built trust and led to better overall health outcomes.	**Very confident** that BF made **some contribution** to the outcome, alongside other factors, but was not the most important cause in Madagascar: In 2017, activities already underway with Marie Stopes (Long-Acting Reversible Contraception activities), Association des Jeunes Pairs Promoteurs (Youth peer-to-peer association, USAID Accessible Continuum of Care and Essential Services, Population Services International Madagascar and Helvetas. BV's core delivery is around training of CHWs and establishment of community health centres. At Inhil, **very confident** that BF made a **critical contribution** to the outcome, without the programme these healthcare results would not have occurred, as no other organisations or interventions are providing this.

FINDING 10: Strong stakeholder engagement through the community first approach has been key in contributing to project outcomes.
This was found to be a key change mechanism. Blue Ventures' community-first model is grounded in the principle of local leadership and ownership, empowering coastal communities to take the lead in managing and protecting their marine environments. For example, in Ambanja, many staff are local community members, some of whom became permanent BV staff through their participation in the programme. This has fostered deep trust and long-term relationships with communities and stakeholders, enhancing programme effectiveness and responsiveness.

At the site in Inhil, this can be seen in the training for the community-based surveillance groups (Pokmaswas) and Village Forest Management Units (LPHDs), who received targeted training, equipment and financial support to strengthen their capacity for patrolling and managing mangrove and fishery areas.

Both case study sites feature the strong use of community-owned data, which is a key pillar of the community first approach. Community-based surveillance groups at both sites use their observations and data to inform local enforcement and management decisions. By prioritising active participation from local stakeholders, the project ensures that the strategies and solutions are not only contextually relevant but also aligned with the needs and aspirations of the communities it serves.

Moreover, this stakeholder-led approach enables the project to draw on local knowledge and expertise of community members, which is often critical in understanding environmental, social and economic dynamics. Community insights can reveal subtle but important patterns in resource use, cultural practices and challenges, allowing the project to tailor interventions more effectively. For example, at Inhil, community health ambassadors were trained and deployed in remote villages and their familiarity with local customs and networks enabled them to deliver health services more effectively and build trust with residents.

FINDING 11: The social capital, built through trust and collaboration with BV (Madagascar) and its implementing partners (Indonesia) has been instrumental to the project's ability to carry out its work effectively.
In Madagascar, BV has operated in Ambanja since 2013, with many staff being local hires who have remained with the programme since its inception. This continuity has fostered deep trust and strong relationships with communities and stakeholders. The programme's flexibility—such as pausing or stopping interventions like sea cucumber farming—was enabled by open dialogue and trust between BV and the community, allowing for responsive and context-sensitive decision-making.

At Inhil, BV worked through trusted local NGOs (YHB and YMI) who had long-standing relationships with communities. This pre-existing social capital enabled rapid engagement and effective delivery. Health outreach was delivered by community-nominated ambassadors, reinforcing trust and ensuring culturally appropriate service delivery. Ensuring stakeholders are integrally involved in decision-making not only enhances transparency but also reduces resistance to change, as the communities themselves become advocates for the initiatives.

This social capital is likely to encourage long-term engagement, helping project sustainability beyond its initial timeframe. Ultimately, BV's approach seeks to transform beneficiaries into partners to address the unique challenges of each context.

FINDING 12: Learning, adaptability and flexibility from partners, stakeholders and the funding mechanism have established a solid foundation for effective delivery by ensuring responsiveness to local contexts and emerging challenges.

These attributes of the programme enabled the project teams to address community-specific needs efficiently, ensuring interventions remain relevant and well-targeted. At the Ambanja site, the programme's flexible funding allowed BV to trial and adapt interventions based on community feedback. For example, sea cucumber farming and fish smoking were paused or stopped when they proved unsuitable in the local context, due to permitting challenges (sea cucumber farming) and damage to equipment (fish smoking). Incorporating iterative learning has allowed the project to refine its strategies systematically, drawing lessons from both achievements and setbacks. Exchange visits between communities enabled cross-site learning. For instance, the community in Ankingabe began producing biocharcoal after seeing it in another region, and expressed interest in scaling it using new technology. This has enabled adjustments to methodologies, tools and objectives to align with evolving community dynamics and external factors such as policy changes or environmental disruptions.

Photo: Local community biocharcoal production in Nosy Fala, Madagascar. Source: NIRAS evaluation team

Stakeholder feedback was used to reveal barriers that require modifications to planned activities. When alternative livelihoods proved difficult to scale due to market and permitting challenges, BV pivoted in 2022 to focus on value chains and financial inclusion, showing responsiveness to both community needs and feasibility constraints.

After the original site (Sembilang) was rejected by the national government, BV quickly pivoted to Inhil, leveraging YHB's scoping work and existing community engagement to ensure relevance and feasibility. These attributes of adaptability and flexibility collectively contributed to an effective framework for project delivery.

FINDING 13: The programme has continuously evolved, responding to emerging challenges and refining its approach to better serve community needs. This adaptability is evident across different scales, from high-level strategy shifts to more localised refinements.

The Covid-19 pandemic required a fundamental reassessment of delivery methods, leading to new solutions such as remote engagement and modified field activities. These changes ensured that key programme objectives remained achievable despite restrictions, highlighting the programme's ability to pivot in response to external disruptions.

In Indonesia, the programme has applied contextual adaptation in recognising that appreciation for local realities is needed to shape programme decisions. Governance structures, community dynamics and ecological pressures differ significantly across regions and programme locations, requiring tailored responses rather than a one-size-fits-all approach. Utilising local implementing partners who understand the context helped accelerate the learning process; however, it also came with certain challenges or biases and assumptions about gender participation (based on their pre-existing work in communities, and following patterns of engagement historically adopted, not necessarily updated or aligned with BF ambitions), and merging of strategic agendas (with pre-existing partner plans and directions integrated or conflated with BF planning).

FINDING 14: The programme has been designed to integrate communities that depend on mangrove environments for their livelihoods and those actively involved in managing these ecosystems as beneficiaries.

Engagement has been structured to ensure involvement at multiple governance levels, from local decision-making processes to broader policy discussions, reinforcing inclusive and sustainable management.

Across Madagascar, the BF programme has worked in communities that are reliant on mangrove ecosystems. BV has drawn on long-standing relationships with communities to implement activities across the programme's

pathways, establishing community-based governance structures to manage mangrove ecosystems and fisheries. Interventions are far-reaching and complementary, bringing together men, women and youth across mangrove and fishery patrolling, data enumeration, women and youth groups, VSLAs, health services and livelihoods activities. This approach has ensured that there are multiple ways for members to get involved in the programme, and that those reliant on mangrove ecosystems are directly involved in managing them.

FINDING 15: Despite success in activities across the BF strategic pathways, wider community integration has remained limited in Indonesia. There are opportunities to enhance crossover, such as incorporating more women from business groups into community surveillance initiatives.
This is most strongly illustrated with the gender disparity experienced at Inhil. Men and women participated differently across the activities, with men more engaged in management and governance activities and women in the livelihoods and community health pathways. Women interviewed at the Inhil site expressed an interest in engaging more with this work. Opportunities for greater cross-over therefore could be experienced by incorporating women into governance activities.

The livelihood activities exclusively targeted women's business groups but BV stated that YMI also supported an additional three KUPS and an LPHD (which are predominantly male-led) under the programme livelihoods pillar, in addition to the women-led KUPS group. Supporting business groups helps reduce pressure on mangrove forests and fisheries, given that extractive practices are predominantly undertaken by men. Supporting women-led groups may lead to women's empowerment and the income diversification could reduce household dependence on destructive practices. Households with greater income would be able to purchase liquified gas for cooking rather than relying on mangrove timber or charcoal and once supported, women-led cooperatives could also be able to engage in other activities, such as mangrove conservation[16]. Additionally, becoming economically independent may give women power to discourage male family member from illegal activities. It should be noted that during FGDs the women interviewed stated the additional household income is viewed positively by their husbands as it provided extra financial security.

FINDING 16: Logframe indicators and targets have been periodically reviewed and updated to maintain relevance and alignment with evolving priorities.
As programme activities have progressed, certain indicators have required recalibration to ensure they accurately track outcomes progress, reinforcing the commitment to meaningful evaluation. This is best demonstrated by the challenges with the establishment of the blue carbon strategic pathway, which instigated its removal from the logframe in 2022. In addition, multiple health-related indicators were adjusted or replaced/removed to better reflect the contextual relevance in Indonesia; e.g. replacing "unintended pregnancies avoided" with indicators on service delivery and referral capacity; and introducing indicators on health worker capacity and community health session attendance. This represents flexibility from programme funding and oversight, in that they were willing to adapt to the changing situation on the ground, rather than holding the programme to unrealistic or unachievable targets.

FINDING 17: Gender participation has been evident across various roles, with women actively contributing to programme activities. However, their engagement differs from men's, often aligning with specific responsibilities or sectors. There is an opportunity to adopt more intentional gender-responsive approaches rather than relying on existing frameworks.
While there have been efforts made throughout programme delivery to achieve equitable gender balance, traditional roles and social norms have shaped participation dynamics, sometimes resulting in subtle imbalances.

The Inhil case study underscores how gender assumptions can influence programme delivery. While governance strengthening efforts have been effective, they primarily focussed on reinforcing existing structures rather than critically examining gender inclusivity. During site discussions, it became clear that women wished to participate more actively in governance but had not been taken forward due to local cultural assumptions about women (e.g. their strength, safety and their roles). This realisation highlights the need for more intentional gender-empowering approaches rather than relying on existing frameworks.

[16] Jjaman R, Mozumder MMH, Emon MA, Islam MM. Why do alternative livelihood interventions succeed or fail? A case study of the Sundarbans mangrove fishing communities of Bangladesh. Maritime Studies. 2025;24:10 Why do alternative livelihood interventions succeed or fail? a case study of the Sundarbans mangrove fishing communities of Bangladesh | Maritime Studies

Madagascar presents a contrasting scenario, where programme longevity has led to more refined gender engagement strategies. Over time, adaptations have resulted in an approach that better considers gender dynamics, ensuring that participation reflects learned experiences rather than initial assumptions. This evolution demonstrates the value of continual assessment and responsiveness to gender-specific needs over time, ultimately fostering more inclusive and effective management outcomes and illustrating the benefit of BV's legacy in Madagascar to the BF programme.

3.5. Impact

EQ9:	To what extent does the BF programme contribute to establishing local management, protection and restoration of mangrove forests at the five project sites, and how do these compare between sites?
EQ10:	To what extent has the BF programme protected or improved livelihoods of supported communities?
EQ11:	To what extent did the project contribute to transformational change?

Rating	Statement	Definition	Description
Some evidence	There is some evidence to make an estimated judgement	Some evidence amongst monitoring data, programme documents or primary data supports a judgement	Data was limited beyond the two case study sites and portfolio/programme documentation (n=55). The evaluation team gathered relevant data from programme documentation and KIIs, including with in-country stakeholders, such as government officials and technical staff (n=32) and local communities (n=102). The coding process on MAXQDA resulted in 63 codes allocated to impact to support the analysis that provided some evidence to make an estimated judgement.

FINDING 18: There is some evidence that the Blue Forests programme has contributed to significant impacts across multiple dimensions, contributing to local management, protection and restoration of mangrove forests. There is some evidence the programme influenced community livelihoods to a limited extent.

Figure ii Reported impact achievements across workstreams from BF logframe 2024 (Year 8)

Local Management and Governance

Madagascar: 17 CLBs coordinated by regional federation (Miarientagna)

Indonesia: LPHDs and Pokmaswas trained for mangrove and fishery governance

Mangrove Protection and Restoration

Madagascar: 75,000+ hectares under community management

Indonesia: 26.2 hectares reforested in degraded coconut plantations

Livelihoods and Economic Impact

Madagascar: 49 VSLAs, biocharcoal, fish processing, beekeeping

Indonesia: Mud crab fishery, women's business groups supported

Integrated Health and Conservation

Madagascar: Safidy programme with 33 health workers and five centres

Indonesia: 72 health ambassadors deployed across six villages

Across the five project sites, mangrove management has played a critical role in both preventing degradation and advancing restoration. At the portfolio level, BF has facilitated the establishment of 12 fishery monitoring activities and five management plans and five locally relevant closures or gear restrictions. These combined efforts have resulted in the removal or avoidance of over five million tonnes of carbon dioxide emissions and the preservation of 2,413 hectares of forest that would otherwise have been lost (Table 7). These results are substantially higher than those recorded in comparable initiatives such as MOZBLUE in Mozambique and Mikoko Pamoja in Kenya. This performance reflects Blue Forests' focus on peat-rich sites with metres-deep carbon stores. Consequently, the programme's carbon figures far outpaced its logframe targets. Although other indicators evolved in line with

expectations, the modest upward adjustment of impact targets suggests the full scale of the project's achievements were not fully captured.

In Madagascar, there has been a marked shift in community attitudes, with widespread recognition of the negative effects of destructive practices. Meanwhile, in Indonesia, increased awareness of the ecological and economic benefits of mangroves has strengthened community engagement and stewardship.

There is some evidence on the extent to which the programme has made improvements to livelihoods. Though the programme achieved many of their indicators within this pathway, the evaluation revealed the impact of those output and outcome indicators does not automatically result in improved livelihoods for community stakeholders. Within Madagascar, the programme has tried several different interventions and adapted based on the challenges experienced. Livelihood improvement efforts have evolved over time, reflecting the programme's responsiveness to early challenges. The programme initially focussed on alternative livelihood provision, focussing on options such as sea cucumber farming, oyster farming and beekeeping. These initial activities yielded mixed results across regions and did not have much success in improving livelihoods. The programme adjusted its approach to the livelihoods pathway to focus more on value chains and livelihoods improvements, which has seen more engagement and success, as well as alignment with community needs and interests. These refinements now offer promising prospects for long-term, sustainable benefits.

The programme delivery mechanism has become more adaptive and demand-driven, expanding the scope of activities while aiming to contribute towards the impact measures. For example, in Indonesia repeated needs assessments have been used to ensure the programme continues to align with government objectives and to identify where the gaps are in government capacity. Implementing partners and communities have built frameworks for governance and resource management, demonstrating the potential for lasting impact. In Madagascar, shifts in perceptions surrounding charcoal production highlight the role of environmental education in influencing behavioural change, while the demand for scaling to new communities underscores the potential for broader impact. In Indonesia, co-developed management plans and strengthened governance structures have deepened local participation, and lessons learned from reforestation efforts have informed scaling strategies. The success of community-led reforestation and governance in Ambanja has led to plans to replicate the sub-granting model from Velondriake, where communities manage their own funds and activities.

Collectively, these impacts illustrate the programme's capacity for meaningful, long-term change, which has laid the groundwork for broader application beyond the initial sites. BV has reported 167 additional sites that are adopting models tested and proved within the BF programme. While challenges remain, the iterative improvements and adaptive approaches suggest that the programme is well-positioned for continued success.

Table 7: Blue Forest Programme Logframe impact indicators

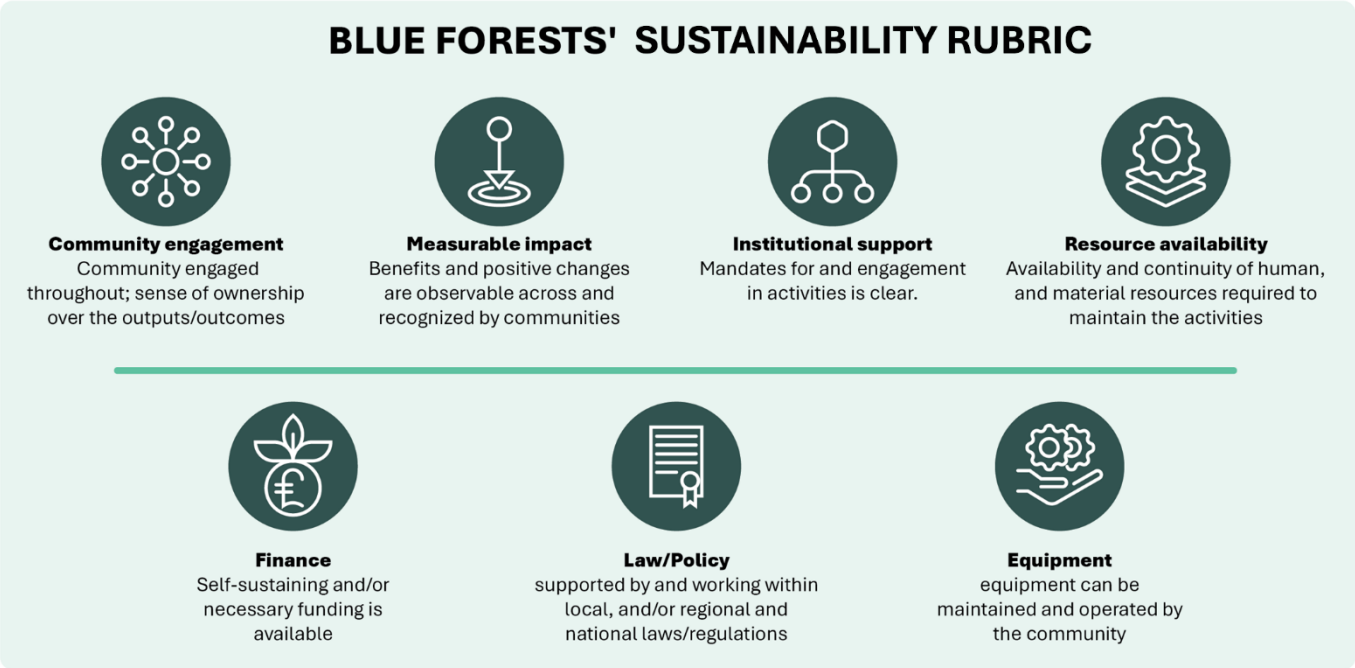
Impact Indicator	Logframe Impact Indicator	Target	Result achieved and comments
1	Tonnes of CO_2 emissions prevented or removed	**1.8 $MtCO_2$**	5 $MtCO_2$ - far exceeding target. *Calculations were reviewed, raw data was not verified*
2	Total number of hectares where deforestation has been avoided (KPI 8) [Note: removed degradation from this KPI as it is not possible to measure simply]	**1,230 ha**	2,413 ha – double the target area.

3.6. Sustainability

EQ12: To what extent are the benefits of the project likely to continue in the medium to long-term?			
Rating	**Statement**	**Definition**	**Description**
Some evidence	There is some evidence to make an estimated judgement	Some evidence amongst monitoring data, programme documents or primary data supports a judgement	Data was limited beyond the two case study sites and portfolio/programme documentation (n=55). The evaluation team gathered relevant data from programme documentation and KIIs, including with in-country stakeholders, such as government officials and technical staff (n=32) and local communities (n=102). The coding process on MAXQDA resulted in 50 codes allocated to sustainability to support the analysis that provided some evidence to make an estimated judgement.

Sustainability for BF is considered by the extent to which positive outcomes of the programme have been maintained throughout the programme's lifetime and/or are likely to continue. To assess the sustainability of BF's two project sites at Ambanja and Inhil, the NIRAS evaluation team developed a multidimensional sustainability rubric covering seven sustainability criteria. These criteria are shown in Figure 6. The rubric was assessed in two ways in the analysis against the five strategic pathways at each site, giving two dimensions of sustainability: per workstream at the site, and per criteria across all five strategic pathways. See Annex 5 for the full template of the criteria and scoring rubric.

Figure 6: Blue Forests' sustainability rubric



FINDING 19: There is some evidence that the Madagascar site has potential for medium-term sustainability. At the Indonesia site, sustainability is limited and continued support is needed. At both sites, financial sustainability is not assured.

Table 8: Scores by sustainability criteria

Site	Community Engagement	Measurable impact	Institutional support and management	Resources availability	Financial Sustainability	Backed up by law/ policy	Equipment continuation
Ambanja, Madagascar	24 (96%)	22 (88%)	25 (100%)	20 (80%)	16 (64%)	20 (80%)	23 (92%)
Inhil, Indonesia	23 (92%)	19 (76%)	22 (88%)	13 (52%)	13 (52%)	22 (88%)	22 (88%)

Based on the overall positive scoring from the rubric, there is potential for medium-term sustainability of the programme for the Madagascar site (Table 8) across a majority of the criteria. The key enabling factors that strengthened sustainability in Ambanja include:

- The sub-granting model: BV plans to replicate the Velondriake model, where funds are sub-granted to the regional Federation (Miarientagna), which then distributes them to CLBs;
- Community buy-in: strong engagement and ownership from communities, with some CLBs already managing activities like fish enumeration and reforestation independently;
- Institutional support: collaboration with regional government departments (DREDD and Regional Directorate of Fisheries and Blue Economy), though these departments have limited capacity and funding.

