

Programme Completion Review

Title: Blue Forests		
Final Programme Spend £ (full life): £11,166,392	Review Date: December 2025	
Analysis code [ID#]: ICF-PO001-BV	Start Date: December 2016	End Date: September 2025

Summary of Programme Performance

Year	2017	2018	2019	2020	2021	2022	2023	2024
Programme Score	A	A	A	A	A	A	A	A
Residual Risk Exposure Rating	Medium/High	Medium/High	Medium/High	Medium/High	Medium/High	Medium/High	Medium/High	Medium/High

DevTracker Link to Business Case (and any addendum):	Blue-Ventures-Business-Case-Final-201909270409001745551954.pdf Blue Forests Business Case 2025-202502270202481745551954.pdf
DevTracker Links to all logframes used during programme lifetime:	ICF-Blue-Forests-Logical-Framework-2020-202403060403011745551951.pdf ICF-BV-Logical-Framework-2023-202504030904431745551954.pdf Blue Forests Logical Framework 20241752237784.xlsx

Acronyms

AR	Annual Review
BPF	Blue Planet Fund
BF	Blue Forests
BV	Blue Ventures
CBD	Convention on Biological Diversity
COAST	Climate and Ocean Adaptation and Sustainable Transition Programme
DEFRA	Department for Environment, Food & Rural Affairs
ECPAT	Every Child Protected Against Trafficking
ERPA	Emission Reduction Purchase Agreement
GEDSI	Gender Equality Disability and Social Inclusion
GEF	Global Environment Facility
GEM	Google Earth Engine Mangrove Mapping
GHG	Greenhouse Gas
Ha	Hectares
HMG	His/Her Majesty's Government
IBC	International Biodiversity and Climate (Directorate)
ICF	International Climate Finance
IPLCs	Indigenous Peoples and Local Communities
KPI	Key Performance Indicator
LARC	Long-acting reversible contraceptives
LMMA	Locally Managed Marine Area
MEL	Monitoring, Evaluation and Learning
MSI	Marie Stopes International

NGO	Non-Government Organisation
NTPF	Non-Timber Forest Products
NTZ	No-take Zone
OCEAN	Ocean Community Empowerment and Nature Programme
ODA	Official Development Assistance
PCR	Programme Completion Review
PrOF	Programme Operating Framework
SEAH	Sexual Exploitation, Abuse and Harassment
SMART	Spatial Monitoring and Reporting Tool
SRC	Safeguarding and Reporting Committee
SRHR	Sexual Reproductive Health and Rights
TGRN	Transfer of Natural Resources Management
ToC	Theory of Change
ToR	Terms of Reference
VfM	Value for Money
YHB	Yayasan Hutan Biru
YMI	Yayasan Mitra Insani
YPI	Yayasan Planet Indonesia
YPL	Yayasan Pesisir Lestari

A. Summary and Overview

Description of the programme and what it has achieved

Blue Forests (BF) was an £11.16 million programme (December 2016 - September 2025) that sought to protect and sustainably manage mangrove forests while reducing the poverty of the coastal communities that rely on them. The programme worked with local communities across the following five sites:

- Site 1 - Ambanja Bay, Madagascar
- Site 2 - Velondriake, Madagascar
- Site 3 - Mahajamba Bay, Madagascar
- Site 4 - Indragiri Hilir (Inhil), Indonesia
- Site 5 - Kubu Raya, Indonesia

The UK Non-Government Organisation (NGO) Blue Ventures (BV) delivered and managed the programme. BV delivered the programme directly in Madagascar, and through three partner NGOs in Indonesia: Yayasan Hutan Biru (YHB), Yayasan Mitra Insani (YMI) and Yayasan Planet Indonesia (YPI). BV's aim was to develop transformative human rights-based approaches for sustainable locally-led marine conservation, building towards a replicable model for the sustainable management of mangrove habitats that is driven directly by communities and their needs. BF contributed to these aims through delivering outcomes across the following pathways:

1. Blue carbon sequestration and forestry management
2. Fisheries management
3. Community governance
4. Livelihood diversification, value chains and savings groups
5. Community health and women's empowerment