In Madagascar, certain CLBs have expressed confidence in their capacity to manage resources independently, with the federation actively seeking direct funding to reduce reliance on BV. However, sustainability challenges were identified in Ambanja. Some community members expressed concern that without BV's presence, activities might stop or regress back to illegal activities (e.g. return to mangrove harvesting). Further training is needed to strengthen grant management and reporting skills. While strong connections and buy-in with local government (DREDD and DRPEB) persist, financial and capacity limitations hinder local government ability to assume responsibility for project activities.

In Indonesia, sustainability challenges are more prevalent and continued support is needed for results in the country to continue and further develop, even with some elements of sustainability in place. Key challenges identified at the Inhil site that influence sustainability include:

- High dependency on financial and technical support from BV and partners;
- Local government lacks budget, capacity and capability to sustain activities independently;
- Short project duration (only two years) limited the ability of the programme to establish a strong foundation to secure sustainability across many criteria;
- No clear exit strategy was in place, increasing the risk of abrupt programme termination and reputational damage.

At the Inhil site, few activities have reached a stage where they can be maintained independently, and community dependence on programme support remains high. While implementing partners display elements of sustainability, beneficiaries indicate that activities would be significantly reduced or discontinued without financial assistance and external guidance by the programme. The Pokmaswas community governance group stands as an exception, benefitting from village budget allocations that provide a degree of financial continuity. Despite strong government ties, local authorities face budgetary and capacity constraints that limit their ability to sustain programme interventions without further external donor/programme support.

Despite these challenges, key enabling factors for strengthening sustainability at the Inhil site were identified: 1) strong regulatory frameworks: village forest management rights last 35 years, giving long-term control to communities; MPA management plans and formation of the management organisational unit. 2) Institutional integration has occurred for the health ambassadors, who are part of the Posyandu (government-recognised integrated service posts) and business groups are formally registered and recognised by village authorities. 3) The implementing partners (YHB and YMI) have institutional capacity and access to other grants; e.g. YMI applied for and received Ocean Community Empowerment and Nature (OCEAN) grant funding, which is another programmed delivered by Defra under the Blue Planet Fund.

FINDING 20: Sustainability per strategic pathway is only assured at both sites for Community Governance. Neither site had developed exit strategies for the end of the programme, which could have strengthened the sustainability of the strategic pathways with weaker sustainability.

The Sustainability rubric provides a scoring of 1 – 5 of the activities within each pathway against the sustainability criteria where:

- 1 = pathway performs poorly in this criterion
- 2 = pathway performs below average in this criterion
- 3 = pathway meets the minimum requirements for this criterion
- 4 = pathway performs well in this criterion
- 5 = pathway excels in this criterion

The overall score possible at strategic pathway level for sustainability = 35. Annex 5 provides guidance on how the scores were calculated. See Annex 6 for full description of the results of the rubric per site.

Table 9: Sustainability scores by strategic pathway

Strategic pathway	Sustainability	
	Ambanja, Madagascar	Inhil, Indonesia
Blue carbon and forestry management	32 (80%)	26 (65%)
Small-scale fisheries management and improvement	32 (80%)	28 (70%)
Community governance	32 (80%)	32 (80%)
Livelihood diversification, value chains and savings groups	25 (62.5%)	25 (62.5%)
Community health	29 (72.5%)	23 (52.5%)

In Madagascar, some of the strategic pathways demonstrate resilience and a degree of self-sufficiency while others remain dependent on continued support from BV. Three of the five pathways were graded positively for sustainability (Table 9): blue carbon and forestry management; fisheries management; and community governance. A majority of activities within these pathways are completely self-managed, such as fish enumeration, community meetings and reforestation activities. Given the community-first approach that BV employs, there is already strong buy-in and interest in sustaining activities across the Ambanja region. However, the concerns expressed by some community members within Ambanja remain relevant here: without the reinforcement from BV, mindsets may shift back to how they were prior to BV engagement.

In Indonesia, community governance (Table 9) is the only strong-scoring pathway when assessed against the sustainability criteria rubric. At the Inhil site a strong regulatory framework exists which helps support programme sustainability. The village forest management rights last 35 years, giving the village leadership long-term control of management decisions. Only the Pokmaswas community governance groups have allocated village budget for support. The programme has also helped develop and implement the management plan for the Inhil marine protected area (MPA) as well the creation of a Strategic Unit of Operation (SUOP) to govern this area. Other pathways, such as community health, received strong scoring for certain criteria, including community engagement, institutional support and management, equipment and backed by law/policy, but received weaker scoring for resource and finance availability.

At both sites, one major limitation to sustainability is the challenges surrounding implementation of blue carbon payments. BF initially aimed to facilitate verified carbon credits which would directly pay communities for mangrove preservation, allowing BV to exit (in the future) with a sustainable funding model in place. However, there were significant challenges over the course of the programme in negotiating voluntary blue carbon with the government. In Madagascar, all climate finance needs to flow through the treasury and then it gets distributed to the beneficiary. This poses significant risks for timely and transparent payment, and without proof of concept, there is a risk for investors. BV is still pursuing this mechanism, but the indicator regarding carbon credits was dropped from the logframe in 2022. Despite this BV made advance payments to the community trust to try to bridge the gap until blue

carbon payments begin to flow. This was to help maintain community faith in the initiative. Should the payments promised through the blue carbon activities fail to materialise for this community there is a risk that negative perceptions of carbon credit schemes may develop potentially reducing scaling opportunities in the future.

Additionally, at both sites, no exit plans were created with Defra ahead of programme closure in 2024. This is most likely due to the fact that BV as an organisation knew they were continuing the intervention's activities through other funding means and resources; e.g. BF activities are continuing, but Defra-backed funding and oversight stopped in 2024. For the plans in Ambanja and Velondriake for transferring activities to the communities is a sort of 'exit plan', but longer-term and not related directly to the ICF funding received from Defra.

4. CONTRIBUTION TO TRANSFORMATIONAL CHANGE

ICF KPI 15 defines transformational as "*encouraging others to replicate and scale up successful activities in the longer term and facilitating substantive institutional and policy change towards a low carbon and climate resilient future*."[17] Transformational changes are unlikely to materialise within an ICF programme lifetime, according to this guidance. Therefore, the aim of this methodology is to capture enough evidence to form a reasonable assessment of ICF effectiveness toward transformational change and is intended to track 'early signs' rather than just quantitative, measurable results.

The programme's business case describes transformational change as "successful interventions to reduce deforestation can transform rural governance and economies at national and international scales". One indicator in the logframe is intended to be used for tracking transformational change: Outcome 2.1 *"Extent to which ICF intervention is likely to have a transformational impact (KPI 15): Number of additional sites adopting models tested and proved within this project (outside of five sites)."* In May 2024, Defra published a review of ICF KPI 15 for the Blue Forests programme that included scoring of logframe output indicators.

For the evaluation we assessed the programme against the ICF KPI 15 ToC pathways that are intended to result in transformational change: **driver**, which examines the programme's capacity and capability and evidence of effectiveness; **mechanism**, which looks at the replicability of BF; and **enabler**, which assesses the programme's sustainability and influence on political will and local ownership. Within these pathways, we identified **six KPI 15 criteria** the programme aligns to for this assessment. The BF-specific criteria used to assess the programme are set out below (Table 10). As this assessment requires programme specific proxies for data input, these criteria were chosen based on the suitability and alignment to the BF intervention. Certain ICF criteria, such as 'increased innovation' and 'critical mass' were not chosen as they do not align to the outcomes of the programme.

Table 10: Six criteria for assessing Blue Forest programme contribution to transformational change

Criteria for Transformational Change *more likely to be transformational if several present*
Political will and local ownership: The need for the change is agreed locally and the process is locally owned
Capacity and capability are increased: Countries and communities have the capacities and capabilities necessary to bring about change
Evidence of effectiveness is shared: Approaches which have proved successful in one location are made widely available and lessons on their usefulness are credible and shared widely **Leverage/create incentives:** for others to act and/or leveraging funds from other donors **Scalability:** the intervention has sufficient reach to achieve progressive institutional and policy reform

[17] UK Government "Extent to which ICF intervention is likely to lead to Transformational Change", ICF KPI 15 Methodology Note, February 2023. https://assets.publishing.service.gov.uk/media/63fe28fb8fa8f527fb67caf8/international-climate-finance_KPI_15_Methodology_Note_Extent_to_which_ICF_intervention_is_likely_to_lead_to_transformational_change.pdf

Sustainability: activities are likely to be sustained once ICF support ends

In addition to reviewing the logframe's Outcome 2.1 results, we reviewed Defra's original KPI 15 scoring from 2024 and in some cases adjusted it based on the latest available evaluation evidence. Our assessment provides a deeper understanding and nuance by identifying outcome level changes aligned with the ICF criteria that place an emphasis on observable, visible and tangible change. These results were derived from the evaluation evidence at the programme and case study level, including from the sustainability and scalability assessments.

Based on the identified outcome-level results, evidence generated from the other EQs and logframe results, we then scored BF accordingly with the KPI 15 scoring guide of 1 – 5 (Table 11). The scoring reflects the availability of evidence on whether or not transformational change is likely (a score of 5), tentative (a score of 4), inconclusive (a score of 3), partially unlikely (a score of 2) or unlikely/will not occur (a score of 1).

Table 11: ICF KPI 15 scoring guide

Score	Description
1	Substantial evidence that suggests transformational change is unlikely or will not occur
2	Partial evidence that suggests transformational change is unlikely
3	Not enough evidence yet to assess or the balance of evidence is inconclusive
4	Partial evidence that suggests transformational change is likely
5	Substantial evidence that suggests transformational change is likely or is already occurring

4.1. ICF KPI 15 Results

4.1.1. Political will and local ownership

Blue Forests aligned logframe indicators	Final logframe result (Y8)
Output 1.1: Number of sites with community-led mangrove management plans	**5**
Output 2.3: Number of local fisheries management plans developed	**6**
Output 5.1: Number of relevant community structures (organisational/financial/administrative) in place to support local mangrove and fisheries management	**31**
Output 5.4: Number of sites with functioning, transparent community conservation agreements	**5**

There is substantial evidence to suggest that transformational change is likely or is already occurring for this criteria. At the output level, BV met all of its indicator milestones that demonstrate evidence of local ownership in place and political will embedded through management plans (fisheries and mangroves), in addition to the functioning conservation agreements.

At both sites BF has facilitated active participation of communities in forest and fishery management plan development and implementation and has provided support to community governance groups (e.g. CLBs in Madagascar and Pokmaswas in Indonesia), ensuring effective community owned governance. In Ambanja, 17 CLBs (with management transfers from the government or TGRNs) have been established, which are overseen by a regional Fédération Miaramientagna consisting of representatives from each CLB (with quarterly meetings). In Indonesia, governance and management were supported at two levels. At the community level, beneficiaries included surveillance groups such as the community-based surveillance groups (*Pengawas Masyarakat Perikanan* – Pokmaswas) and Village Forest Management Units (*Masyarakat Mitra Polhut - MMP*), whose capacity has been strengthened through targeted training and equipment provision. While at the government level the programme's engagement focussed on needs assessments and training exercises. These efforts not only helped build local

government capacity but also identified gaps beyond their reach, enabling the programme to support beneficiaries who might otherwise be overlooked.

Political will and local ownership — Score: 5

4.1.2. Capacity and capability can be increased

Blue Forests aligned logframe indicators	Final logframe result (Y8)
Output 4.3: Number of healthcare workers or community health ambassadors who report improved skills and knowledge in health delivery	**290**
Output 5.2: Monitoring capacity number of sites where community resource monitoring protocol is in place	**5**
Output 5.3: Enforcement capacity: number of sites where a community-led coastal management law enforcement protocol is in place	**5**

There is substantial evidence to suggest that transformational change is likely or is already occurring for this criterion. The metrics for capacity and capability increase seek to measure the resulting change in upskill and capacity for communities involved in Blue Ventures interventions across three of the programme's five strategic pathways (community health; fisheries management; community governance). The programme has met its target in the training and capacity building of healthcare workers. In Madagascar, Safidy (the health pillar) works across 18 villages in Ambanja and has trained 33 community health workers and established five health centres, with a total of 51 service delivery points. It also works with mothers' groups and youth groups to support health education across communities. The project has exceeded its targets for women accessing sexual and reproductive health and rights services, as well as the number of people attending community health sessions. In Inhil, the programme has trained 72 community health workers and placed community health ambassadors across six villages. Health services have been able to reach more remote villages thanks to the collaboration between the programme and the local health centre (*Puskesmas*).

Community-led monitoring at each of the five sites demonstrates not only local ownership but increased capability and capacity. For example, in Indonesia, the community-based surveillance groups (*POKMASWAS*) and Village Forest Management Units (MMP) routinely patrol mangrove and fishery management areas. Their capacity to fulfil this role has been strengthened through targeted training and equipment provision by the programme. Meanwhile, engagement with local government focussed on needs assessments and training exercises. These efforts not only helped build local government capacity but also identified gaps beyond their reach, enabling the programme to support beneficiaries who might otherwise be overlooked.

Capacity and capability can be increased — Score: 5

4.1.3. Evidence for effectiveness is shared

Blue Forests aligned logframe indicators	Final logframe result (Y8)
Output 6.1: Number of new pieces of evidence for individual conservation models	**34**

There is partial evidence that suggests transformational change is likely with this criterion. This driver measures progress on the programme broadcasting their work effectively and is obtaining key outcome results. BF's logframe (OP6.1) looks at pieces of evidence for effective models. There are notable research papers publicly available on effective conservation models through the programme that have been delivered, but mostly for Madagascar. Adaptive programming towards effective models is evident, as seen in the strategic shift to livelihoods from

alternative livelihoods when challenges with sea cucumber farming arose, and the programme broadening to incorporate savings and loans groups, and the adaptation resulting from Covid-19. However, it is unclear if the programme has made this evidence widely available and shared lessons with relevant stakeholders, such as governments.

Evidence for effectiveness is shared — Score: 4

4.1.4. Leverage/create incentives for others to act

There is partial evidence that suggests transformational change is likely with this criterion. There is evidence of funds leveraged by other donors, specifically the Coca-Cola Foundation[18] and the Blue Action Fund.[19] In addition, partners in Indonesia have received £243,216 in BPF OCEAN[20] grant funding for their BF work. Other funds have been leveraged from other donors, but this is not currently tracked by BV and better reporting on this aspect is needed.

Donor	Original Currency	GBP equivalent (Forex 15 May 2025)	Description
Coca-Cola Foundation	$497,560	£372,547	2024- Grant for mangrove restoration activities in Mahajamba (Site 3) and Tsimpaika Bay (Site 1)
Blue Action Fund	€ 1,778,602	£1,496,372	2021- Funding for Kubu Raya (site 5)
OCEAN Grant Fund	£243,216	N/A	2024 – Defra-managed grants programme delivered under the BPF. YMI will be using the BF model in six new villages in Indonesia.

Leverage/create incentives for others to act — Score: 4

4.1.5. Scalability

There is partial evidence to suggest that transformational change is likely or is already occurring for this criterion. For Outcome 2.1, the logframe reported that by Year 8 a total of 167 models were tested beyond the five sites. In addition, as noted previously, BV has already expanded BF activities in Madagascar into four additional sites in Madagascar (the Bay of Ambaro, Nosy Komba, Nosy Be and Ankify), while YMI has a new grant of £243,216 from OCEAN (to 2027) and will be using the same approach as the ICF programme in six new villages in Indonesia. The evaluation's analysis of scalability is an important piece of evidence for this ICF criteria.

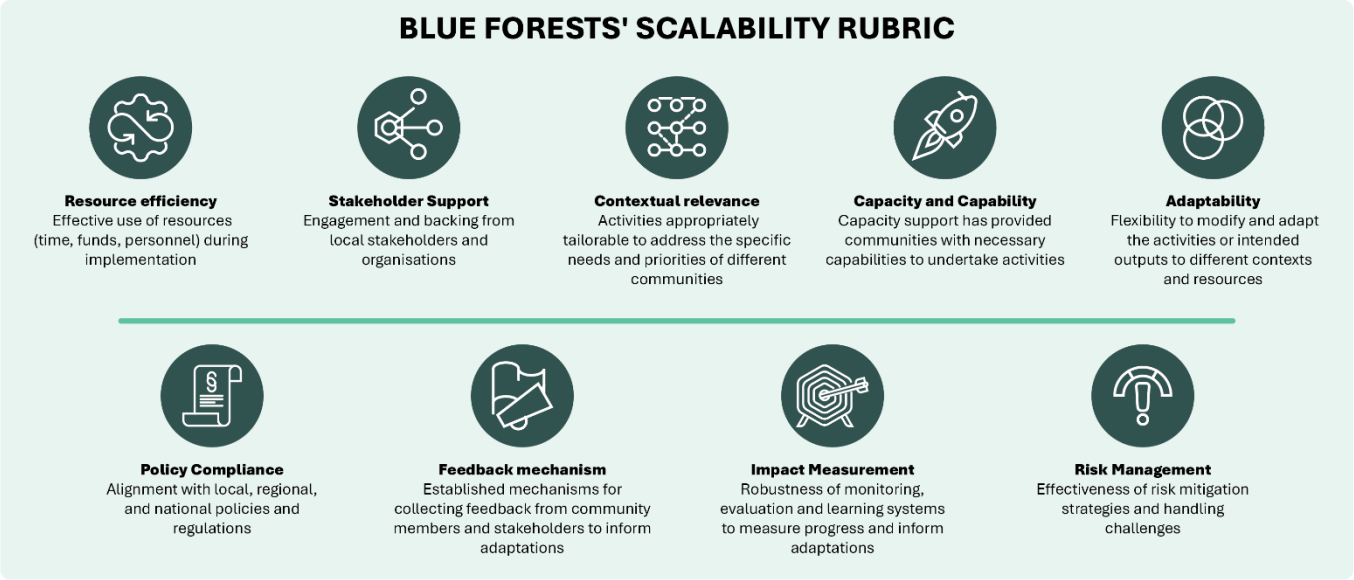
FINDING 20: Opportunities for scaling are evident at both portfolio and site levels, with Madagascar already demonstrating scaling activities. In Indonesia, scaling is possible given the right conditions.
For scalability, a similar rubric to sustainability was developed to assess if BF's long-term impact of the model being scaled to other BF sites is likely and whether or not this has occurred/is occurring. Figure 7 depicts the nine criteria related to scalability used in the assessment.

[18] The Coca-Cola Foundation Awards Grant to Blue Ventures to Help Protect Madagascar's Mangroves

[19] Factsheet_04_17_21-26_BlueVentures_Indonesia_A4.pdf

[20] Ocean Community Empowerment and Nature (OCEAN) grant is part of BPF aimed at addressing imbalances in ocean investment and supporting communities disproportionately impacted by climate change.

Table 7: Blue Forests' scalability rubric



The rubric assessed the suitability of the model delivered at sites (Table 12) across the 9 criteria. At the site level, the scalability rubric provides a scoring of 1 – 5 at each site against the sustainability criteria where:

- 1 = the site performs poorly in this criterion
- 2 = the site performs below average in this criterion
- 3 = the site meets the minimum requirements for this criterion
- 4 = the site performs well in this criterion,
- 5 = the site excels in this criterion.

The overall score possible per site = 25. Annex 5 provides guidance on how scores were calculated. See Annex 6 site reports for full description of the results of the rubric per site.

Table 12: Scores by scalability criteria per site

Site	Resource Efficiency	Stakeholder Support	Contextual relevance	Capacity and Capability	Adaptability	Policy Compliance	Feedback mechanism	Impact Measurement	Risk Management
Ambanja, Madagascar	24 (96%)	23 (92%)	25 (100%)	24 (96%)	25 (100%)	20 (80%)	20 (80%)	20 (80%)	18 (72%)
Inhil, Indonesia	24 (96%)	24 (96%)	25 (100%)	21 (84%)	25 (100%)	23 (92%)	20 (80%)	20 (80%)	18 (72%)

Based on the scalability rubrics both Madagascar and Indonesia demonstrate strong scalable potential in resource efficiency, stakeholder support, contextual relevance, capacity and capability support, policy compliance, feedback mechanisms, impact measurement and risk management (Table 9). For example, in Indonesia the mechanisms developed for community-led approaches and collaborative implementation across groups show strong scalability potential.

BV has effectively used insights from the programme to refine its future initiatives, adopting a more needs-focussed approach that integrates sustainability, capacity-building and community engagement lessons. Experience with both internal and partner-led delivery models has strengthened the organisation's ability to implement activities effectively at new sites. At the site level, stakeholders in Ambanja and Inhil have expressed a desire to replicate the

approach in additional locations, reinforcing the potential for broader application. BV has already expanded BF activities beyond its original sites in Ambanja, into the Bay of Ambaro, Nosy Komba, Nosy Be and Ankify in Madagascar, while YMI has a new grant from OCEAN (to 2027) and will be using the same approach as the ICF programme in six new villages.

In Madagascar, a sub-granting model has been developed at Site 2 in Velondriake, with the aim to build community capacity so they can receive and manage funding directly. This is planned for replication in Ambanja (as included in BV's recent proposal submission to the OCEAN grant programme), with the model being adopted to the Ambanja context. Funds would be sub-granted from BV to the Federation, who would then distribute funds across the CLB.

Risk management received the lowest grading at both sites. At Ambanja, there were clear risks in patrolling activities. Safeguarding policy has been somewhat top-down in terms of adapting to the local contexts, according to stakeholders. At Inhil, risk management was challenging for evaluators to discuss with stakeholders, who declined to comment on it.

Table 13 provides the results of the scalability assessment of the five strategic pathways graded against the nine criteria related to scalability. At the strategic pathway level, the scalability rubric provides a scoring of 1 – 5 for each pathway against the sustainability criteria where:

- 1 = pathway performs poorly in this criterion
- 2 = pathway performs below average in this criterion
- 3 = pathway meets the minimum requirements for this criterion
- 4 = pathway performs well in this criterion,
- 5 = pathway excels in this criterion.

The overall score possible per site = 45. Annex 5 provides guidance on how scores were calculated. See Annex 6 site reports for full description of the results of the rubric per site.

Table 13: Scalability scores by strategic pathway

Strategic pathway	Scalability	
	Ambanja, Madagascar	Inhil, Indonesia
Blue carbon and forestry management	40 (88.9%)	39 (86.7%)
Small-scale fisheries management and improvement	40 (88.9%)	41 (91.1%)
Community governance	40 (88.9%)	42 (93.3%)
Livelihood diversification, value chains and savings groups	38 (84.4%)	36 (80%)
Community health	41 (91.1%)	42 (93.3%)

Across the strategic pathways, both sites received high scores for scalability. In forestry management, strong collaboration with all groups and following a community-led approach meant resources were targeted efficiently. At Inhil, the high scores represent the capacity building efforts of the programme. The use of needs assessments identified gaps and training and capacity building was used to address these. The lower score for the livelihood component reflected feedback from interviews highlighting the ongoing need for sustained support.

Scalability — Score 4

4.1.6. Sustainability

The balance of evidence is inconclusive to suggest that transformational change is likely for this criterion. Per the findings presented in Section 3.6, the Madagascar site has strong indications of medium-term sustainability. At the Indonesia site, sustainability is limited and continued support is needed. At both sites, financial sustainability is not assured. Sustainability per strategic pathway is only assured at both sites for Community Governance. Neither

site had developed exit strategies for the end of the programme, which could have strengthened the sustainability of the strategic pathways with weaker sustainability.

Overall, the sustainability of Indonesia is less assured than Madagascar. For example, in Inhil where the community has re-established the mangrove forest in the degraded coconut plantation area, the community members stated that without continued assistance they would not conduct reforestation activities in the future, despite having been trained. Sustainability varies across sites in Indonesia. In Kubu Raya, the community health pathway is more developed, with a greater number of trained health workers and patient visits conducted both at home and in clinics. These activities are expected to continue even without further support. In contrast, at Inhil, many health workers and village health visits would likely be lost without ongoing assistance.

Sustainability for Madagascar is generally stronger, with some elements regarding finance and resourcing more tenuous: for example, patrolling and enforcement rely on payments from BV, which communities fear will end.

Sustainability — Score 3

4.2. KPI 15 Summary Score

From the aggregated scores across the six criteria, the evaluation has assessed the Blue Forests programme with an **ICF KPI 15 score of 4**: **there is partial evidence to suggest that transformational change is likely to occur from the programme**.

Per Table 12, certain criteria, such as political will and local ownership, increasing capacity and capability and scalability are already demonstrating evidence of this change occurring. Evidence of the intervention's effectiveness being shared, leveraging others to act and scalability of the programme demonstrates partial evidence of transformational change. Sustainability, while strong for some strategic pathways in the programme and particularly in Madagascar, is inconclusive when considering both Madagascar and Indonesia.

Table 12: Blue Forests programme ICF KPI 15 total average score

Criteria for Transformational Change (weightings)	Scoring
Political will and local ownership	5
Capacity and capability are increased	5
Evidence of effectiveness is shared	4
Leverage/create incentives for others to act	4
Scalability	4
Sustainability	3
Total Average ICF KPI 15 Score	**4**

Photo: official opening ceremony of the Mahaloky fishing season – DIANA region, Nosy Fala, 31 March 2025. Source: NIRAS evaluation team

5. CONCLUSIONS AND KEY LESSONS

5.1. Conclusions

The BF programme has demonstrated a significant and multifaceted contribution to the sustainable management of mangrove ecosystems and the wellbeing of coastal communities in Madagascar and Indonesia. The programme is overall addressing the right problems and has targeted the relevant beneficiaries across sites, while also being inclusive of wider stakeholders. However, some strategic gaps remain in terms of addressing drivers of change, resource users and beneficiaries. BF targets women's participation and actively seeks to include women in activities, but challenging gender contexts were found to affect certain aspects of delivery.

BF has been delivered in an economical, efficient, effective and equal manner, ensuring the programme has been delivered in a timely and cost-effective way. The programme's adaptive design and flexible funding mechanisms have enabled it to respond effectively to contextual challenges, including the COVID-19 pandemic, regulatory hurdles and shifting community needs. This adaptability has been a key enabler of success, particularly in refining the livelihoods and health pathways.

Through its integrated, community-first approach, the programme has achieved notable outcomes across its five strategic pathways—mangrove and blue carbon management, small-scale fisheries, community governance, livelihoods and community health. Most indicators have been achieved across the logframe with a relatively high level of contribution from the BF programme. Delivery has benefitted from its community-led design and the flexibility of both its implementation and funding, while the long-term nature of funding has provided stability.

The BF programme has made significant contributions to strengthening local management, protecting and restoring mangrove forests and supporting the livelihoods of mangrove-dependent communities. Strong engagement, support and ownership from communities and local government contribute to programme sustainability. In Madagascar, long-standing relationships and embedded delivery models have fostered strong community ownership and institutional support, contributing to medium-term sustainability. In Indonesia, while progress has been made, sustainability remains more fragile due to shorter implementation timelines, limited government capacity and high dependency on external support.

While the BF programme has laid a strong foundation for transformational change to potentially occur, particularly in terms of political will, local ownership and capacity building, the sustainability of project outcomes is at risk post-funding with no clear exit strategy in place. For some strategic pathways at the two sites, without continued support from the programme/BV, many activities would be unlikely to persist due to resource and capacity constraints. There is need for clearer exit strategies, improved financial sustainability and more intentional gender-responsive approaches, particularly in Indonesia. The programme's long-term impact will depend on continued investment, strategic scaling and the resolution of systemic barriers such as the operationalisation of blue carbon finance.

5.2. Key Lessons learned

The success of certain strategic pathways depended heavily on partner engagement, with isolated activities requiring stronger coordination mechanisms to maintain coherence. The strategic pathways, livelihood diversification and blue carbon, faced considerable challenges. External factors disrupted intended outcomes, while in some instances, the groups receiving support were not necessarily those best positioned to drive long-term impact. However, certain pathways complemented each other, enabling integration and reinforcing positive outcomes. Forestry and fishery management worked well alongside community governance, strengthening local stewardship and conservation efforts. Similarly, small-scale fisheries management benefitted from improved resource governance, creating a more structured approach to sustainability.

Successful interventions require balancing economic opportunity with long-term sustainability and local buy-in. The programme's pivot towards a more holistic approach to reducing the reliance on unsustainable practices has allowed the programme to be more effective. The livelihood diversification, value chains and savings groups pathway has been particularly challenging for the programme. Initially, the aim was providing alternative livelihood opportunities for mangrove dependent communities, however a range of factors highlighted

this as overly simplistic. Rather than shifting entirely away from fishing, strengthening value chains improves incomes while maintaining traditional practices. Savings groups and cooperatives offer financial stability but must be carefully targeted to ensure they engage those whose activities impact mangrove health.

While carbon finance offers a promising pathway for sustainability, its implementation is highly dependent on regulatory clarity, political will and bureaucratic efficiency, factors that were beyond the control of implementing organisations. Utilising blue carbon and carbon credits for sustainability is strong conceptually, but requires more foundational work in the countries and coordination with governments before it may be actionable. The protracted approval process in Madagascar has created long delays, disrupting the project's financial sustainability, while the moratorium on externally led carbon projects by the Indonesian government means that there is no pathway to success for this at present. Ultimately, while carbon finance holds great potential, at present its viability depends too much on unpredictable external processes, risking long-term sustainability.

Building the BF programme from the foundations of previous work (Madagascar) or through pre-existing relationships (Indonesia) has contributed to buy-in and engagement from the outset. Without these foundational relations it is likely the lead time to implementing activities would have been longer, and buy-in not so assured. This approach is effective for layering impacts and consolidating progress.

The community-first approach adopted across the BF programme has proven effective and key to engaging and empowering stakeholders to achieve change, ensuring the intervention is led by what the communities want and need, and by having BV/ local partner team members embedded within the communities and understanding local contexts well.

The programme has been able to be responsive and adaptive due to the flexibility of partners and the funding mechanism, highlighting the importance of such flexibility for enabling local BV and partner team members to optimise programme delivery, deal with emerging challenges and adapt to context as needed.

5.3. Recommendations

Drawing on the findings, conclusions and lessons learned above, the following recommendations have emerged from this summative evaluation:

RECOMMENDATION 1: The programme should revisit expectations under the livelihood diversification, value chains and savings groups pathway and continue to update/adapt according to the challenges observed and solutions already being tested on the ground. It is recognised that value chains and savings groups were not part of the original idea and so are themselves a learning and adaptation, but there is more to do. This will also require a review of how such a pathway is anticipated/intended to interact with other pathways to change and overall output and outcome expectations.

RECOMMENDATION 2: Defra should continue to enable flexible funding of delivery partners so that they may adapt according to the challenges observed and contexts on the ground. Flexible funding allowed local BV and partner teams to deliver effectively when faced with programmatic challenges or external challenges that were hindering results.

RECOMMENDATION 3: Ensure appropriate mechanisms for women to engage proactively in all programmatic implementation activities (including, for example, governance), not just those that align with existing cultural norms and perceived gender roles. This is particularly the case in Indonesia where women voiced interest for wider engagement in patrol activities. To enable improved engagement may require further training of BV and partner staff in safeguarding practices, and the establishment of clear and consistent safeguarding protocols at the programmatic level (cross-partner) tailored to cultural and geographical context. It may be advantageous to explore setting GESI targets within the logframe to enable clearer goals to work towards on the ground.

RECOMMENDATION 4: There is an opportunity to better integrate activities across sectors, allowing all community stakeholder groups to reinforce a unified message that protecting mangroves is directly linked to sustaining fish stocks and improving community livelihood and health. This connectivity in messaging is not always evident or being implemented to full effect. Coordinating activities between community stakeholder groups

and encouraging people to join multiple groups would be a valuable next step to improve these linkages between actionable support provided and the outcome intended.

RECOMMENDATION 5: Defra should require VfM reporting to ensure accountability and value of ODA-spend. It would be a valuable exercise to undertake a more detailed review of the cost drivers and expenditure in Indonesia to make a more informed judgement of VfM in this country, as the VfM analysis provided is high-level and based on available information. It is anticipated further lessons could be learned to guide and inform future replications of the BF approach, and support the prioritisation of activities and programme delivery mechanisms. In addition, the programme should accurately track instances of the BF leveraging funding from other donor sources, as this is a strong indicator for demonstrating the potential to contribute to scalability, replicability and sustainability.

RECOMMENDATION 6: A transition strategy/plan is needed to plan per site more explicitly for future sustainability of the programme. In particular, financial sustainability remains elusive within the programmatic design, and capacity gaps remain for local governments and community leaders to take on roles and activities currently provided by BV and partner staff.

RECOMMENDATION 7: In the event of BF programme replication at new sites, it will be a valuable exercise to pre-identify the key drivers of mangrove habitat loss/ impacts and ensure the strategic approach adopted effectively targets the stakeholders involved in those drivers. While this was evident in Madagascar (where interventions were targeted towards mangrove resource user/extractors, as well as wider stakeholders), it was less evident in Indonesia, where actions, while having a positive impact on mangrove preservation in key sites were not addressing the wider drivers (and associated stakeholders) that continue to extract/utilise/reduce mangrove habitat. For example, the livelihood activities at Inhil exclusively target women's business groups at present with no engagement of men. This approach misses opportunities to reduce pressure on mangrove ecosystems, as extractive practices are predominantly carried out by men.

Photo: Local government community event to promote awareness of mangroves and conservation, Nosy Faly, Madagascar. Source: NIRAS evaluation team

Annex 1: Theory of Change Narrative

Blue Forests programme

Theory of Change Narrative for Blue Ventures

Department of Environment, Food, and Rural Affairs

Date: 31 January 2025

Contents

1 Introduction

This document sets out the Blue Forests (BF) programme's Theory of Change (ToC) narrative. The ToC narrative explains how the BF programme's activities are intended to produce a series of results that contribute to achieving the final intended outcomes and impact of the programme. It represents the BF programme in 2025, four years into implementation, and is intended to reflect the BF programme's current state of programming and aims. Theories of Change and their accompanying narratives are living tools that demonstrate the building blocks a programme uses to reach its goals. It should be owned by the implementing teams delivering the BF programme, with the intention to re-visit and update this narrative periodically as the BF programme continues along its project cycle.

The NIRAS evaluation team has been contracted to deliver an independent evaluation of the Blue Forests programme in July 2021. The aim of the Summative Evaluation (to be conducted in 2025) is to present an inde-

pendent and balanced appraisal of the BF programme, document progress against outcomes, and provide learning on what works, for whom, and how, to Blue Ventures and Defra for their investment in Blue Ventures.

The NIRAS evaluation team assessed the status of the programme in late 2021 and provided several recommendations to ensure it is in the best place possible to be evaluated in 2025. These recommendations included revising and updating the Blue Forests MEL framework, which includes the logframe and associated indicators and the Theory of Change. Recommendations to the Blue Forests logframe were made in 2022 and accepted by Defra in 2023.

In late 2023, the NIRAS evaluation team carried out a review of the ToC, resulting in several recommendations for the BF team. This review was in preparation for ToC workshops held with implementation teams in Madagascar and Indonesia to check if programme activities and outputs remained feasible and realistic and if assumptions held true. The NIRAS evaluation team conducted two ToC workshops in December 2023: one with members of the BF Madagascar implementation team and one with members of the BF Indonesia implementation team. Both workshops were carried out online, with live translation for the BF Indonesia teams.

1.1 The Blue Forests programme

The Blue Forests programme seeks to protect and sustainably manage mangrove forests through community-led initiatives that support the improved management and sustainability of small-scale fisheries and develop alternative livelihoods in coastal communities in Madagascar and Indonesia. The programme is delivered and managed by the UK non-government organisation (NGO) Blue Ventures, whose aim is to develop transformative approaches for sustainable locally led marine conservation, building towards a replicable model for the sustainable management of mangrove habitats.

In 2022, the project was moved under the Blue Planet Fund due to the programme's close alignment with the aims of the Blue Planet Fund. The Blue Forests programme works with local communities, the private sector, and national governments at five sites: three in Madagascar (Ambanja Bay, Velondriake, and Mahajamba Bay) and two in Indonesia (Indragri Hilir and Kubu Raya).

1.2 Overarching Objectives of the Blue Forests Programme

The Blue Forests (BF) programme seeks to protect and sustainably manage mangrove forests through community-led initiatives that support the improved management and sustainability of small-scale fisheries and develop alternative livelihoods in coastal communities in Madagascar and Indonesia. The programme recognizes the critical role that mangrove forests play in supporting the economic, social, and environmental needs of coastal populations. Mangroves provide essential ecosystem services, including blue carbon sequestration, coastal protection, and habitat for marine biodiversity, which are vital for the livelihoods of local communities.

The BF programme aims to develop transformative approaches for sustainable, locally led marine conservation, building towards a replicable model for the sustainable management of mangrove habitats. This involves working with local communities, the private sector, and national governments to implement strategies that enhance the resilience and sustainability of coastal ecosystems. It's impact statement is:

> 'Mangrove forests and ecosystem services (fisheries etc) protected and restored, preventing carbon emissions and supporting security of livelihoods in communities.'

The programme delivers outcomes across four key pillars:

1. **Blue carbon sequestration and forestry management**: Enhancing the capacity of local communities to manage and protect mangrove forests, thereby increasing carbon sequestration and contributing to climate change mitigation.

2. **Small-scale fisheries management and improvement**: Supporting the sustainable management of small-scale fisheries to ensure long-term food security and economic stability for coastal communities.

3. **Livelihood diversification**: Developing alternative livelihoods that reduce pressure on marine resources and provide economic opportunities for local populations.

4. **Community health and women's empowerment**: Promoting community health initiatives and empowering women to take active roles in conservation and sustainable development efforts.

The BF programme is aligned with the objectives of the Blue Planet Fund, reflecting its commitment to addressing global environmental challenges through locally driven solutions. By fostering local ownership and building the capacity of stakeholders, the BF programme aims to create lasting positive impacts on both the environment and the communities that depend on it.

1.3 Outcome and Intermediate Outcome Level Changes

The programme's stated Outcomes are:

> 'Improved sustainable mangrove forestry and fisheries management implemented by coastal communities at Blue Forests sites in Madagascar and Indonesia;' and
>
> 'Tested implementation models for scaling available to coastal communities in other geographic locations.'

To reach that Outcome, the intervention must first result in the implementation of results at the Intermediate Outcome level, which is more in control of the programme to influence:

- Mangrove forests better protected under local management, and blue carbon activities in development.
- Fisheries have improved value, protection, and benefits to fishers.
- Community-based governance structures are created and/or improved.
- Communities benefit from alternative livelihoods, value chains, and/or savings groups.
- Enhanced and inclusive delivery of healthcare that supports target communities.

2 Problem Statement

The problem statement of a ToC sets out the issues, challenges, or problems that the intervention intends to address, and the constraints to addressing that problem. For the Blue Forests programme, the following problems were identified:

- **Mangrove Harvesting:** In the areas where we operate, mangroves are being harvested for building materials and fuel wood. There is limited or no management in place, and even where management exists, engagement in rule implementation is minimal, leading to poor compliance and enforcement.

- **Fisheries Exploitation:** Local fisheries are being exploited for both subsistence and income. Management is either limited or non-existent, and where it does exist, compliance and enforcement are weak, especially when there are external financial incentives to catch more.

- **Local Governance:** Local governance often lacks the mandate to focus on natural resource management. Decision-making at the local level is frequently hindered by complex issues such as poverty, unmet health needs, and a high reliance on fishing.

- **Dependence on Resources:** Communities are highly dependent on mangrove wood and fisheries for their livelihoods, including food, income, and fuel. This dependence makes it challenging to comply with management rules aimed at reducing resource pressure.

- **Health Services Access:** Poor access to health services can lead to frequent illness among community members, limiting their ability to engage in or comply with natural resource management efforts. Illness may force individuals to adopt more destructive fishing methods or fish illegally to increase yields. It also restricts their ability to participate in improved value chains, new non-extractive livelihood opportunities, or financial inclusion activities, leading them to rely on traditional, often extractive, income-generating activities.

- **Financial Inclusion:** Limited access to savings and loans restricts community members' ability to invest in non-extractive livelihood opportunities. This financial constraint forces them to continue relying on traditional income-generating activities that require lower upfront investment but are more likely to be extractive.