Programme history

£10,145,972 was initially approved in December 2016 for seven years of programme delivery (original programme lifetime 2017-2023). At the time of approval, BV had already begun independent scoping work in Madagascar. The Defra funding was designed to help complete this stage and move into full project development and implementation, eventually replicating the fully validated model elsewhere in Indonesia. BV had also received approximately £478,694

in Darwin Initiative funding between 2012-2017 for two programmes in Madagascar, and in 2017 they received a third Darwin award for delivery in the Barren Isles archipelago to run until 2020, forming a total of £616,953. The new investment into the Blue Forests programme from Defra sought to build on this previous success and expertise established in Madagascar. The business case highlighted BF's strategic alignment to HMG priorities and commitments at the time, with the programme directly contributing to Sustainable Development Goals 13 (Climate Action) and 14 (Life Below Water), as well as the objectives of the Convention on Biological Diversity (CBD)¹. Strategic alignment with CBD objectives was strengthened in December 2022 with the introduction of the "30x30" target at COP15, an initiative to designate 30% of Earth's land and ocean area as protected areas by 2030. As the programme focused on the sustainable management of mangrove ecosystems, Blue Forests was designed and developed as 100% attributable to HMG's International Climate Finance (ICF) goals and has delivered against ICF Key Performance Indicators (KPIs) throughout its lifetime. ICF alignment was later revised to 90% in 2024 owing to its community health component which, whilst delivering strong outcomes, was not directly focused on climate adaptation or mitigation.

In 2018, instead of expanding into a sixth site in Myanmar, the budget was invested in mangrove restoration and conservation activities in Indonesia (sites 4 and 5). This was considered to be the best option within the scope of the project to deliver additionality, impacts and Value for Money (VfM). In response to the impacts of Covid-19 in 2020, support for the programme was extended for one year through to 2024. An additional £870,420 in funding was allocated to BF to cover the costs incurred by BV for the year extension. BF struggled to establish activities at the original location for site 4 (Sembilang) due to delays in securing a collaboration agreement between BV's partner and the National Park Authorities, resulting in a move to Inhil in 2021. BV acknowledged that this enabled greater VfM, and the benefits of this choice outweighed the sunk costs as the overall impact and number of beneficiaries would have been limited at Sembilang. A further £150,000 was also allocated to evaluate BF in 2021 as the original business case and grant agreement did not include any provision or funding relating to this. Where additional budget was allocated to the programme, the Defra team followed appropriate procedures in consultation with Commercial and Finance colleagues and recorded the decisions in Change Control Notices. BV selected the consultancy NIRAS as the independent evaluator through a competitive procurement process. Funding for programme delivery activities stopped at the end of December 2024, and a final no-cost extension was agreed until September 2025 to cover delivery of the external evaluation. The final evaluation report was received in August 2025 and the UK's agreement with BV formally ended on 30 September 2025.

How was this report conducted?

The most recent annual review (AR) completed for the programme covered the 2023 calendar year. This programme completion review (PCR) incorporates the annual review for the 2024 calendar year and the final 9 months of 2025 covering the programme evaluation. It aims to assess whether BF was successful in achieving its desired results against its business case and logframe and highlights challenges, successes and lessons learned along the way. The PCR also aims to incorporate poverty reduction and Gender Equity, Disability and Social Inclusion (GEDSI) as core evaluative dimensions, showing how they relate to impacts, sustainability, and Value for Money.

Defra discussed the scope of the PCR with BV in the final BF Quarterly Steering Group meetings at the end of 2024 and the beginning of 2025. The Defra team also provided BV with guidance on the content of their end of programme delivery partner report, submitted in July 2025. This delivery partner report and the independent programme evaluation were key inputs to this PCR. This PCR also draws on the programme's previous ARs, business case, logframe, risk register and grant agreements to form the main evidence base for this review. BPF Regional Coordinators for South-east Asia and East Africa were commissioned for input and feedback, and the team also sought views from the British Embassy in Madagascar and Indonesia on programme successes and challenges.

Headline operational points

- BF has performed strongly across its lifetime, delivering positive results against its targets. Assessing the logframe output, outcome and impact indicators, Defra and delivery partner performance, and reviewing programme achievements, **BF scores an overall A for performance**. Key results are summarised below:
 - BF has consistently achieved A ratings in every Defra annual review since its inception. The programme has retained this record by scoring its eighth consecutive A rating as part of this PCR.

¹ The Convention on Biological Diversity (CBD) is a global treaty with three main goals: to conserve biological diversity, to ensure the sustainable use of its components, and to ensure the fair and equitable sharing of benefits arising from genetic resources.