- **Gender and Social Norms**: Traditional gender and social norms may restrict women and youth from engaging in natural resource management, improved value chains, or non-extractive livelihood opportunities. However, evidence shows that involving women in resource management and alternative livelihoods can foster greater community support and lead to more sustainable practices.

- **Global Challenges:** Coastal communities worldwide face these issues. There is a lack of evidence, guidance, and tools to facilitate successful community-led governance and management of natural resources, particularly in holistic and integrated programming.

Summarised problem statement: "Coastal communities face unsustainable mangrove and fisheries exploitation, characterised by insufficient management, low compliance, and complex socio-economic challenges, including poverty, limited access to healthcare, and traditional gender norms that can restrict the participation of women and youth in natural resource management and alternative livelihoods."

3 Strategic Pathways

Strategic pathways (also referred to as 'causal pathways') are the identified linkages between an intervention's activities and the necessary steps and actions to get to the desired outcomes. They are the mechanisms of the programme that address the identified constraints and problem statement. The strategic pathways for the BF include:

- Blue carbon and forestry management
- Fisheries management
- Community governance
- Livelihood diversification, value chains and savings groups
- Community health

The strategic pathways demonstrate the linkages between BF's activities and inputs and the sequence necessary

for creating the expected changes in mangrove ecosystem management and community resilience within the programme sites in Madagascar and Indonesia. The causal pathways are the avenues in which BF will address the identified constraints and problem statement. The outcome of BF delivering outputs through these strategic pathways is expected to result in improved sustainable mangrove forestry and fisheries management and these tested implementation models available for scaling by other coastal communities.

For example, through providing technical assistance on blue carbon activities, the BF programme should enact a positive change and increase a community's capacity (i.e., resources) and capability (i.e., ability) to manage and protect mangrove forests. The change that is expected to occur along these pathways is not linear, nor does each pathway operate in isolation; they should collectively support each other and result in synergies. Technical assistance for blue carbon activities could involve both training local community members and providing access to better datasets to support local conservation efforts, while simultaneously working with local governments and stakeholders to strengthen policies around mangrove protection.

Evidence for the efficacy of these strategic pathways is linked with interdependent inputs (i.e., the activities or resources provided by the programme) that result in the BF programme's outputs.

The inputs for the Blue Forests (BF) programme include:

- Funding: A mixture of International Climate Finance (ICF) and Official Development Assistance (ODA) funding, through the Blue Planet Fund. The BF programme is a £10M eight-year pro-gramme (2017-2024) which is now in its penultimate (7th) year of implementation.
- Wider community investment: Contributions by private sector partners who support sustain-able business opportunities.
- Human resources: Expertise in marine science, monitoring, governance, and management.
- Research and evidence capacity: Strengthening the ability to conduct research and gather evidence to inform programme activities.
- Infrastructure: Development and maintenance of necessary infrastructure to support programme activities.

3.1.1 Blue Carbon and Forest management

This pathway enables and builds capacity of communities to sustainably manage their natural environment. Initially, Blue Ventures works with the community and other stakeholders, alongside research partners and local/national government (where appropriate), to develop an understanding of the key threats and issues in a specific project location. Once research is undertaken, results are then shared with community decision-makers and other stakeholders. Assuming that there is community and stakeholder buy-in, this evidence is then used in the participatory development (involving both communities and other key stakeholders) of management approaches and management plans.

Blue carbon and forestry management activity examples
Blue Carbon field work
Participatory forestry field work and monitoring
Participatory biodiversity monitoring
Co-design forest management plans

If management plans are developed by the community for both mangrove and fisheries management in the local areas, and all community members recognize the legitimacy of these management plans, then it is highly likely that these plans will be implemented and complied with. However, this assumes that our gender-sensitive interventions in health, alternative livelihoods, governance, and other social barriers are working and, as such, people are able to engage in the research and development phases of management/governance.
We also assume that a local governance body exists to implement management plans, and all stakeholders recognize the legitimacy of and abide by the plans and management rules. In order to build strengthened

community governance, it is important that all stakeholders are involved and feel sufficiently represented in decision-making.

If management plans have been developed using the knowledge generated by local fieldwork, participatory monitoring, and assessment of mangrove health and biodiversity, then we assume that the management strategies included in the management plans are sufficient and iteratively improved to effectively manage the resources.

There is also the assumption that the trade-off that a community is making to implement management is sufficiently offset by any benefit they see from management in the short/medium/long term. This may be due to fisheries benefits accrued through management and improved catches, or through incentives such as carbon payments or the provision of other income-generating activities, the sharing of which is developed in partnership with local communities as well as regional and national authorities.

The expected Output for this pathway is: "Sustainable community mangrove management plans in place and implemented with increased capacity of communities in forest management."

Expected Outputs: Madagascar

- Sustainable community mangrove management plans in place
- Mangrove reforestation plan implemented
- Validation of carbon credit projects at identified sites and/or identification of carbon financing
- Increased capacity of communities in forestry management and stakeholder engagement on blue carbon

Expected Outputs: Indonesia

- Sustainable community mangrove management plans in place
- Mangrove reforestation plan implemented
- Obtain recognition from the government of social forestry rights
- Communities have awareness of government Blue Carbon work
- Increased capacity of communities in forestry management.

3.1.2 Small scale fisheries management and improvement

This pathway supports the development and implementation of small scale fisheries management and improvement plans for local communities and stakeholders in Madagascar and Indonesia. If management plans have been developed using the knowledge generated by local fieldwork, participatory monitoring, and assessment of mangrove health and biodiversity, then we assume that the management strategies included in the management plans are sufficient and iteratively improved to effectively manage the resources.

The expected Output for this pathway is: "Fisheries management plans or fisheries improvement action in place and supported with available strengthened data."

Expected Outputs: Madagascar

- Fisheries management plans or fisheries improvement action plans in place

Small scale fisheries management and improvement activity examples

Participatory and mobile fisheries monitoring

Fisheries value chain assessment

Co-design and/or support of implementation of fisheries management activities and management plans

- Communities have access to mobile data feedback for fisheries; community data system feedback in place

Expected Outputs: Indonesia

- Fisheries management plans or fisheries improvement action plans in place
- Awareness activities on environmental health delivered

3.1.3 Community governance

Activities designed to strengthen local governance are likely to be more successful if there is a national policy in place that supports local decision-making on the management of natural resources. Where this doesn't exist or where it is not "fit for purpose," the first activity should be to advocate—together with government or non-governmental partners or through networks—for policies that support the transfer of rights to communities, enabling them to manage their local resources.

Community governance groups are often established as associations, although they may have different names in different locations depending on national policies about who is entitled to manage resources. For example, a locally managed marine area (LMMA), Fisheries Association, or Beach Management Unit (BMU). Local governance may need to be strengthened in various ways; however, association support often focuses on key areas of governance. These include setting clear objectives, implementing management plans, establishing monitoring systems, rules, processes for rule enforcement, ensuring transparent communications, and improving local engagement and equitable participation.

Depending on the context and the areas that need strengthening for the particular community association in question, we assume that our gender-sensitive projects addressing health, livelihoods, and/or other locally relevant social barriers to engagement are working, and as such, people are able to engage in local governance and decision-making.

If we work together with the local association to strengthen local governance, we assume that the governance body becomes sufficiently autonomous and has a relevant mandate for ongoing management of both fisheries and mangroves. We also assume that this association is able to effectively and iteratively manage and enforce rules within the management area (fishery/mangrove). If this focus on local resource management is maintained by the association, we would expect to see governance structures strengthened to the point where they are able to continue to support management over the project cycle of 20 years and beyond.

Community governance activity examples

Govt negotiations for mangrove management (regional/national) where needed for transfer of management rights

Set up/continue community associations

Set management objectives with community associations

Collaboratively design conversations agreements

Establish community monitoring surveillance

Establish community enforcement

Governance & capacity assessment

The expected Output for this pathway is: "LMMA/Local governance in place, management activities monitored and enforced through community based governance engagement and available strengthened data."

Expected Outputs: Indonesia and Madagascar

- LMMA/Local governance in place
- Community-based organisation/association

- Management activities monitored
- Management enforced
- Management compliance
- Engagement in community-based governance
- Data availabilities on LMMAs to strengthen decision-making for capacity building prioritisation (Madagascar)

3.1.4 Livelihood diversification, value chains and savings groups

Developing alternative livelihoods and financial inclusion reduces reliance on extractive livelihoods, enables engagement in local governance, and reduces barriers to compliance with management rules. Livelihoods or income-generating activities that do not rely on the extraction of natural resources and/or are reliant on healthy functioning ecosystems for improved production are identified and developed with the community and local stakeholders. In addition, avenues to improve existing extractive livelihoods are explored. Finally, savings and loans groups are initiated, often requiring a private sector partnership. The Blue Forests programme will establish Savings Groups at all project sites with the assistance of Savings Group (SG) experts. These groups will be formed and led by trained savings group leaders, who will receive training from programme partners. In Velondrake and Majahamba, the Savings Internal Lending Community will be delivered by Catholic Relief Services, while the Aga Khan Foundation will deliver Village Savings and Loan Associations (VSLAs). Additionally, entrepreneurship training will be provided in the Southwest sites to enhance local business skills. The programme will also include financial education and financial literacy training to ensure community members are well-equipped to manage their finances effectively.

Livelihood diversification activity examples (Madagascar

Fish smoking

Sea cucumber fattening (as opposed to farming)

New techniques for crabs fishing (garigary)

Fish storage (also includes octopus) e.g. store rooms, using ice for transport, cooling pots

We assume the development of improved and alternative livelihoods, by communities and supported by savings and loans groups, can occur if:

- There is an accessible market (through a partner) for the product.
- The activity is culturally/locally relevant and acceptable to people who would otherwise be performing extractive activities (e.g., cutting mangroves/fishing).
- There is belief/buy-in from the community that the proposed livelihood option will work, generating sufficient engagement to make it profitable.
- Gender-sensitive projects addressing health and/or other locally relevant social barriers to involvement in alternative livelihoods are addressed through parallel interventions.

If the alternative livelihoods are successful in generating income, production rates are sufficiently high, and remuneration for the product is sufficient, those involved in the livelihood activity will make a profit from this activity. This will enable individuals to diversify their livelihoods and reduce their reliance on extractive livelihoods (fishing/mangrove cutting). We assume that this ultimately reduces pressure on extractive activities, and in turn, this reduced reliance on fishing and mangrove cutting enables people to comply with natural resource management. Engagement with savings and loans groups will also support existing and alternative livelihoods and provide further financial stability. In addition, engagement agreements (conservation agreements) developed in the area where the alternative activities are being implemented may further ensure engagement in local decision-making around natural resource management and/or compliance with management rules.

The expected Output for this pathway is: "Alternative livelihoods implemented, value chains assessed and savings groups in place."

Expected Outputs: Madagascar and Indonesia

- New alternative livelihood mechanism implemented and generating income
- Completed supply chain assessments inform value chain addition work/decision making
- Operational savings and loans groups (e.g., Savings Groups) in place

3.1.5 Community health

Improved access to community health education and services reduces illness, giving people more time and energy to engage in activities such as alternative livelihoods and natural resource management. If unmet health needs are identified as a key barrier to engagement in, or compliance with, natural resource management, then improved access to health education and services is needed (either through the development of a community health programme or through engagement of a partner health organisation). Improved access to health services will lead to increased uptake, so long as these services are known by and acceptable to local people. This is also contingent on the partner organisation having the expertise to effectively address the specific health needs of target communities. If there is increased access to health services and they are used by communities, and are effective, illness will be reduced. If people are sick less often (or have fewer unintended pregnancies in the case of family planning services), then we assume that they have more time, energy, and improved mental wellbeing and are therefore more able to engage in:

- Income-generating activities including non-extractive alternative livelihoods where supported and available. Where there is a focus on family planning, this may equip women and youth with the ability to make reproductive choices and increase their economic independence—both key building blocks for their capacity to engage in activities including natural resource management.
- Complying with local natural resource management restrictions.
- Community governance/natural resource management decision-making where they have an interest in such activities and where there are no other barriers to their engagement (e.g., restrictive gender norms, the need to prioritise subsistence activities or household tasks).

Community health activity examples (Madagascar)

Provide access to health services (family planning, Maternal Child Heath, HIV, WASH)

Capacity building of Community health workers & agents.

Ensure drugs supply for the community health workers

Run training session on the new protocol for the child healthcare services.

We know that in many cases, the time, energy, and improved mental wellbeing created through improvements to health may not directly result in increased engagement in natural resource management, governance, or alternative livelihoods. However, we also know that if priority unmet health needs are not addressed, then community capacity for engagement can be limited. This is why priority unmet health needs are always addressed by Blue Ventures as part of a holistic health-environment approach, whereby service users are encouraged to engage in alternative non-extractive livelihoods and local natural resource management efforts through integrated outreach activities and robust cross-referral systems.

Priority unmet health needs are identified through community consultations (involving women, men, elders, youth) and key informant interviews (including local healthcare providers, potential health partners). Attention is paid to whether or not priority unmet health needs may be presenting a barrier to community engagement in natural resource management. We always work to align with Ministry of Health priorities and the WHO's universal health coverage framework. Priority unmet health needs in most places where we work relate to access to and quality of basic primary health services within the UHC framework.

Our in-house health expertise, applied through more than a decade of programming in Madagascar, is focused primarily on family planning, sexual and reproductive health, maternal and child health, infectious diseases, sanitation and hygiene, and health systems strengthening. As we move into other geographies, including Indonesia, we proactively seek out health partners with relevant/complementary expertise where necessary. The list of health interventions in the ToC is indicative but not exhaustive. Health barriers are iteratively identified as natural resource management efforts progress, community relationships strengthen, and contexts change. Where new health topics are identified as a significant barrier to community engagement in natural resource management, we would seek to identify health partners who could work to address these specific issues.

In Indonesia, programme focuses on identifying health barriers and providing access to health services. The programme will establish community health and service programming, including check-ups for elderly community members and support for government-run community clinics. Nutrition campaigns will be provided by these clinics, and health partner outreach missions will be enabled. YPI will work with community health centres to identify activities for collaboration twice a year, bringing health workers into communities to deliver services through specific health representatives. YHB will coordinate at Puskesmas (community health centres) to deliver activities for children, pregnant women, and the elderly on a monthly basis. Health representatives will visit houses to follow up on specific health needs and track changes, and YHB will also visit schools to distribute medicines. For WASH, YHB will provide assistance to waste management officers and run a programme with youth for waste management, such as plastic waste initiatives.

Expected Output from the Community Health pathway: "Increased access to health services."

Expected Outputs for Madagascar:

- Increased access to health services (FP, WASH, MCH)
- Health Huts for Community health workers established/rehabilitated
- Health Agents & Community Health Workers trained & evaluated (stock & budget management, treatment of childhood illness)

Expected Outputs for Indonesia:

- Increased access to health services and community clinics (FP, WASH, MCH)

4 Assumptions

There are some critical assumptions that must hold for the envisaged changes in the four strategic pathways.

4.1.1 Activities to Outputs

Assumption for Activities to Outputs	*Strategic Pathway*
All forest users (community member) recognise the legitimacy of, and comply with forest management and reforestation plans with many engaging in reforestation activities	Mangrove Management

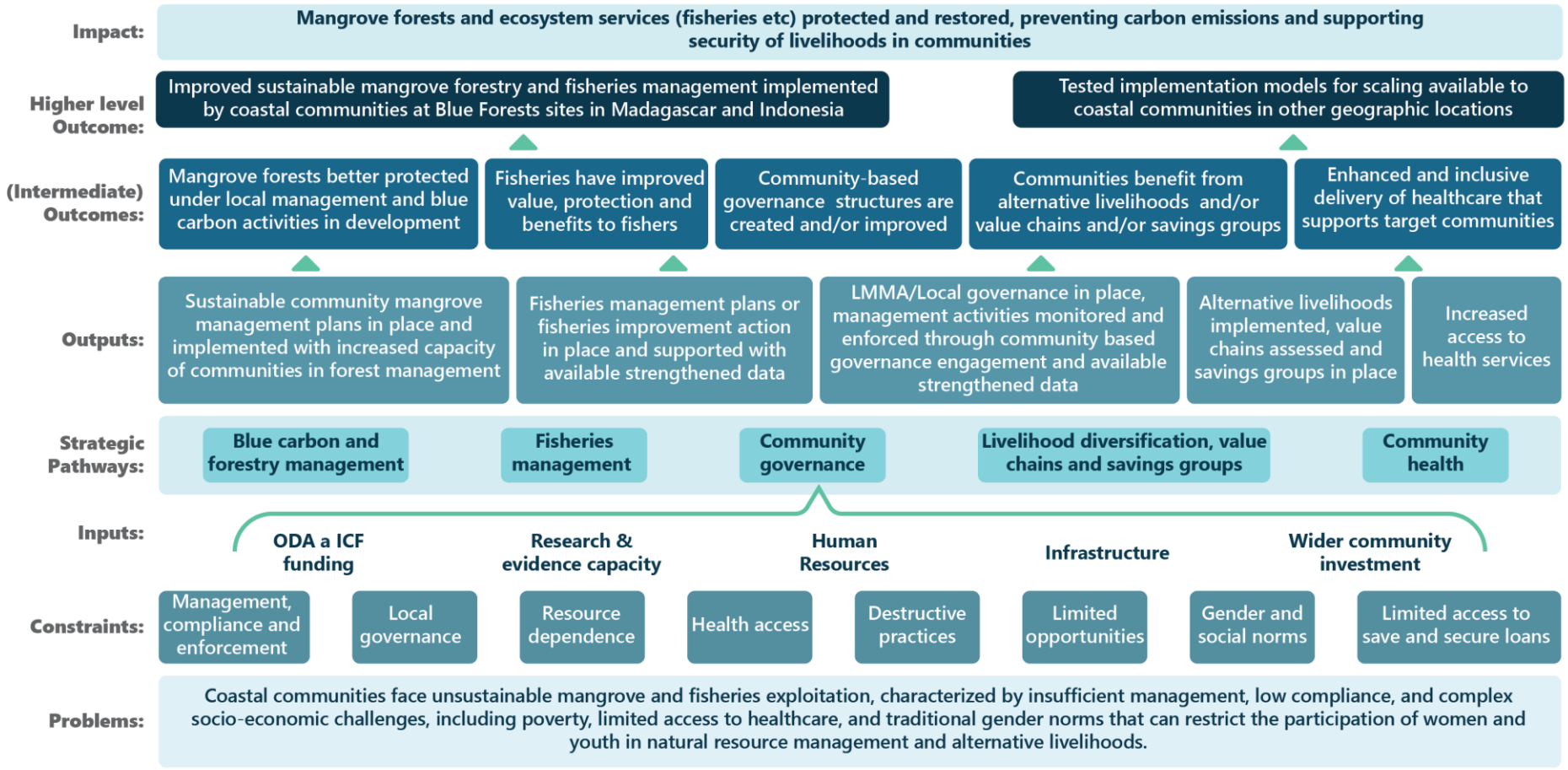
Governance exists to implement plans and all stakeholders recognise the legitimacy of this governing body	Mangrove Management
Communities are not restricted from engaging with NRM or governance by unmet health needs	Mangrove Management
Governance exists to implement plans and all stakeholders recognise the legitimacy of this governing body	Fisheries Management
National policy supports local governance and management of mangroves	Community Governance
Community associations are representative, inclusive and relevant in the local context	Community Governance
Conservation agreements offer sufficient benefit to allow engagement in governance or compliance with management	Community Governance
Communities are not restricted from engaging with NRM or governance by unmet health needs	Community Governance
Communities have adequate access to alternative livelihoods which allows them to engage in local governance systems	Community Governance
There is a market for alternative livelihood product(s)	Alternative Livelihoods
Locally/culturally relevant and acceptable activities and people engage in the livelihood activity	Alternative Livelihoods
Market is stable/increasing and people are paid fairly for their products	Alternative Livelihoods
Health is identified as a key barrier to engagement in resource management/community governance	Health

4.1.2 Outputs to Intermediate Outcome

Assumptions for Outputs to Intermediate outcome	***Strategic pathway***
Management and reforestation plan objectives are achieved	Mangrove Management
Management and reforestation plans are appropriate to the resource and social contexts	Mangrove Management
Local governance systems work to enforce and uphold management measures/plans	Mangrove Management
Communities have adequate access to alternative livelihoods which allows them to comply with mangrove management measures	Mangrove Management
Governance exists to implement monitoring and enforcement of fisheries management plans or fisheries improvement action plans	Fisheries Management
Community organisation is sufficiently autonomous and has relevant mandate for supporting ongoing management of fisheries and mangroves	Community Governance
Community based organisation engages in adaptive management - setting objectives, monitoring, and adapting management	Community Governance
Enforcement mechanisms are appropriate and sufficient to ensure compliance	Community Governance
Production is sufficient to allow monthly sales targets to be met (as per model)	Alternative Livelihoods
Income generated ($15 per month) from the alternative livelihood(s) are sufficient to ensure people choose to spend time doing this activity	Alternative Livelihoods
People use profits to invest in this livelihood and/or other sustainable business/livelihood opportunities	Alternative Livelihoods
Health services are used by key groups within the community	Health

4.1.3 Outcome to Impact

Assumptions for Outcome to Impact	*Strategic pathway*
Degradation/deforestation would have continued without the project thus leading to CO2 prevention	Mangrove Management
It is possible and practical to validate carbon credits	Mangrove Management
Fisheries management benefits secure/strengthen support for protection/management of mangrove forests	Fisheries Management
Mangrove management is a primary focus of local association governance systems	Community Governance
Fisheries management is a primary focus of local association governance systems	Community Governance
Livelihood diversification and finanical inclusion is an improvement to the status quo and increases peoples ability to resist, recover and adapt to economic and environmental shocks	Alternative Livelihoods
People's livelihood options are more sustainable	Alternative Livelihoods
People are not restricted in other ways from engaging in community governance or complying with mangrove or fisheries management	Alternative Livelihoods
Conservation agreements ensure those engaging in alternative livelihoods activities comply with management and are engaged in local governance systems	Alternative Livelihoods
Healthier people, and/or women with fewer unwanted pregnancies have more time/energy and mental wellbeing	Health
Healthy people are more able to engage in income generation, alternative livelihoods and governance (doesn't necessarily mean that they will)	Health
Healthy people are more able to comply with management measures (again doesn't mean that they will)	Health
Other barriers to engagement in community governance and natural resource management either do not exist or are addressed.	Health


Impact:
Mangrove forests and ecosystem services (fisheries etc) protected and restored, preventing carbon emissions and supporting security of livelihoods in communities
Higher level Outcome:
Improved sustainable mangrove forestry and fisheries management implemented by coastal communities at Blue Forests sites in Madagascar and Indonesia
Tested implementation models for scaling available to coastal communities in other geographic locations
(Intermediate) Outcomes:
Mangrove forests better protected under local management and blue carbon activities in development
Fisheries have improved value, protection and benefits to fishers
Community-based governance structures are created and/or improved
Communities benefit from alternative livelihoods and/or value chains and/or savings groups
Enhanced and inclusive delivery of healthcare that supports target communities
Outputs:
Sustainable community mangrove management plans in place and implemented with increased capacity of communities in forest management
Fisheries management plans or fisheries improvement action in place and supported with available strengthened data
LMMA/Local governance in place, management activities monitored and enforced through community based governance engagement and available strengthened data
Alternative livelihoods implemented, value chains assessed and savings groups in place
Increased access to health services
Strategic Pathways:
Blue carbon and forestry management
Fisheries management
Community governance
Livelihood diversification, value chains and savings groups
Community health
Inputs:
ODA a ICF funding
Research & evidence capacity
Human Resources
Infrastructure
Wider community investment
Constraints:
Management, compliance and enforcement
Local governance
Resource dependence
Health access
Destructive practices
Limited opportunities
Gender and social norms
Limited access to save and secure loans
Problems:
Coastal communities face unsustainable mangrove and fisheries exploitation, characterized by insufficient management, low compliance, and complex socio-economic challenges, including poverty, limited access to healthcare, and traditional gender norms that can restrict the participation of women and youth in natural resource management and alternative livelihoods.

Annex 2: Evaluation matrix

#	Question	Sub-question	Data/ tools	Method
Relevance				
1	Has the project targeted the relevant beneficiaries inclusively?	1a. Are those whose engagement and behaviours essential for mangrove preservation/reforestation included, how? 1b. To what extent have women and marginalised/vulnerable groups been engaged in the project?	Focus Group Discussion (FGD); Key Informant Interview (KII); Observation; Document Review; Disaggregate by: Gender; Marginalised/vulnerable groups (for example, clans/family groups, youth)	Evidence synthesis
2	To what extent has the project design responded to the needs and priorities of beneficiaries?	2a. To what extent has the project identified and addressed barriers for mangrove preservation at the community-level? 2b. To what extent has the project managed safeguarding risks?		
	Coherence			
3	To what extent has the project ensured buy-in from and harmonisation between project stakeholders*? * Stakeholders include subgrantees, CSOs, networks, governments, other partners		FGD, KII, Observation, Document Review	Evidence synthesis
4	In what ways has the project complimented, or undermined, policies and regulations as well as international conservation and developmental agendas, and vice versa?			
	Effectiveness			
5	To what extent has the programme achieved, or is expected to achieve its outcomes and has it generated unintended outcomes, either positive or negative?	5a. What are the key change mechanisms through which the project has contributed to the intended and unintended outcomes?	FGDs, Document reviews, KIIs, Learning Events	Contribution Analysis; for EQ 6a, see section 5.6
6	Who has benefitted from/been adversely impacted by the project and how has this been realised?	6a. How do results achieved compare between genders and marginalised/ vulnerable groups, and why?		
7	How well has continuous learning contributed to adaptive programming?	7a. How effectively has the programme applied learning during the programme and used learning to adapt delivery? 7b. How was the BF model adapted to different country contexts and to meet emerging challenges (e.g. Covid-19, political challenges etc)?		Scalability rubric

#	Question	Sub-question	Data/ tools	Method
Efficiency				
8	To what extent did the project deliver value for money (as defined by the FCDO 4Es framework)?	7a. To what extent was the BF project delivered in a timely and economic way? 7b. What are the factors that support/hinder efficient and effective delivery (for example, partner arrangements, management processes, etc)?	Budget and expenditure data; Document review; FGDs; KIIs	VfM analysis; Qualitative and quantitative analysis
Impact				
9	To what extent does the BF programme contribute to establishing local management, protection and restoration of mangrove forests at the five project sites, and how do these compare between sites?	9a. To what extent have the different programme components contributed to scaling beyond the five sites?	Learning Events, FGDs, Document Review, Case Studies that include all five strategic pathways	Contribution analysis with Case Studies; KPI15 analysis; Scalability rubric analysis
10	To what extent has the BF programme protected or improved livelihoods of supported communities?			
11	To what extent did the project contribute to transformational change?			
Sustainability				
12	To what extent are the benefits of the project likely to continue in the medium to long-term?	12a. What elements of the BF model ensure sustainability at the five sites and beyond the five sites? 12b. To what extent do the five project sites' exit strategies support sustainability?	Case studies, Document Review, Synthesis of other EQ answers;	Sustainability rubric analysis; Descriptive assessment of evidence as described in section 5.6.

Annex 3: Documents reviewed

Document	Details
BF ToC and Narrative	Blue Forests Theory of change documentation
BF LogFrame	LogFrame targets and reporting for the BF Programme
BV GESI assessment	
Annual Reviews 2017 - 2023	Annual progress reports available up to the year 2023
ICF Quarterly updates 2024	Quarterly update reports for the year 2024 in the absence of annual reviews
BV Peer reviewed publications x8	Journal articles relevant to the programme that included BV personnel
BV Risk register	Identification and assessment of risk associated with project delivery
Mangrove Impact Indicator Calculation	Calculations for the areas of mangrove forest conserved or reforested
Sembilang contingency plan justification	Rationale for alternative strategies to address disruption at Sembilang site
Plan Vivo Tahiry Honko Documents	Documents related to the Plan Vivo Blue Carbon certification of the Tahiry Honko site
Defra BF Grant agreement	Original grant agreement between Defra and Blue Ventures
Provincial and regional policies, regulations and decrees	Relevant to Blue Forest Programme and its activities
BV and partner slide decks	Slides created for presentations detailing work done and achievements
2024 BV GESI Analysis	BV produced report and analysis of the GESI context within Madagascar and Indonesia.

Annex 4: Contribution analysis template

Key Change from Blue Forests: ***describe the key change/outcome***		
Significance of the Change	**Strength of evidence and Level of Contribution of BF to change – Low/Medium/High**	**ToC Strategic Pathway**
Describe the context in which the change occurred and why it is important.	*Describe how the BF programme contributed to the change and the outputs provided and what happened as a result of the outputs produced by BF.*	*Aligned with strategic pathway within the BF ToC and which outcome statement.*

Annex 5: Sustainability and Scalability Rubrics

Sustainability and Scalability Rubrics, guidance for scoring.

This rubric assesses the sustainability of each strategic pathway across nine key criteria. Each criterion reflects a core aspect of sustainability relevant to community-based programming in Madagascar.

Step-by-Step Guide

1. **Review Each Criterion**
    - Each of the nine criteria is defined in the rubric (e.g., community engagement, measurable impact, financial sustainability).
    - These definitions guide how each strategic pathway is assessed.
2. **Score Each Strategic Pathway**
    - For each pathway (e.g., Blue Carbon, Fisheries, Health), assign a score from **0 to 5** for each criterion:
        - **1: Poor** - The project performs poorly in this criterion.
        - **2: Fair** - The project performs below average in this criterion.
        - **3: Good** - The project meets the minimum requirements for this criterion.
        - **4: Very Good** - The project performs well in this criterion.
        - **5: Excellent** - The project excels in this criterion.
3. **Add Up the Scores**
    - Each pathway can receive a **maximum score of 45** (9 criteria × 5 points).
    - The **"Overall score across Sustainability considerations"** column reflects the total score for each pathway.
4. **Calculate the Overall Programme Score**
    - Add the scores from all five pathways to get the **"Overall Sustainability score across Strategic Pathways"**.
    - This score provides a numeric summary of sustainability across the programme.
5. **Use the Comments Section**
    - Provide brief qualitative notes to explain the score for each pathway.
    - These comments help contextualize the numeric score and highlight strengths or gaps.

The guidance above also applies for the scalability rubric, but with different criteria.

SUSTAINABILITY Rubric template

Strategic pathway	Community Engagement	Measurable impact	Institutional support and management	Resources availability	It is financially sustainable	Backed up by law/policy	Equipment continuation	*Overall Sustainability score across Strategic Pathways (# / max 35 score)*	*Comments*
	Community have been engaged throughout and have a sense of ownership over the outputs/outcomes	*Enduring benefits and positive changes are observable across, or recognised by, the community/communities*	*Institutional mandates for and engagement in activities is clear*	*Availability and continuity of financial, human and material resources required to maintain the activities*	*Activities are self-sustaining or, where applicable, necessary funding is available*	*Activities and outputs are supported by and working within local and/or regional and national laws/regulations*	*Where supplied any speciliasied equipment can be maintained and operated by the community*		
Blue carbon and forestry management									
Small-scale fisheries management and improvement									
Community governance									
Livelihood diversification, value chains and savings groups									
Community health									
Overall score across Sustainability considerations (# / maximum 25 score)									
Comments									

SCALABILITY Rubric template

Strategic pathway	Resource Efficiency *Effective use of resources (time, funds, personnel) during implementation. [source: from VfM analysis]*	Stakeholder Support *Engagement and backing from local stakeholders and organisations.*	Contextual relevance *Activities appropriately tailorable to address the specific needs and priorities of different communities.*	Capacity and Capability *Capacity support has provided communities with necessary capabilities to undertake activities*	Adaptability *Flexibility to modify and adapt the activities or intended outputs to different contexts and resources.*	Policy Compliance *Alignment with local, regional and national policies and regulations.*	Feedback mechanism *Established mechanisms for collecting feedback from community members and stakeholders to inform adaptations*	Impact Measurement *Robustness of monitoring, evaluation and learning systems to measure progress and inform adaptations*	Risk Management *Effectiveness of risk mitigation strategies and handling challenges.*	***Overall Scalability Potential score across Strategic Pathways (# / maximum 45 score)***
Blue carbon and forestry management										
Small-scale fisheries management and improvement										
Community governance										
Livelihood diversification, value chains and savings groups										
Community health										
Overall scores across Scalability considerations (# / maximum 25 score)										
Comments										

Annex 6: Case Study site reports

Ambanja Site Case Study

Summative Evaluation of Blue Ventures

Blue Ventures

Date: 11 July 2025

1. Introduction

This report presents the Case Study analysis and results for Blue Forests (BF) interventions at the site level in Ambanja, Madagascar. It seeks to provide a deep dive assessment of BF's activities in Ambanja and assesses contribution towards Blue Ventures' Theory of Change (ToC).

1.1. Blue Forests in Madagascar

BF operates at three sites in Madagascar and two sites in Indonesia (see Figure 1 below). For this case study, we examined all interventions in Ambanja, Madagascar. Blue Ventures (BV) has been operational in Ambanja since 2013, initially receiving £616,953 in funding from MacArthur and the Darwin Initiative focussed on mangrove biodiversity, poverty alleviation and rights-based fishery management. This work helped establish strong relationships between BV and Defra, which then helped to facilitate ICF funding that began in 2017.

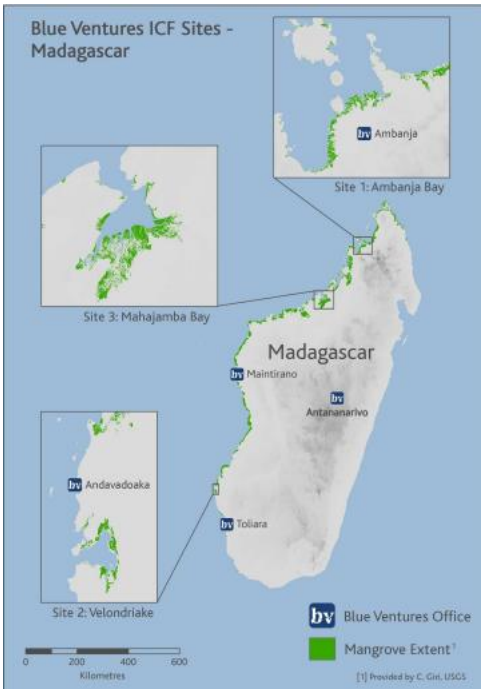


Figure 1: Blue Ventures sites in Madagascar (source ICF Update Oct-Dec 2024)

Introduction and Context

Madagascar is home to one of the world's most vital and at-risk mangrove ecosystems, with approximately 2,800 square kilometres of mangroves, primarily along its western coastline. These habitats are not only crucial for biodiversity conservation and climate regulation through carbon sequestration but also serve as a lifeline for local communities that rely on their resources for fishing, fuel and construction materials. Despite their importance, Madagascar's mangroves face significant threats stemming from unregulated exploitation, lack of formal management and inadequate recognition of their ecosystem services.

In the Ambanja site, located in the northwest of Madagascar, these challenges are particularly acute. Prior surveys conducted by BV revealed that approximately 81% of the mangrove forest in the Ambaro-Ambanja Bay area—covering around 19,560 hectares—lacked any formal management arrangements. This situation has led to unregulated exploitation, depriving local communities of incentives to invest in sustainable use and conservation, and exposing the habitat to ongoing degradation.

The underlying problems in Ambanja are rooted in the lack of property rights and management frameworks, which hinder communities' ability to sustainably harvest resources or develop alternative livelihoods linked to mangroves. Moreover, the ecosystem services provided by these mangroves—such as coastal protection, carbon storage and habitat for marine life—are often undervalued or unrecognised in local and national markets, further diminishing the motivation for conservation.

Recognising the critical importance of these ecosystems, BF interventions in Ambanja aim to foster sustainable management, build local capacity and promote community-led conservation efforts. These interventions are part of a broader strategy to contribute to Madagascar's national and global climate resilience goals, while also securing livelihoods for local populations. This case study provides a comprehensive analysis of BF interventions in Ambanja, assessing their progress, effectiveness and alignment with the broader ToC aimed at creating lasting environmental and social impact.

2. Methodology

The evaluation employs a mixed-methods, theory-based approach, assessing the primary pathways for change by testing the ToC through contribution analysis. In order to ensure breadth as well as depth in the analysis of the programme, two case study sites were selected: Ambanja, Madagascar and Inhil, Indonesia. These sites were chosen on the recommendation of BV, based on factors such as accessibility to the sites due to seasonal weather patterns, observance of religious holidays and site maturity. This section provides an overview of the methods utilised for the Ambanja case study. Further detail on the wider methodological approach can be found in the main evaluation report.

Overview of Data Collection

Data collection consisted of document review, key informant interviews (KIIs), focus group discussions (FGDs) and site observations. The evaluation team reviewed primary documents such as reports, workplans and MEL documents, alongside learning event reports and secondary sources including peer-reviewed studies, policy documents and case studies. Two MEL consultants from NIRAS attended a three-day in-country visit to various locations across the Ambanja site, including Nosy Faly, Ankingabe, Andimakafito and Nosy Be. The itinerary for the site visit was co-developed with the BV team, and BV staff were in attendance throughout. Over the course of this visit, NIRAS conducted KIIs, FGDs and site observations, as well as conducted follow-up interviews remotely. Interviews were semi-structured using an interview template based on the evaluation questions.

A total of 68 stakeholders (34% women) were engaged in the case study through KIIs or FGDs in Madagascar, including 18 BV staff members[1], two government officials, 46 community beneficiaries (including those participating in FGDs) and two non-BV staff working in the same space. The underrepresentation of women in KIIs reflect the make-up of community participants in the programme and staff. For example, women are generally under-represented at government levels within Madagascar. Community members included those involved in village savings and loans associations (VSLAs), data enumeration, mangrove patrolling, biocharcoal production, oyster farming, fisheries and leadership roles in the community-based organisations (CLBs) and Federation. FGDs were utilised to gather opinions from as many community members as possible; however, there were instances where community leaders were present and this may have influenced views shared by other members. Efforts were made to speak to FGD

[1] Some of the BV staff interviewed are based in other sites in Madagascar or are based at the national level. Their input has served as an opportunity for comparative analysis, as well as to increase the depth of the evidence base for the evaluation.

participants in a brief follow-up discussion (for instance, during a break or walking in between sites) to allow opportunity to share individual views. Figure 2 below summarises the range of stakeholders consulted, disaggregated by gender.

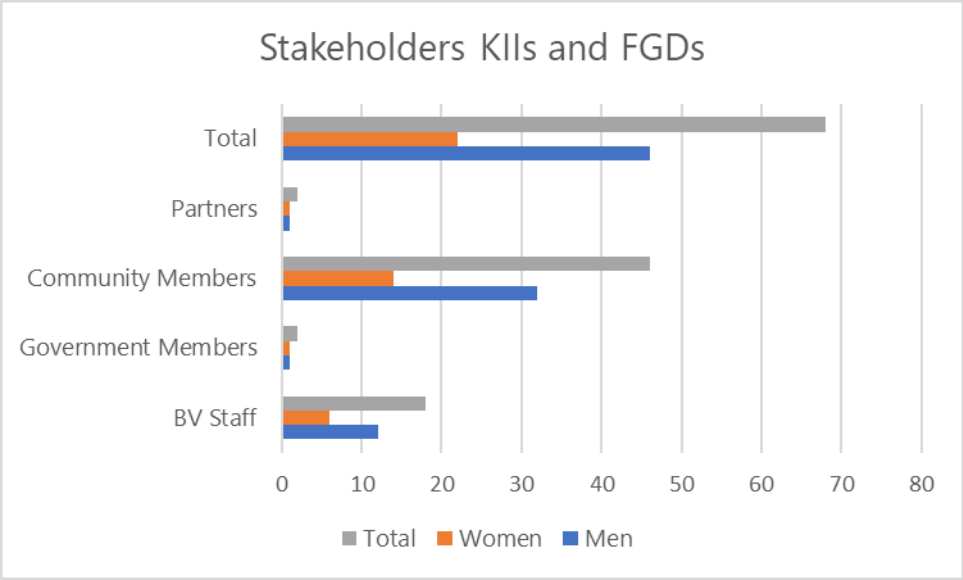


Figure 2: Stakeholder KIIs and FGDs, disaggregated by gender

Analysis of Data

All collected data was transcribed and coded in MaxQDA using a standardised coding framework aligned with the evaluation questions. The analysis employed contribution analysis to validate the programme's logic by assessing the extent to which activities contributed to observed outcomes, while considering external factors. This involved developing case-specific contribution stories, notably for Madagascar's Ambanja site, and applying a strength-of-contribution scale categorising contributions as critical, important, some or negligible, supported by evidence. The evaluation also assessed impact and sustainability by determining whether positive outcomes were maintained and scalable, using rubrics with nine criteria for scalability and seven for sustainability, to evaluate the potential for expansion into other geographic areas. The conclusions were drawn from the contribution analysis, sustainability assessments and stakeholder validation processes, aiming to inform the programmatic level Summative Evaluation findings and recommendations for future programme design and scaling efforts.