- The programme exceeded its 2024 targets for both impact indicators and outperformed final expectations in this area. The programme successfully prevented a larger area of mangrove deforestation than expected, resulting in notable environmental and social benefits. The scale of overperformance against the impact indicators suggests that final targets could have been set more ambitiously. Nevertheless, the programme achieved strong final results under its impacts. Results against outcome targets were more variable, with 5 of 8 outcome indicator targets exceeded, 1 meeting expectations and 2 falling narrowly short. Highlight outcome results include successfully protecting or sustainably managing 75,727 hectares (ha) of mangroves and providing 77,302 people with improved or protected food security or income generation by programme closure. Final figures against output indicators were similarly varied, with 12 indicator targets exceeded, 7 met and 4 falling short. Whilst impact indicators were exceeded, the results were mixed for outcome and output indicators, suggesting possible weakness in parts of the Theory of Change (ToC). Where targets were missed, the mitigating circumstances are explored throughout this report. BF's overall results against impacts, outcomes and outputs are mostly positive.
- From the outset, Blue Forests has also performed strongly against relevant ICF KPIs, helping the UK to deliver on environmental commitments made to developing countries under the Paris Climate Agreement in 2015. The programme's reported KPIs are shown below:

ICF KPI #	KPI Name	Target	Result
6	Tonnes of greenhouse gas emissions reduced or avoided as a result of International Climate Finance	1,691,554	4,602,753
8	Ecosystem loss avoided (Hectares) as a result of International Climate Finance	1,107	2,249
10	Value of ecosystem services generated or protected as a result of International Climate Finance	646,792	1,161,836
15	Extent to which International Climate Finance intervention is likely to lead to transformational change	-	4/5 (Partial evidence that suggests transformational change is likely)
17	Area under sustainable management practices as a result of International Climate Finance	75,678	76,577

- The programme's final evaluation concluded that there is strong evidence that BF 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 evaluation also found that there is partial evidence to suggest that transformational change is likely to occur as a result of the programme, with BF scoring an ICF KPI15 score of 4/5, as shown in the table above.
- Although BF has performed well across various metrics outlined above, there is a broader question around whether it met all its objectives set out in the original business case. A key element of the business case focused on using the income from the sale of carbon credits to support communities with development projects and local marine management, fund ongoing carbon credits work and support carbon credit verification and monitoring. However, there was a lack of progress in establishing carbon credit models. This impacted the longer-term sustainable financing mechanism to support BF's 20-year impact vision and raises questions regarding whether carbon credits are a reliable method of funding community carbon projects in reasonable timeframes. Specific issues that the programme faced in this area are discussed in lessons learned below and in section C.
- BF achieved good VfM over its lifetime, but there are learning opportunities noted below that can be applied to future ODA programming to ensure VfM is as strong as possible. The programme logframe shows excellent results for the monetisable benefits (e.g. tonnes of CO₂ emissions prevented or removed). Supplementing this analysis with qualitative evidence identified areas for improvement, as well as informing the broader positive conclusion on VfM performance, which is discussed further in section D.

- BF made strong progress in promoting equity and inclusion by fostering the participation of women and marginalised groups in community conservation activities ranging from mangrove planting to digital data training and providing increased access to reproductive health services. The GEDSI focus grew over time in accordance with heightened HMG ambition in this area. The programme evaluation noted that women's participation has been evident across various roles, with women actively contributing to programme activities. However, it recognised that their engagement differs from men's, often aligning with specific responsibilities or sectors. While there have been efforts made throughout programme delivery to achieve equitable gender balance, traditional roles and social norms have continued to shape participation dynamics in some instances, sometimes resulting in subtle imbalances. Overall, female participation was relatively even and contextually relevant in Madagascar's mature sites, while progress in Indonesia was hindered by a more male-dominant culture. BV have acknowledged that there is an opportunity to deepen gender-responsive strategies that challenge persistent structural and cultural barriers, ensuring that all community members can engage in activities meaningfully.
- BV was an exemplary delivery partner for Defra. They showed a consistent willingness to collaborate, improve strategic alignment, and adapt to changing HMG requirements throughout the years of programme delivery. BV consistently provided clear and timely financial updates and high-quality reporting in line with deadlines, helping the Defra team to stay well-informed on programme budgets and activities. Regular Steering Group meetings allowed Defra and BV to effectively govern the programme, and the teams developed positive working relationships with open and honest communication channels.