3. Key findings by Evaluation Criteria

3.1. Relevance

EQ1:	Has the project targeted the relevant beneficiaries inclusively?
EQ2:	To what extent has the project design responded to the needs and priorities of beneficiaries?

Overall, it is felt that the programme is addressing the right problems, with a core focus on fisheries and mangroves, and is relevant to regional priorities.

BV has been operating in Ambanja since 2013 and received funding from MacArthur and the Darwin Initiative from 2013-2017 addressing mangrove biodiversity, poverty alleviation and rights-based fishery management. The BF programme built upon these foundations, focussing on addressing the drivers of mangroves deforestation and fisheries exploitation. It also complemented these activities through strengthening local governance, improving livelihoods and increasing access to health services. Interventions were designed to be complementary and address overlapping problems.

Community-first approach

The BF programme is driven by a 'community first' approach, ensuring that priorities are identified and discussed thoroughly with community members to facilitate buy-in and ownership. This consultative approach ensures that interventions are addressing activities that align with community needs. This approach was strengthened by the programme's flexibility to trial different interventions, which could be altered or stopped if they did not work in that context. This was seen particularly across the livelihoods pathway in Ambanja, with activities such as sea cucumber farming and fish smoking either paused or stopped due to challenges.

BV also invested time and funds into having the right staff in the right roles. At the Ambanja site, many of the staff are local and deeply understand the context and challenges in the region. There are several instances of community members who later became permanent BV staff through participation in the programme. Many of the staff members in Ambanja have been working on BF since its inception in 2017, allowing them to build trusting and close relationships with the community and other local stakeholders.

Primary Beneficiaries

Women have been actively targeted and engaged in the project, participating in activities such as fish processing, community health and mangrove patrolling. Women's engagement is tailored to be culturally relevant. For instance, in Madagascar, women traditionally manage the household finances. Women therefore have a high level of participation in the VSLAs as well as value-chain activities such as fish processing. There are a small number of female mangrove patrollers and female fishery patrollers, and safeguarding measures are in place to ensure women are not patrolling on their own.

Safeguarding has become increasingly more important over time, with staff training implemented and the appointment of a Safeguarding Officer. Risks are still inherent in activities such as fisheries patrolling, but BV has taken an active role in managing and mitigating risks, such as through the supply of equipment, including the Global Positioning System (GPS) and communication tools like walkie talkies. In addition, the organisation has established robust safeguarding policies and measures, with established whistleblowing channels for BV-engaged participants to access, according to the organisation.

Relevance of activities

There were differing opinions on the types of activities, with some interviewees noting that BV should focus more on 'hard' activities, such as delivering equipment and tangible items, rather than 'soft' activities, such as training and workshops. This is already part of delivery to some extent, with provision of items such as GPS to support fishery patrolling, or equipment to support data enumerators. Provision of equipment is generally accompanied by training or workshops so that community members can use it effectively. Some community members requested that there needs to be greater provision of equipment and at a larger scale (for instance, cold fish storage or additional boats for fisheries). However, others noted that there needs to be a strong business case for physical items to ensure there is clear community demand and items will not sit unused.

3.2. Coherence

EQ3:	To what extent has the project ensured buy-in from and harmonisation between project stakeholders*? **Stakeholders include subgrantees, CSOs, networks, governments, other partners, beneficiaries*
EQ4:	In what ways has the project complemented, or undermined, policies and regulations as well as international conservation and developmental agendas, and vice versa?

Broadly, the Blue Forests programme in Ambanja is felt to be coherent with local and national priorities. There is strong community buy-in, as well as support from local and regional government.

Strong community buy-in

Interventions are community-driven and require buy-in from local communities. Thorough consultation periods ensure that communities are on board with interventions. However, in some cases this has taken a long time to get off the ground, as communities were not initially interested in mangrove restoration. Having local 'champions' (former charcoal producers now championing mangrove restoration) and the trust of BV staff has helped bring people on board. Communities can also choose not to work with BV if they are not interested. This has been the case in some villages across Ambanja.

Buy-in is further strengthened by the success and ownership of activities by community members. Financial incentives such as patroller indemnity are sometimes used to encourage participation in project activities and cover the cost of not partaking in other work.

Support and challenges with other stakeholder coordination

BV is one of the only non-government organisations (NGOs) in the region addressing biodiversity and environmental issues, especially for the coastal and marine environment. Its long-standing presence in the region has allowed it to form a mutually beneficial partnership with its new partner on seaweed farming, Riake Nosy Be Society, with BV facilitating community engagement and Riake Nosy Be providing technical expertise. Interviewees noted that in the past, coordination with other partners on livelihoods activities has been less successful, as partners bring their own agendas and priorities.

In the health sector, BV collaborates closely with other NGOs, working with Marie Stopes, Association des Jeunes Pairs Promoteurs (youth peer-to-peer association/AJPP), Mahefa Miaraka under USAID ACCESS[2], Population Services International (PSI) Madagascar and HELVETAS.

Alignment with local and regional priorities

The interventions in Ambanja are aligned with local and regional priorities, and there is strong coordination with relevant government departments. These departments do not have the financial means or capacity to fully support activities, so the BV support is felt to be critical and mutually beneficial. For instance, the Regional Directorate of Environment and Sustainable Development (DREDD) and Regional Directorate of Fisheries and the Blue Economy (DRPEB) representatives were always in attendance during management transfer officialisations.

Management transfers take into account the traditional local agreement or community-based law (*dina)* to allow for sustainable mangrove harvesting for members of the CLB. Other regions in Madagascar noted a challenge with aligning the *dina* against the national law prohibiting mangrove cuts.

3.3. Efficiency

EQ8	To what extent did the project deliver value for money (as defined by the FCDO 4Es framework)?

Overall, the Blue Forests project in Ambanja was delivered in a timely and economic way.

The funding in Ambanja ran from 2017 to 2024, including a one-year no-cost extension to account for the underspend incurred from COVID-19 disruptions.

Factors Supporting Delivery

A key enabler was the long-term nature of the funding, which allowed plenty of time to build trust with communities. This was felt to be a unique factor in comparison to other funding sources with shorter timeframes. However, the

[2] No longer an active partner as USAID funding has ended.

community approach sometimes meant that progress was relatively slow, and it was occasionally difficult to meet project deadlines.

In comparison to other funds, the Defra funding allowed for a large expenditure on project staff, preventing the need for exhaustive/restricted staffing lists. This has been critical for effective delivery and community buy-in.

The flexibility of the funding was also a crucial component, allowing opportunities to change and pivot as required. In practice, this meant that activity targets could be revised or changed in collaboration with Defra. For instance, given the challenges with establishing blue carbon payments due to government bureaucracy, the logframe was updated in 2022 to remove blue carbon credits as an indicator. During COVID-19, BV also trialled new activities and was granted a no-cost extension by Defra to account for the underspend in funds.

It was also noted that there is strong leadership in BV across the Madagascar team, which has kept the staff motivated and engaged in their work. Reporting requirements and engagement with Defra were straightforward and not felt to be a burden for the Ambanja team.

Factors Hindering Delivery

The nature of BF's 'community first' approach required long consultation periods prior to starting activities, which often meant slower progress towards project objectives. Some interviewees noted that fulfilment of community requests could take a long time (such as the request for a speedboat in Nosy Faly requiring length procurement).

There were delays from COVID-19 and BV had to pivot or adapt some interventions, but the team continued work throughout. For instance, large community gatherings were not permitted, and there was no travel allowed between regions in Madagascar. However, given the programme's locally-led approach, as well as the extension provided by Defra, there were minimal long-term impacts from COVID-19 on effective delivery.

Staff turnover at Defra was also cited as a challenge.

3.4. Effectiveness

EQ5	To what extent has the programme achieved, or is expected to achieve, its outcomes and has it generated unintended outcomes, either positive or negative?
EQ6	Who has benefitted from/been adversely impacted by the project and how has this been realised?
EQ7	How well has continuous learning contributed to adaptive programming?

The programme has made significant progress towards achieving its outcomes, indicating strong effectiveness in delivery. It has demonstrated improvements in mangrove ground cover and fisheries stock, bolstered by strong and effective community management and improved access to health services. There have been modest improvements in livelihoods improvements, although these are currently limited in scale.

The programme's effectiveness has been driven by three key change mechanisms. The first is the community-led approach, which has enabled strong engagement and ownership across all activities. The second is BV's embedded nature in the region, with local long-term staff bringing deep knowledge and expertise, fostering trust across communities and other stakeholders. Finally, the adaptability, flexibility and continuous learning across the programme have ensured responsiveness to beneficiary needs and evolving contextual dynamics.

The programme's beneficiaries are those who are dependent on mangrove environments or actively involved in their management. This includes individuals directly reliant on these ecosystems for their livelihood, such as fishers. Governance and education efforts have sought to reduce illegal mangrove harvesting for charcoal production, as well as illegal fishing practices. BF's approach to integrated and complementary activities has ensured that interventions are often addressing several challenges at once, which can yield multiple improvements for beneficiaries or communities. The programme has actively engaged women through activities such as VSLAs, women's groups and value chain processing (discussed in more detail in Section 3.1).

Across the Ambanja site, local governance structures and procedures have been established to ensure effective natural resource management. A total of 17 CLBs (with management transfers from the government or TGRNs[3]) have been established, which are overseen by a regional Federation Miarientagna consisting of representatives from each CLB (with quarterly meetings). The CLBs manage community governance, including enforcement of mangrove patrolling and fisheries patrolling. Mangrove restoration activities have been effective, with a notable increase in mangrove forest cover and a reduction in charcoal production and use. This has been enabled in part by permitting sustainable charcoal harvesting through passage of the local law (*dina*), and also in development of alternative fuel sources such as acacia trees, sustainable cookstoves and biocharcoal. However, one notable gap in this pathway is the lack of verified carbon credits, which were paused while government frameworks are put in place and are discussed in more detail in Section 3.6. Fisheries management has also been effective, with increased community ownership over activities such as data collection and analysis, allowing them to make informed decisions regarding closure and patrols, and an overall increase in fishery stocks. However, there have been some safety concerns regarding patrolling, with several violent incidents noted related to illegal fishing practices.

Access to health services has also improved, increasing use of medical services and family planning through training of community health workers and construction of local Health Centres. Engagement with traditional midwives has also improved safety in birthing procedures. Some gaps still exist, however. For instance, there has been increased demand for water and sanitation infrastructure across target communities, which is outside the remit of BV's expertise. There are now plans underway to roll the health activities into a separate NGO from June 2025.

There have been significant challenges in establishing and scaling alternative livelihoods over the course of the funding period, including lack of access to suitable markets, lack of community interest or challenges in permitting and local government coordination. Activities such as oyster farming, fish smoking and processing and beekeeping have been piloted across the region, but have struggled to find markets that would allow for expanded production. As these activities have not been able to mature into reliable income sources, BV adjusted the approach of this pathway. In 2022, BV expanded the focus of this pathway to include strengthened value chains and financial inclusion, and as of 2024, alternative livelihoods activities are being passed off to partners.

A core strength of the programme is its dedication to continuous learning and improvement. Over the course of the programme, exchange visits took place across sites in Madagascar, allowing beneficiaries to visit other regions and learn about fisheries management, alternative livelihoods activities and other programme interventions. There was demonstrated application of these learnings, particularly across the livelihoods pillar. In Ankingabe and other villages, the communities have begun production of biocharcoal and other alternative fuel woods. Although currently limited in scale, beneficiaries noted their interest in procuring an electric charcoal machine which they saw on an exchange visit, which would increase their production by 60 times. Learnings have also been shared around activities that have not worked as well (for instance, the fish processing activity which was felt to be ineffective in the Ambanja context).

Table 1 below provides a summary of BV's contribution to outcomes across the five programmatic pathways in Ambanja.

Table 1: BF's Contribution to Outcomes

ToC Pathway	Key Result	Programme Contribution
Blue Carbon Sequestration and Forest Management	Through collaborative consultations with communities, BF has co-developed 17 TGRNS (mangrove management plans), resulting in 7,631 km^2 under management. 180 mangrove patrollers have been trained using Dina for law enforcement.	High
Small-scale fisheries management and improvement	BF has facilitated establishment of a fishery management plan for Tsimipaika Bay, which was validated and approved by all 36 communities on the bay in 2018. Monitoring for fish, crab, shrimp and sea cucumber fisheries has been established, with community members trained to enumerate catches and support community-led decision-making and	High

[3] See main report for more detail

	management decisions. 100 community surveillance patrollers use Dina for law enforcement and have reduced illegal fishing practices, although there are still some instances of this occurring.	
Community Governance	17 TGRNs have been established, with the regional Federation established as an umbrella organisation. This has facilitated more coordinated and effective governance across the region, supporting fisheries and mangroves activities.	High
Livelihood improvements, diversification, value chains and savings groups.	Alternative livelihood activities have been limited in scope. However, as part of the financial inclusion activities, 49 savings and loans groups have been established. Communities benefit from VSLAs and there is strong engagement (1,197 people involved as of 2024) although the average savings per person, total income generated and total cumulative savings indicators are all below the 2024 target.	Medium
Community Health	Safidy (the health pillar) works across 18 villages in Ambanja and has trained 33 community health workers and established 5 health centres, with a total of 51 service delivery points. It also works with mothers groups and youth groups to support health education across communities. The project has exceeded its targets for women accessing sexual and reproductive health and rights services, as well as the number of people attending community health sessions.	Medium

3.5. Impact

EQ9	To what extent does the BF programme contribute to establishing local management, protection and restoration of mangrove forests at the 5 project sites, and how do these compare between sites?
EQ10	To what extent has the BF programme protected or improved livelihoods of supported communities?
EQ11	To what extent did the project contribute to transformational change?

The Blue Forests programme has significantly contributed to its core impact of strengthening local management, protecting and restoring mangrove forests and supporting the livelihoods of mangrove-dependent communities.

Across the site, contribution to mangrove area management has been considerable. Community attitudes have undergone a significant change and there is a clear understanding of the negative implications of unsustainable mangrove harvesting for charcoal production, supported by environmental education efforts (mascots, community champions, women's groups and youth groups). This has been reinforced as communities see the positive results of conservation efforts. Establishment of community governance has been effective in mangrove management and enforcement, and management plans have been concretised into local policy *(dina)* allowing for some sustainable harvesting where appropriate. As a result, there has been a significant increase in mangrove cover across the region.

Contribution to livelihoods provision has seen mixed results, especially in the early stages. BV has adapted activities to focus more on value chains and improvement of existing livelihoods. While alternative livelihoods activities remain modest in scale due to market limitations, the renewed focus on value chains, financial inclusion and improvement of existing livelihoods appears to be better targeting the needs and opportunities of communities.

There is clear opportunity and demand for scaling to new communities. Other communities have requested support from BV after seeing the success of interventions across Tsimipaika Bay. Currently, BV is scoping a new site in the Diana Region.

3.6. Sustainability

EQ12	To what extent are the benefits of the project likely to continue in the medium to long-term?

It is likely that the benefits of the project will continue in the medium term, but there is mixed evidence as to the long-term sustainability of interventions without BV support.

The Ambanja site is currently developing plans to ensure activities are sustainable. BV are planning to replicate and tailor the sub-granting model established at the Velondriake site, where communities are beginning to manage their own funds and activities autonomously from BV. In the Ambanja region, funds would be sub-granted from BV to the Federation, who would then distribute funds across the CLB. This model will require sufficient capacity building and training to ensure Federation members can effectively manage grant funds. This approach has been included as part of BV's recent proposal submission for the OCEAN grant programme, funded by the UK government. [4]

Given the community-first approach that BV employs, there is already strong buy-in and interest in sustaining activities across the Ambanja region. However, community members expressed mixed levels of confidence in sustainability without BV. Some CLBs noted that they have the necessary skills and equipment to manage their natural resources effectively and autonomously. Some activities are completely self-managed, such as fish enumeration, community meetings and reforestation activities. In other communities, CLB members expressed reservations about BV stopping implementation, noting that without the reinforcement from BV, mindsets may shift back to how they were prior to BV engagement, and there is a risk community members may return to illegal mangrove harvesting. Community members also noted that they are dependent on the financial payments from mangrove enforcement and patrolling, and expressed concern about these payments stopping when BV departs. However, BV staff noted that these payments would be included as part of the standard operating costs associated with the proposed sub-granting model.

One major limitation to sustainability is the challenges surrounding implementation of Blue Carbon payments. BF initially aimed to facilitate verified carbon credits which would directly pay communities for mangrove preservation, allowing BV to exit with a sustainable funding model in place. However, there were significant challenges over the course of the programme in negotiating voluntary blue carbon legal frameworks with the government. In Madagascar, all climate finance needs to flow through the treasury and then it gets distributed to the beneficiary. This poses significant risks for timely and transparent payment, and without proof of concept, there is a risk for investors. BV is still pursuing this mechanism, but the indicator regarding carbon credits was dropped from the logframe in 2022.

There is strong collaboration with DREDD and DRPEB, and the ministers for both departments are heavily engaged with BV activities. However, despite their technical interest, the regional departments have very limited budget or capacity to take on activities themselves. This may be an additional limitation to sustainability of activities as BV scales back its support.

4. Conclusions

The BF programme in Ambanja has achieved significant progress towards its outcomes. Its community-led approach has enabled deep engagement and buy-in across beneficiaries, supported by long-term and embedded staff members. Activities were felt to be relevant and suitable for the local context, with flexibility to adapt and learn over the course of the programme.

The relevant communities and groups were targeted through the interventions, and specific efforts were made to target women participation, ensuring that activities were contextually appropriate and relevant. There has been

[4] As of June 2025, BV's OCEAN proposal submission was unsuccessful. We have not included this in our analysis as the update was received after the evaluation data collection and analysis period had concluded.

strong stakeholder engagement from the regional governments, and where applicable, good coordination with other NGOS, such as across health interventions.

BF has made significant strides in improving mangrove cover and replenishing fishery stocks through effective community governance. Health activities have also yielded success, with improved access to reproductive healthcare and medical services. The livelihoods pathway has been less successful, as alternative livelihoods activities have struggled without the proper technical expertise required, as well as a lack of suitable markets. BV has adapted interventions in this pathway to ensure a greater, more holistic focus on value chains, financial inclusion and improvements of existing livelihoods.

There are efforts underway to ensure sustainability of interventions, through adoption of the BV sub-granting model first started in Velondriake. This model would allow the Federation Miarientagna to receive funds directly, which could then be funnelled to the participating CLBs across the region. Significant capacity building and support will be required to ensure communities can effectively manage funding and reporting requirements. Another mechanism for sustainability, verified carbon credits, is less assured given the political challenges present in Madagascar.

Overall, the programme in Ambanja has shown significant achievements in mangrove restoration, fisheries management, community governance, increased healthcare access, with some modest achievements in livelihoods and financial inclusion.

Annex 1: Sustainability and Scalability Framework

Table 2: Sustainability framework showing the scores (1 – 5) of the activities within each pathway against the sustainability criteria where 1 = the pathway performs poorly in this criterion, 2 = pathway performs below average in this criterion, 3 = pathway meets the minimum requirements for this criterion, 4 = pathway performs well in this criterion, 5 = pathway excels in this criterion.

Strategic pathway	**Community Engagement** *Community have been engaged throughout and have a sense of ownership over the outputs/outcomes*	**Measurable impact** *Enduring benefits and positive changes are observable across, or recognised by, the community/communities*	**Institutional support and management** *Institutional mandates for and engagement in activities are clear*	**Resources availability** *Availability and continuity of financial, human and material resources required to maintain the activities*	**It is financially sustainable** *Activities are self-sustaining or, where applicable, necessary funding is available*	**Backed up by law/policy** *Activities and outputs are supported by and working within local, and/or regional and national laws/regulations*	**Equipment continuation** *Where supplied any specialised equipment can be maintained and operated by the community*	***Overall Strategic Pathways (# / max 35 score)***
Blue carbon and forestry management	5	5	5	4	4	3	5	31
Small-scale fisheries management and improvement	5	5	5	4	4	4	5	32
Community governance	5	5	5	4	4	4	5	32
Livelihood diversification, value chains and savings groups	4	3	5	3	2	4	4	25
Community health	5	4	5	5	2	4	4	29
Overall Criterion scores (# / maximum 25)	24	22	25	20	16	19	23	
Comments	Very strong community engagement given BV's long history in the region, and embedded 'community first' approach. Livelihoods had slightly less engagement for some activities which limited scaling, although lots of activities now (e.g. beekeeping, vegetable farming) are driven forward by community members.	Clear and enduring benefits for fisheries, mangroves and governance. Positive outcomes from health but not as widespread. Scope of livelihoods has changed over time so benefits are less realised.	Strong collaboration with forestry and fishery departments. Ministers attend all management transfer ceremonies. Mutual benefits in relationship to supplement lack of government capacity.	Health component spun off into separate NGO run by BV so it can receive direct health funding. OCEAN grant pending, all other activities currently co-funded by other grants.	Fisheries, mangroves and management pathways are well-positioned to be self-sustaining, with further support from BV to build capacity of CLBs to manage their own funding. Scale of value-chain and livelihood diversification too low currently to be self-sustaining. Community health piece is going to be rolled into a separate NGO managed by BV but separate.	Some challenges noted with aligning the dina and national legislation, but this is usually resolved and incorporated into management transfer documentation. Issue in establishing blue carbon piece due to challenges with Mada government; this was removed from the scope of work in 2022.	This was specifically noted as a core consideration by BV before provision of material. Training always provided on equipment (boats, GPS/satellite equipment, enumeration technology, etc). Some areas where more equipment requested (cold storage for fish, medicine storage and mattresses for health centres).	

Table 3: Scalability framework showing the scores (1 – 5) of the activities within each pathway against the scalability criteria where 1 = the pathway performs poorly in this criterion, 2 = pathway performs below average in this criterion, 3 = pathway meets the minimum requirements for this criterion, 4 = pathway performs well in this criterion, 5 = pathway excels in this criterion.

Strategic pathway	Resource Efficiency *Effective use of resources (time, funds, personnel) during implementation. [source: from VfM analysis]*	Stakeholder Support *Engagement and backing from local stakeholders and organisations.*	Contextual relevance *Activities appropriately tailorable to address the specific needs and priorities of different communities.*	Capacity and Capability *Capacity support has provided communities with necessary capabilities to undertake activities*	Adaptability *Flexibility to modify and adapt the activities or intended outputs to different contexts and resources.*	Policy Compliance *Alignment with local, regional and national policies and regulations.*	Feedback mechanism *Established mechanisms for collecting feedback from community members and stakeholders to inform adaptations*	Impact Measurement *Robustness of monitoring, evaluation and learning systems to measure progress and inform adaptations*	Risk Management *Effectiveness of risk mitigation strategies and handling challenges.*	**Overall Pathway score (# / maximum 45 score)**
Blue carbon and forestry management	5	5	5	5	5	4	4	4	3	40
Small-scale fisheries management and improvement	5	5	5	5	5	4	4	4	3	40
Community governance	5	4	5	5	5	4	4	4	4	40
Livelihood diversification, value chains and savings groups	4	4	5	4	5	4	4	4	4	38
Community health	5	5	5	5	5	4	4	4	4	41
Overall Criterion Score (# / maximum 25 score)	24	23	25	24	25	20	20	20	18	
Comments		Very strong collaboration with regional governments and local partners for health. A few challenges getting livelihoods off the ground (e.g. sea cucumber permitting issue) and some challenges around enforcement for patrols (local gov corruption).	Facilitated by lengthy community consultations and ensuring communities choose their own activities and are bought into the process, so that activities are addressing relevant issues.	Appropriate training provided for all technical areas (patrolling, enumerating, governance, etc). Even though uptake on livelihoods is lower, training is still appropriate.	Many examples of adapting activities that worked well in other regions (replicating fish smoking activity from Mahajamba) or needed to be updated or tailored (shifting from alt livelihoods to value chains).	See comments on sustainability re policy alignment.	Could not find evidence of formal feedback mechanisms, but community-led approach and regular community engagement provides opportunity to share feedback regularly.	MEL is fit for purpose.	Clear risks in patrolling activities. Safeguarding policy has been somewhat top-down in terms of adapting to the local context.	

Inhil Site Case Study

Summative Evaluation of Blue Ventures

Blue Ventures

Date: 11 July 2025

Acronyms and Abbreviations

BAPPEDA	Badan Perencanaan Pembangunan Daerah
BF	Blue Forests
BPF	Blue Planet Fund
BV	Blue Ventures
Defra	Department for Environment, Food and Rural Affairs
DPMD	Dinas Pemberdayaan Masyarakat dan Desa
FCDO	Foreign, Commonwealth & Development Office
FGD	Focus Group Discussion
GESI	Gender Equity and Social Inclusion
ICF	International Climate Fund
Inhil	Indragiri Hilir
KII	Key Informant Interview
KKP	Kementerian Kelautan dan Perikanan
KPH	Kesatuan Pengelolaan Hutan
KUPS	Kelompok Usaha Perhutanan Sosial
LPHD	Lembaga Pengelola Hutan Desa (Village Forest Management Units)
MEL	Monitoring, Evaluation and Learning
NGO	Non-governmental organisation
Pokmaswas	Kelompok Masyarakat Pengawas (Community-based Surveillance Group)
Posyandu	Pos Pelayanan Terpadu (Integrated Service Posts)
RPJMD	Rencana Pembangunan Jangka Menengah Daerah
SUOP	Strategic Unit of Operation
VfM	Value for money
YHB	Yayasan Hutan Biru
YMI	Yayasan Mitra Insani

1. Introduction

This report presents the Case Study analysis and results for Blue Forests (BF) interventions at the site level in Indragiri Hilir, Riau Province, Indonesia. It seeks to provide a deep dive investigation into the degree to which activities have been completed, and whether the interventions and conditions identified are necessary and sufficient to create change on different levels of the intervention. It assesses contributions towards Blue Forest's Theory of Change.

1.1. Blue Forests in Indonesia

The Blue Forests initiative was first launched in Madagascar and expanded to Indonesia in 2019 after a scoping study was conducted to identify suitable locations. Initially, two sites were selected for BF in Indonesia — Sembilang National Park in South Sumatra and Kubu Raya in West Kalimantan. However, in 2021, BV's application to work in Sem-bilang was declined, leading to the selection of Indragiri Hilir (Inhil) as an alternative. BV also initially established a civil society organisation Yayasan Pesisir Lestari (YPL) to oversee operations in the country, though their management of the project through YPL was ultimately moved back to BV (see Section 3.4).

Due to these delays, work at the two sites did not begin in earnest until the fourth quarter of 2021. During this time, management of the programme in Indonesia was moved from YPL to BV and directly employed local staff to oversee operations. Unlike in Madagascar, BV are not directly implementing activities in Indonesia. Rather, they are using local non-governmental organisations (NGOs) to implement activities, with BV taking on project administration and oversight. At the Inhil site the implementing partners are Yayasan Hutan Biru (YHB) and Yayasan Mitra Insani (YMI).

YHB works across multiple provinces, integrating environmental education, ecological mangrove rehabilitation, coastal field schools and sustainable livelihoods programmes. YMI is based in Pekanbaru, the capital of Riau province where Inhil is located. It works on initiatives related to forest and land conservation, coastal and marine resource management and social entrepreneurship. They do this by working with community groups, including women and youth groups, small business enterprises and local governance organisations. Livelihood activities include both direct and indirect links to mangrove ecosystems and sustainable use. Direct activities include efforts such as Kelompok Usaha Perhutanan Sosial's (KUPS) nipa palm stick processing and eco-printing, while indirect ones involve products such as coconut coir processing and home gardening. YMI's support aligned with the social forestry framework, supporting groups affiliated with this scheme, including KUPS, business units under Lembaga Pengelola Hutan Desa (LPHD) or village forest management units. Examples of assistance from YMI include providing equipment for building drying houses, which help maintain the quality of the harvested sticks. For a fuller list of activities and interventions, please refer to the programme's Theory of Change narrative (Annex 1).

1.2. Coastal Environment Context Indonesia

Indonesia is home to one of the world's largest and most diverse marine and coastal environments that include coral reefs, seagrass beads and mangrove forests. The extensive coastline is vital to the country's economy, culture and environment, with 70 percent of the population living in coastal areas and many depending on the ocean for their livelihoods. Indonesia has approximately 23 percent of the world's mangrove forests, covering an estimated area of 3.2 million hectares, predominantly located in Sumatra, Kalimantan, Sulawesi and Papua[1].

[1] Giri, C., Ochieng, E., Tieszen, L. L., Zhu, Z., Singh, A., Loveland, T., ... & Duke, N. (2011). Status and distribution of mangrove forests of the world using earth observation satellite data. *Global Ecology and Biogeography*, 20(1), 154-159.

Mangrove forests provide a wide range of ecosystem services that are crucial for both the environment and local communities[2]. Despite their importance, mangrove forests in Indonesia face numerous threats, including deforestation, land conversion for agriculture and aquaculture and coastal development. The loss of mangroves not only reduces the availability of critical ecosystem services but also exacerbates the impacts of climate change and coastal hazards. Efforts to conserve and restore mangrove forests are essential to ensure the continued provision of these vital ecosystem services.

The mangrove area around Inhil contains vital ecosystems providing numerous ecological, social and economic benefits. They act as natural breakwaters, preventing coastal erosion, trapping sediment and serving as critical habitats for a diverse range of marine biota, including fish, crabs and shrimp. However, they are facing threats from deforestation and land conversion, illegal timber harvest, overfishing and destructive fishing practices and coastal erosion. Key challenges that must be overcome include limited local government budget for restoration, community support or management activities and conflict over land tenure and resource access.

Recognising the vital role of this environment for local communities and its potential to retain and sequester significant amounts of carbon, BF interventions aim to promote sustainable management, strengthen local capacity and advance community-led conservation efforts. These initiatives will contribute towards Indonesia's national and global climate resilience goals while securing livelihoods for local populations.

Figure 1: Blue Ventures sites in Indonesia (source ICF Update Oct-Dec 2024)

2. Methodology

2.1. Overview of Data Collection

The evaluation questions (EQs) were reviewed and approved by Defra in 2024 prior to the start of the Summative Evaluation to update and ensure that the evaluation is exploring the right questions for the contexts of the BF programme. A comprehensive review of primary and secondary documents was undertaken, including reports, workplans, government regulations and MEL documents. Primary data collection was gathered during a five-day visit to the Inhil site. The survey site was selected by BV, and the itinerary for the site visit was co-developed with the BV

[2] Bimrah, K., Dasgupta, R., Hashimoto, S., Saizen, I., & Dhyani, S. (2022). Ecosystem Services of Mangroves: A Systematic Review and Synthesis of Contemporary Scientific Literature. *Sustainability*, *14*(19), 12051.

team. Staff from BV, YHB and YMI were in attendance throughout. During the site visit, 87 participants (31 percent women) were surveyed through key informant interviews (KIIs) and focus group discussions (FGDs), including 3 BV staff members, 17 implementing partner staff members, 56 community beneficiaries and 11 government officials with representatives from BAPPEDA (3), DPMD (3), KKP (3), KPH Mandah (1) and Camat Kuala Indragiri (1)[3]. Figure 2 summarises the range of stakeholders consulted, disaggregated by gender. Surveys were complemented by site observations and remote follow-up interviews.

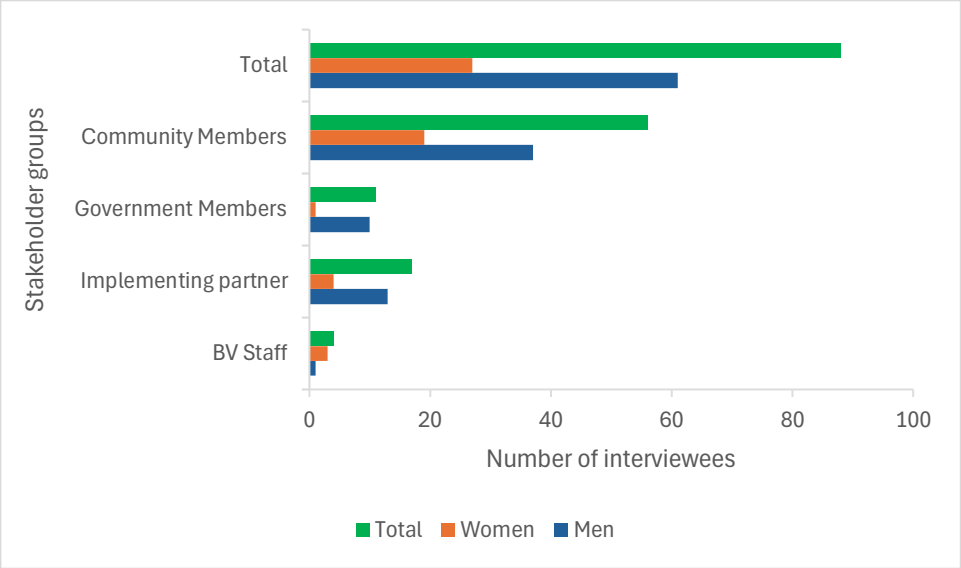


Figure 2: Composition of the stakeholders surveyed during the Inhil site visit.

2.2. Data Analysis

The analysis employed contribution analysis to validate the programme's logic by assessing the extent to which activities contributed to observed outcomes, while considering external factors. This involved developing case-specific contribution stories for Inhil site and applying a strength-of-contribution scale categorising contributions as critical, important, some or negligible, supported by evidence. The evaluation also assessed impact and sustainability by determining whether positive outcomes were maintained and scalable, using rubrics with nine criteria for scalability and seven for sustainability, to evaluate the potential for expansion into other geographic areas. The conclusions were drawn from the contribution analysis, sustainability assessments and stakeholder validation processes, aiming to inform the programmatic level Summative Evaluation findings and recommendations for future programme design and scaling efforts.

2.3. Timeline

The evaluation took place from February to June 2025, with data collection occurring primarily in March and April and the site visit conducted from April 20th to 26th. Preliminary findings were reviewed through a validation workshop in May, with the final report completed by the end of June 2025.

[3] BAPPEDA: Regional Development Planning Agency; DPMD: Office for Community and Village Empowerment; KPP: Ministry of Marine Affairs and Fisheries; KPH Mandah: Mandah Forest Management Unit; Camat Kuala Indragiri: Subdistrict Head of Kuala Indragiri

3. Key findings by Evaluation Criteria

3.1. Relevance

EQ1:	Has the project targeted the relevant beneficiaries inclusively?
EQ2:	To what extent has the project design responded to the needs and priorities of beneficiaries?

It is generally felt that the programme is addressing the right problems in Inhil, with a core focus on identifying key stakeholder groups, their needs and relevant actors.

Actors essential for mangrove preservation have been engaged by the project. This includes regional and district government representatives, village leaders, community patrol groups and fishers.

After the national government declined to approve activities at Sembilang, BV were required to move quickly to identify a new location. Sembilang proved impractical given the hurdles in securing government endorsement, stakeholder support and national park permits. Inhil was selected due to the scoping work of BV and YHB, who had identified it as a site with high potential due to the existence of legally recognised community-based forest management, active and effective local partners and an engaged stakeholder group.

YMI has been working with the communities in this area for twelve years and understood the needs of the beneficiaries surveyed. The programme used this to address interconnected environmental, economic and governance challenges in a vulnerable coastal region. Its focus on community-driven solutions, local government partnerships and sustainable livelihood alternatives came across in many of the activities. For example, coconut plantations throughout the Inhil area have been degraded by saltwater inundation, destroying their crops and the livelihoods of farmers. In response, the project has undertaken a pilot mangrove forestation effort in some of these areas. The success of this pilot provided a new income opportunity for these farmers through the creation of a mud crab fishery. This has in turn led to an increased appreciation and sense of stewardship for the mangrove environment, halting the emigration of households from the village in search of other income sources.

However, there was uncertainty about the relevance of some activities, particularly within the livelihoods pathway. It was noted that these did not necessarily target the beneficiaries most aligned with the programme's intended outcomes. Instead, the programme focussed on small KUPS women's and men's business groups that YMI already supported, likely reflecting YMI's own agenda, while BV deferred to their lead without redirecting focus to those most likely to drive unsustainable mangrove use. While these groups benefit from supplemental household income, its direct impact on reducing unsustainable activities remains unclear. Although long-term income stability may lessen reliance on extractive practices, it could be argued these were not the most relevant beneficiaries at this stage. Efforts to introduce new business activities through the KUPS groups, such as eco-print clothing, nipa palm products and coconut coir processing are showing promise. However, those involved noted persistent barriers to success, including limited market access, competition from low-cost alternatives and the need for further capacity development.

BV and their partners each have their own safeguarding policies and procedures and have worked together to ensure they are aligned. However, the male-dominated environment was highlighted by all partners as a barrier to inclusivity and a potential safeguarding challenge. Partners have attempted to counteract this by actively recruiting female staff and ensuring their involvement in decision making. This has served the dual purpose of improving representation, while also ensuring women's interests are heard and accommodated within the programme. As a result, this has also better facilitated access and discussion with women in the community.

There was a policy in place that aimed to facilitate equal gender representation at meetings or learning events, where appropriate. This can often be challenging to achieve, and it can be even more challenging to ensure all voices are heard during these meetings. To counteract this, they try to give women space to be heard during the meetings or informally and if necessary, privately after.

While there are channels in place for reporting, the clarity and communication on health, safety and safeguarding policies need to be strengthened internally, according to the implementing partners. However, staff interviewed were generally positive about their experiences with safeguarding and workplace safety. Nonetheless, BV Global should continue to work with implementing partners on mainstreaming a culture of safeguarding and the need for appropriate internal policies to be in place on safeguarding and GESI awareness.

During consultations, partner staff observed that young women in these communities often marry and become mothers at ages younger than might be typical in the UK, a reflection of local cultural norms rather than any programme influence. BV neither endorses nor facilitates early marriage; instead, they take a non-judgemental approach, ensuring lines of communication are open and individuals know they can turn to project staff for any assistance needed.

Infrastructure and urban development have been identified as the underlying drivers behind mangrove deforestation. However, it was acknowledged that little has been done to counteract these. The region's towns and villages continue to expand onto swamp and peatland, where construction is complicated by the soil's low shear strength, high compressibility and excessive water content. Mangrove trees are seen as crucial to providing foundational support and structural stability for building in these conditions. Therefore, restricting timber harvesting in one area often results in logging shifting to unprotected sites. YHB has attempted to address this issue through two policy initiatives: the first advocated for government-funded construction projects to replace mangrove timber with concrete, while the second proposed a sustainable harvest management plan. Neither effort has seen meaningful progress, which is likely a result of challenges navigating local government bureaucracy.

3.2. Coherence

EQ3:	To what extent has the project ensured buy-in from and harmonisation between project stakeholders*? **Stakeholders include subgrantees, CSOs, networks, governments, other partners, beneficiaries*
EQ4:	In what ways has the project complemented, or undermined, policies and regulations as well as international conservation and developmental agendas, and vice versa?

Blue Forests programme has strong community buy-in, as well as support from local and regional government. It is felt to be coherent with local and national priorities.

As noted, the scoping study identified Inhil as a location where stakeholders were already engaged and "bought in" to many of the ideas and activities proposed by the BF programme. This was due in large part to the efforts of YMI, who have been working at sites in Riau Province for over 20 years. Further engagement was built through learning exchanges, needs assessments and the development and implementation of relevant training events.

There is scope to better integrate activities across sectors in a way that would enable groups within the community to reinforce a unified message: that protecting mangroves is directly linked to sustaining fish stocks and improving community health and wellbeing. Improving coordination of activities among groups and encouraging people to join multiple groups would be a valuable next step, ensuring that activities and discussions are more joined up across the community programmes.

The programme activities in Inhil effectively fills critical gaps in local government capacity by supporting ecosystem restoration efforts that align with regional development priorities. It addresses limitations in government mobility and funding while fostering collaboration among multiple stakeholders, including provincial agencies, community groups and customary leaders. This programme aligns with the district's Medium-Term Regional Development Plan (*Rencana Pembangunan Jangka Menengah Daerah* – RPJMD), which prioritises environmentally based economic growth.