Major lessons learned, evidence generated and recommendations

Recommendations from the programme are included in the discussion and analysis throughout the review. Core themes surrounding lessons learned from the programme are summarised below.

1. Alternative livelihoods and financial inclusion

Lesson: Diversifying and strengthening livelihoods through value chain improvements and savings groups can reduce economic vulnerability in coastal communities. However, success depends on understanding local context, including value chain dynamics, inclusive engagement, and adaptability to challenges.

Evidence: Livelihood diversification, value chains and savings groups is one of five pathways contributing to Blue Forests' approach to sustainable, locally-led and replicable marine conservation, rooted in the principle that expanding opportunities for diverse income streams will reduce economic vulnerability in coastal communities. Pressures on livelihoods include fisheries closures or competition for depleted fish stocks, severe weather and climate events impacting local infrastructure, and mangrove deforestation. Blue Forests set out to address these challenges through the facilitation of alternative sustainable livelihoods and income generation, as well as community-led savings and loans groups and consideration of improvements to value chains. Progress against linked outputs are discussed in section C.

BV built alternative livelihoods into their delivery model from the outset, and they were described in the business case as a driver of women's empowerment and wider economic benefits. Whilst there were successful alternative livelihoods established, the programme faced challenges at some sites with theft (e.g. sea cucumbers), disease (e.g. poultry) and market dynamics (e.g. unfair pricing). It was also found that alternative livelihoods were suited to different geographical contexts with local conditions determining their viability, and in some instances, there were limited options for diversification. The evolution of this component reflects the challenges faced in livelihood diversification, prompting a new focus on enhancing existing livelihoods and financial inclusion.

BV broadened their approach in response to these challenges from 2022. Activities included addressing issues with post-capture losses and price transparency with collectors and assisting community financial planning.

In principle, strengthening existing value chains improves income whilst maintaining traditional practices and community buy-in. Results relating to savings groups and value chain improvements broadly performed well against targets and showed good progress. For example, four new approaches to value chain improvement were implemented at site 1 in Madagascar in the last two years of programme delivery (fish smoking, sea cucumber fattening, improved gear for crab fishing, and a cooperative). However, the overall effectiveness of these improvements was not explored prior to programme closure.

The savings and loans groups established in Madagascar are majority attended by women, with women often taking a leading role in managing household budgets. In Indonesia, women accounted for 45% of the group members, meaning that there was a larger male presence, which was highlighted through the evaluation as a barrier to inclusive engagement. This difference was addressed dynamically, as implementing partner staff created informal spaces after meetings where women could share their views more comfortably.

Recommendation: BV should conduct analysis on the effectiveness of the value chain improvement approaches implemented across their sites, including context-specific factors that may have contributed to their success, potential for applicability across other sites and geographies, and a comparative assessment of benefits derived from each approach – especially for women and marginalised groups. This will facilitate knowledge transfer and help to inform thorough value chain analysis which should be undertaken to help establish whether strengthening value chains or implementing new livelihoods activities are the most viable options in each community. Taking this approach will help support the scalability of coastal livelihood activities to further sites supported by other sources of HMG funding.

Recommendation: Programme teams should promote integration of gender equity and social inclusion into financial management from inception by ensuring savings and loans groups, value chain improvements, and financial planning activities are designed for equitable participation and decision-making by women and marginalised groups. They should also build on existing work to ensure gender-sensitive facilitation by monitoring participation and leadership roles as part of the programme’s MEL framework to track progress on equity.

2. Carbon credits and blue finance mobilisation

Lesson: Carbon credit schemes may be one tool in mobilising long-term sustainable finance for community-led marine management, but progress hinges on overcoming structural and bureaucratic barriers. Early expectations must account for delayed benefits and adaptive strategies.

Evidence: The Blue Forests business case outlined the programme’s approach to carbon credit generation to help mobilise sustainable finance as part of the focus on community governance; facilitating community-owned funding streams to progress development projects and local marine management. Significant benefits were not expected to be realised until year 9 (2025), which provided part justification for sustained Defra funding in the short-term. The expectation of a Blue Forests blue carbon credit was central to business case rationale for using ODA to catalyse long-term blue finance, which is of increasing interest and importance in a development landscape impacted by funding cuts.