However, the programme's success is tempered by coordination challenges. Layers of government bureaucracy hampered harmonisation of the project between stakeholders, while challenges coordinating between villages and sub-districts led to conflict over rights and access. During our joint functional group discussion (FDG) with the LPHD and the community-based surveillance group (POKMASWAS) it was stated:

"*There are many people here. Some say, 'This canal doesn't belong to you.' That's just human nature—canals are open to everyone. Even if there's a regulation, we can't always enforce it. But eventually, people become aware on their own*."

The conflict stems from issues regarding ownership rights of river or mangrove areas and a lack of clarity around temporary closure boundaries and the dissemination of their locations. In the future, greater clarity and publication of the area boundaries, as well as the role of the POKMASWAS in monitoring these areas, would help reduce conflicts.

Overall, while the programme has garnered strong local support and contributed to the region's environmentally based growth agenda, its long-term impact depends on improved governance integration and effective local policy adjustments.

3.3. Effectiveness

EQ5	To what extent has the programme achieved, or is expected to achieve its outcomes and has it generated unintended outcomes, either positive or negative?
EQ6	Who has benefitted from/been adversely impacted by the project and how has this been realised?
EQ7	How well has continuous learning contributed to adaptive programming?

The Blue Forests programme has achieved its intermediate outcomes across the mangrove, fisheries management and community governance pathways, while making progress towards programme outcomes in community health. However, livelihood diversification activities remain limited in scope and scale.

The programme has made significant progress towards achieving its outcomes, demonstrating strong effectiveness in delivery in Inhil. It has proven effective in reducing environmental degradation and enhancing local livelihoods. This is supported by improved monitoring through community and provincial partnerships. However, it should be noted that the scale of activities, particularly those of mangrove restoration and livelihood improvement is relatively small and the underlying causes of deforestation remain under-addressed.

The programme's effectiveness has been driven by three key change mechanisms. First, the community-led approach has fostered strong stakeholder engagement across all activities. In Inhil, this is evident through needs assessments and stakeholder consultations that have shaped capacity-building efforts for government and community governance bodies, alongside support for management activities that have driven mangrove reforestation and fisheries restoration. Second, the social capital built through trust and collaboration with implementing partners has been crucial in enabling the programme to operate effectively. Finally, the adaptability, flexibility and continuous

learning of the programme's partners, stakeholders and funding mechanism have ensured responsiveness to beneficiary needs and evolving on-the-ground dynamics.

The programme's beneficiaries are those dependent on mangrove environments or actively involved in their management. This includes individuals directly reliant on these ecosystems for their livelihood, such as fishers. Education and management efforts have focussed on reducing unsustainable practices, including the use of poisons, enhancing fishing sustainability through equipment provision and temporary closures and fostering awareness of management measures and their underlying rationale.

Governance and management were supported at two levels. At the community level, beneficiaries included surveillance groups such as the community-based surveillance groups (*Pengawas Masyarakat Perikanan* – Pokmaswas) and Village Forest Management Units (*Lembaga Pengelola Hutan Desa* – LPHD), who routinely patrol mangrove and fishery management areas. Their capacity to fulfil this role has been strengthened through targeted training and equipment provision. Meanwhile, engagement with local government focussed on needs assessments and training exercises. These efforts not only helped build local government capacity but also identified gaps beyond their reach, enabling the programme to support beneficiaries who might otherwise be overlooked.

The programme has actively ensured women's participation across various roles such as business groups, fisheries enumerators and community health workers. However, it was noted that men and women participated differently across the activities, with men more engaged in management and governance activities and women in the livelihoods and community health pathways. While these were deemed appropriate given the local context, missed opportunities were noted, as women did express an interest in engaging more with community governance. YMI supported an additional three KUPS and an LPHD (which are predominantly male-led) under the programme livelihoods pillar, in addition to the women-led KUPS group. Supporting business groups helps reduce pressure on mangrove forests and fisheries, given that extractive practices are predominantly undertaken by men. Supporting women-led groups is also needed as it may lead to women's empowerment and the income diversification could reduce household dependence on destructive practices. Households with greater income would be able to purchase liquified gas for cooking rather than relying on mangrove timber or charcoal. Once supported, women-led cooperatives are also able to engage in other activities, such as mangrove conservation[4]. Additionally, becoming economically independent may give women power to discourage male family members from illegal activities. It should be noted that during FGDs, the women interviewed stated the additional household income is viewed positively by their husbands as it provided extra financial security.

Lessons from livelihood improvements in Madagascar may not have been fully applied in Inhil. Rather than applying lessons learnt about identifying and engaging people unsustainably using the mangrove forests, the targeted groups at Inhil have limited interaction with the mangrove forest and are instead largely those YMI was already working with. While this approach may help build trust in BV and the programme, its impact on broader outcomes remains limited and given the short time frame of the programme may not have been the most efficient or effective approach.

Table 1: BF's Contribution to Outcomes

ToC Pathway	Key Result	Programme Contribution
Blue carbon sequestration and forestry management	Village-level forest management plans in place at 4 villages covering 7,664 ha.	Medium

[4] Jjaman R, Mozumder MMH, Emon MA, Islam MM. Why do alternative livelihood interventions succeed or fail? A case study of the Sundarbans mangrove fishing communities of Bangladesh. Maritime Studies. 2025;24:10 Why do alternative livelihood interventions succeed or fail? a case study of the Sundarbans mangrove fishing communities of Bangladesh | Maritime Studies

Blue carbon sequestration and forestry management	Community-led mangrove reforestation of degraded coconut plantation area using an efficient, economical and low-skilled approach. This is a proof-of-concept activity and has achieved 26.2 ha at present.	High
Small-scale fisheries management and improvement	Following reforestation a mud crab fishery has developed, providing a new income for the community. Fisher training, provision of cages and enumerator training has created a productive and sustainable fishery.	High
Small-scale fisheries management and improvement	Fishing communities designated temporary closures of mangrove fishing at 3 villages, totalling approx. 65 ha. Management has been strengthened the KKD Inhil, an existing MPA covering 126,097 ha. This includes socialisation of the management plan and formation of the management organisational unit (SUOP)	Medium
Community governance	Community governance groups have been strengthened through the provision of training, capacity development, financial support, monitoring posts and boat and fuel access.	Medium
Livelihood diversification, value chains and savings groups.	Existing alternative livelihood sources have been strengthened, and new activities have emerged. With project assistance, these are now marketed beyond the village and into the district. These income sources provide direct economic benefits to the community.	Low
Community health	Health services have been able to reach more remote villages thanks to the collaboration between the programme and the local health centre (Puskesmas). They have trained 72 and placed community health ambassadors across 6 villages.	Low

The programme has only been operational at Inhil for two years, limiting the scope for learning and adaptation. Nonetheless, the BV team have had to adapt BF programme delivery to work through local implementing partners and to adapt some approaches from the Madagascar context into a different cultural and governance context. Needs assessments have been effectively used to identify gaps, and by working closely with local government, they were able to use local policies or action plans to guide their activities, ensuring alignment.

3.4. Efficiency

EQ8	To what extent did the project deliver value for money (as defined by the FCDO 4Es framework)?

The activities have demonstrated value for money (VfM); however, bureaucratic challenges at the programmatic level in Indonesia reduced overall cost-effectiveness. Activities were consistently executed in a timely and cost-effective manner. Several supporting factors have ensured this efficient delivery.

Factors supporting efficient delivery

The programme benefitted from thorough scoping before implementation, enabling efficient progress from the outset. The consortium structure has supported streamlined delivery, with partners already embedded in local communities and trusted by stakeholders, ensuring immediate action with minimal delays. Given the limited timeframe at

the backup site before the funding cycle ended, its selection appears to have been influenced by the need to deliver key activities and outputs swiftly and cost-effectively. BV staff on-site have helped smooth administrative activities and given BV a presence in discussions with local government. This helps ensure that activities are in line with the intended outcomes of the BF programme.

Factors hindering efficient delivery

Project delivery was initially disrupted by uncertainty over YPL/BV's coordinating role. BV had established YPL as its in-country entity to lead the BF programme delivery, but legal and governance challenges led to BV formally registering a legal presence in Indonesia in 2023/2024, taking direct oversight of operations. Implementing partners noted that, even during YPL's oversight, they engaged BV directly. Moreover, after the transition to BV Indonesia, lingering confusion left them uncertain about communication channels. Additionally, it was suggested that the programme would have benefitted from stronger governance, leadership and integration, led by BV. The shortcomings in the coordination of strategic planning by BV led to partners developing overlapping workplans, which could have been avoided through improved coherence in annual and strategic plans. Delivery was also affected by early uncertainty around BV's entity, YPL, whose eventual removal disrupted information flow and planning. While it was widely agreed that the expertise of BV on-site was valued, the delayed recruitment of an in-country director for strategic engagement contributed to inefficiencies and role ambiguity.

Despite this, the BV staff on the ground have been effective in their coordination and administrative support of the project, facilitating communication on funding needs and advocating at various levels. BV's involvement in capacity building has strengthened partners' ability to deliver activities effectively, while ICF funding has provided flexibility to respond to policy and community shifts. The consortium model, with BV overseeing strategic direction and YHB and YMI leading implementation, benefitted from diverse on-the-ground expertise and shared goals.

3.5. Impact

EQ9	To what extent does the BF programme contribute to establishing local management, protection and restoration of mangrove forests at the 5 project sites, and how do these compare between sites?
EQ10	To what extent has the BF programme protected or improved livelihoods of supported communities?
EQ11	To what extent did the project contribute to transformational change?

The Blue Forests programme has significantly contributed to its core impact of strengthening local management, protecting and restoring mangrove forests and supporting the livelihoods of mangrove-dependent communities.

Communities have been engaged and empowered through co-developed management plans and assistance to community governance groups. Reforestation actions have brought an appreciation of mangrove value, and implementing partners have learned and planned on scaling this approach. These activities served to strengthen both management and appreciation of the mangrove habitat's value. Though the project is still in its early stages at Inhil, it is apparent that it is making significant contributions to both the environment and communities in the area.

Activities in the livelihood pathway have been well received and helped strengthen existing opportunities. A number of novel initiatives such as Nipah stick and eco-print activities are still in their early stages and require further development before community groups are in a position to sustain these activities without support, which is unsurprising at this stage. However, despite the success of activities in both the livelihood and community health pathways, their

contribution to the project's impact statement appears limited at this stage, a finding that, again, is not unexpected given the short lifespan of project activities. The interventions reached a wide variety of KUPS groups, including activities that directly benefit mangrove ecosystem as well as other indirect ventures such as banana chip production, thus extending support across diverse community segments. While the programme has effectively expanded health services and addressed key gaps in government capacity, its early-stage activities have had only a marginal impact.

There is clear opportunity and demand for scaling to new communities. People have seen the success of interventions at the existing villages, and both YMI and YHB have plans to expand activities using the strategic pathway model. The scaling of the project to the wider region is necessary to help reduce the unintended impacts of displaced deforestation. This can be done by bringing additional areas of mangrove under sustainable management. However, these findings underscore the need for legislation establishing a framework for sustainable timber harvesting. Previous lobbying efforts have not yet succeeded, but the next project phase presents BV with an opportunity to leverage its resources and strong government and community relationships to champion this reform.

3.6. Sustainability

EQ 12. To what extent are the benefits of the project likely to continue in the medium- to long-term?

The sustainability of the programme was limited at the Inhil site, and the stakeholders across all activities noted that without continued support from the programme, they would be unable to continue many of the activities.

The communities and stakeholder groups surveyed suggested they would generally be unable to sustain activities without support. Reliance on the financial assistance and guidance provided through the programme remains high, with beneficiaries indicating that many activities would end or be severely restricted without continued support. This includes activities conducted with the local government who, despite strong engagement and enthusiasm for programme activities, lack the budget, capacity and experience to continue programme activities without financial and capacity support from BF. Given the programme's relatively short duration in Inhil, this finding is unsurprising; however, there are several elements that contribute towards programme sustainability.

At the Inhil site, a strong regulatory framework exists, which helps support programme sustainability. The village forest management rights last 35 years, giving the village leadership long-term control of management decisions. The programme has also helped develop and implement the management plan for the Inhil marine protected area (MPA), as well as the creation of a Strategic Unit of Operation (SUOP) to govern this area. Health ambassadors are from integrated service posts (*Pos Pelayanan Terpadu* – Posyandu) that are officially recognised by the local government. They work together with village midwives to provide health services in the village through the Posyandu programme. Business groups engaged and supported by the project are registered businesses, formally recognised by the village with their own developed business plans.

While the programme itself currently lacks financial sustainability, the BF implementing partners YHB and YMI have shown that they have the institutional capacity to continue a number of the programme's activities. Both have access to additional grant funds, and YMI has recently been awarded OCEAN funding from the Defra-administered Blue Planet Fund (BPF). BV has supported both implementing partners and community groups with grant writing and proposal development, helping expand their access to funding opportunities. This assistance aims to strengthen local ownership and sustainability by enabling these groups to secure resources independently and align financing with

locally defined priorities. Both NGOs are committed to delivering activities in line with the Theory of Change. YHB has prioritised Riau province, while YMI plans to expand its operations to six additional villages in Inhil.

At the community level, funding opportunities exist for community-led activities through village budgets and government grants; however, communities feel these options are not yet practical. The programme has assisted groups with funding applications and encouraged village leaders to integrate key activities (such as surveillance groups) into local budgets, but these efforts have not yet provided viable alternatives, the exception being the POKMASWAS community surveillance group who will receive village funding moving forward.

Financial sustainability remains a significant challenge due to reliance on short-term grants, complicating long-term planning. The lack of legislation for sustainable timber harvesting prevents communities from monetising forest resources and securing steady income. Local partners also face capacity constraints in financial literacy and business planning, hindering the development of scalable enterprises. Finally, Inhil's remoteness and dispersed community operations raise transaction costs for monitoring and product aggregation.

The project lacked a clear exit strategy to ensure its sustainability, relying instead on securing additional funding to continue its activities. This approach poses a risk: if project operations are suddenly halted due to insufficient financing or the absence of a proper exit plan, BV and its implementing partners could face reputational damage. Such an outcome might erode stakeholder trust and hinder their ability to gain support for future initiatives. At present, the strategy to manage this is limited to assisting with access to additional grant funding and ongoing capacity development.

4. Conclusions and Key Lessons

The BF programme utilised a 'community first' approach to contribute to project outcomes effectively. By engaging local NGOs as implementing partners, the programme ensured efficient project delivery and implemented site-based activities with communities by building on the social capital already established by these partners over their years working with them. This local knowledge also contributed to the project targeting relevant communities.

There were some challenges associated with BV's governance of programme activities. At the outset, the change of who was managing the programme from YPL to BV was noted as a source of confusion. While BV administrative personnel at a site level were seen as doing a positive job, there was a lack of project coordination at a strategic level. This led to overlap in workplans between the project partners impacting project coherence and delivery.

The relevant communities/groups were targeted for the majority of the pathways. Local government, village leadership and forestry and fishery stakeholders were engaged to ensure management plans were designed and implemented appropriately. Community governance groups were strengthened and empowered through capacity building. However, the groups targeted for livelihood opportunities are, at present, one-dimensional and do not yet include those directly involved in driving unsustainable practices.

Programme sustainability emerged as a concern, as the majority of activities are dependent on external support for continuity. Without sustained assistance, many initiatives risk failure. Their continuation depends largely on implementing partners' ability to secure funding and prioritise BF activities. Additionally, the absence of long-term strategies for structural challenges, such as deforestation and management implementation, further undermines the sustainability of project outcomes.

Ultimately, the programme is showing strong achievements in ecological restoration and community governance but has limitations in gender inclusion, livelihoods sustainability and long-term impact.

Annex 1: Sustainability and Scalability Framework

Table 2: Sustainability framework showing the scores (1 – 5) of the activities within each pathway against the sustainability criteria where 1 = the pathway performs poorly in this criterion, 2 = pathway performs below average in this criterion, 3 = pathway meets the minimum requirements for this criterion, 4 = pathway performs well in this criterion, 5 = pathway excels in this criterion.

Strategic pathway	**Community Engagement** *Community have been engaged throughout and have a sense of ownership over the outputs/outcomes*	**Measurable impact** *Enduring benefits and positive changes are observable across, or recognised by, the community/communities*	**Institutional support and management** *Institutional mandates for and engagement in activities is clear*	**Resources availability** *Availability and continuity of financial, human and material resources required to maintain the activities*	**It is financially sustainable** *Activities are self-sustaining or, where applicable, necessary funding is available*	**Backed up by law/policy** *Activities and outputs are supported by and working within local and/or regional and national laws/regulations*	**Equipment continuation** *Where supplied any specialised equipment can be maintained and operated by the community*	***Overall Strategic Pathways (# / max 35)***
Blue carbon and forestry management	5	3	5	2	2	5	4	26
Small-scale fisheries management and improvement	5	4	4	3	3	4	5	28
Community governance	5	5	5	4	4	5	4	32
Livelihood diversification, value chains and savings groups	5	4	4	2	3	4	5	27
Community health	5	3	4	2	1	4	4	23
Overall Criterion score (# / maximum 25)	25	19	22	13	13	22	22	
Comments	Strong community engagement was generated through the community-led approach and use of trusted partners.	Positive change was recognised across all pathways. However, the likelihood of these benefits enduring was mixed. In particular, those engaged in forestry and health activities suggested they might not continue beyond the project.	Strong support for activities across all pathways. Institutional mandate, policy or regulations supporting activities was generally clear.	The POKMASWAS community governance group were the only group to suggest that activities would continue in the same form without project support.	Activities across the majority of pathways rely on financial support from the programme. Only the POKMASWAS community governance group have allocated village budget for support.	Regulations in place to support activities in forestry, fisheries and governance. Business groups are registered and formally recognised and health ambassadors are a Posyandu group recognised by the government.	Equipment was well understood by community users.	

Table 3: Scalability framework showing the scores (1 – 5) of the activities within each pathway against the scalability criteria where 1 = the pathway performs poorly in this criterion, 2= pathway performs below average in this criterion, 3 = pathway meets the minimum requirements for this criterion, 4= pathway performs well in this criterion, 5 = pathway excels in this criterion.

Strategic pathway	***Resource Efficiency*** *Effective use of resources (time, funds, personnel) during implementation. [source: from VfM analysis]*	***Stakeholder Support*** *Engagement and backing from local stakeholders and organisations.*	***Contextual relevance*** *Activities appropriately tailorable to address the specific needs and priorities of different communities.*	***Capacity and Capability*** *Capacity support has provided communities with necessary capabilities to undertake activities*	***Adaptability*** *Flexibility to modify and adapt the activities or intended outputs to different contexts and resources.*	***Policy Compliance*** *Alignment with local, regional and national policies and regulations.*	***Feedback mechanism*** *Established mechanisms for collecting feedback from community members and stakeholders to inform adaptations*	***Impact Measurement*** *Robustness of monitoring, evaluation and learning systems to measure progress and inform adaptations*	***Risk Management*** *Effectiveness of risk mitigation strategies and handling challenges.*	***Overall Pathway score (# / maximum 45 score)***
Blue carbon and forestry management	5	5	5	3	5	5	4	4	3	39
Small-scale fisheries management and improvement	5	4	5	5	5	5	4	4	4	41
Community governance	5	5	5	5	5	5	4	4	4	42
Livelihood diversification, value chains and savings groups	4	5	5	3	5	4	4	4	3	37
Community health	5	5	5	5	5	5	4	4	4	42
Overall Criterion scores (# / maximum 25 score)	24	24	25	21	25	24	20	20	18	
Comments	Strong collaboration with all groups and following a community-led approach meant resources were targeted efficiently.	Groups interviewed stated strong support; however, rule breaking over the fishery management might suggest a lack of	Through the community-led approach followed by BV and partners, the project was highly relevant to the needs of the community.	The high scores represent the capacity building efforts of the programme. The use of needs assessments	The community-led approach meant the project adapted to the needs of the community, and the flexibility of the funding meant they were	Working closely with local government and community leadership meant the	Community members were able to provide feedback through a variety of methods, including in-person visits and WhatsApp	Meetings and workshops with stakeholders both from the community and from local governance allowed BV and partners to understand	Though we were able to identify a number of steps the project was making to	

		support from unsurveyed groups.		identified gaps, and training was used to address these. The lower score for the livelihood component reflected feedback from interviews, highlighting the ongoing need for sustained support.	able to target activities where needed.	project aligned well with relevant policies.	conversations. However, the programme did lack formal feedback channels beyond these somewhat informal approaches.	the impact of programme activities.	ensure risk management, it was a challenge to explain/discuss, so there is a need to improve understanding across stakeholders.