The BF programme targeted a minimum of 50% of income from carbon credit sales to benefit community development projects and local marine management, representing an estimated £26 million from 13.9 million carbon credits over 20 years. As noted above, progress under the carbon credits schemes faced significant unexpected challenges in both Madagascar and Indonesia. In response, an indicator on carbon credits was removed from the logframe in 2022 whilst still pursuing the legislative framework for the Tahiry Honko carbon conservation project. Progress was made on this project in the final two years of programme delivery but was not fully operational within Defra’s funding lifetime. It is unclear whether carbon credit initiatives established under Blue Forests will mobilise the volumes of finance originally expected, but it will depend on overcoming various structural barriers in participating countries.

Demonstrating their commitment to knowledge sharing and learning, BV published a report in 2021 entitled “Identifying Mangrove Blue Carbon Barriers”², featuring Tahiry Honko as a case study. In 2022, BV established the Frontline Community Fund to provide funding directly to community implementors who are best positioned with the proximity, presence and long-term commitment within communities to drive scale with solutions that last. This remains a facility dependent on donor funding, yet is complemented by wraparound support, including technical training, peer learning networks and advocacy, provided by BV to remove barriers and build partner capacity for resilient, long-term independence. Following programme closure, Blue Ventures received \$62 million from MacKenzie Scott (philanthropist) in late 2025, a significant portion of which will support the Frontline Community Fund.

² <https://blueventures.org/publications/identifying-mangrove-blue-carbon-barriers-key-considerations-for-policy-makers/>

Recommendation: Marine ODA programmes should include proposals for alternative sustainable financing options in initial planning to avoid overdependence on any one particular model. Programme teams should recognise the nuances involved in developing carbon credits schemes, which involve significant timeframes required to generate carbon revenue for communities.

Recommendation: Programme teams should look to build on small, successful trials, as proof of concept is important for de-risking opportunities for investors. As demonstrated through BV's "Identifying Mangrove Blue Carbon Barriers" report, feeding learning back into the global evidence base will support other actors and policy makers to make informed decisions and adjustments to their blue finance programming.

3. Sexual Reproductive Health and Rights (SRHR)/community health activities

Learning: Improving community health and championing women's empowerment can support economic development and indirectly support conservation but navigating cultural norms and Sexual Reproductive Health and Rights (SRHR) complexities require sensitive, inclusive approaches. Benefits to conservation are harder to articulate than health outcomes.

Evidence: Pathway 5, community health and women's empowerment, was modelled on the principle that when women and girls have better health and autonomous reproductive decision-making, they may have more time and fewer barriers to receiving an education, earning sustainable livelihoods, and/or participating in conservation activities, therefore contributing to holistic community governance. Whilst recognised as meaningful, this workstream presented complexities relating to SRHR, including challenges surrounding social norms and cultural practices, as well as potentially heightened safeguarding risks. These challenges were reviewed through a BF GEDSI analysis, to ensure a voluntary, rights-based approach was upheld across SRHR interventions under the programme. A full assessment of BF's SRHR activities can be found in section F.

The benefits to people from BF work on SRHR are clear, enabling thousands of individuals to access community health sessions and/or sexual and reproductive health and rights services. The benefits to conservation remain more theoretical, with the primary outcome on health being centred on the programme communities' access to health services rather than how the services have enabled them to engage in conservation efforts. BV have published reports and articles to articulate these principles and their learning on health and conservation, including "Working Holistically"³ (2015), and are featured as an example in "New Partnerships, New Perspectives"⁴ (2019).

Recommendation: BV should consider a metric that connects uptake in health interventions with increased climate resilience for individuals and broader communities. Case studies with tangible outcomes will support the evidence base for SRHR interventions across other ICF programmes and strengthen their ToC with validated assumptions.

Recommendation: BF's SRHR activities also promoted deeper consideration from Defra about reconciling potentially heightened safeguarding risks associated with SRHR interventions with their prospective benefits for community empowerment and marine conservation. We recommend aligning risk appetites across all Defra ODA programmes delivering SRHR interventions and embedding this theme within existing GEDSI communities of practice, drawing on the experience and learning of delivering such interventions across HMG programming. These considerations and the evidence generated from this report should be used to review in which contexts and through which delivery expertise Defra should continue to fund SRHR activities.

4. Lessons from programme management

To support UK ODA/ICF programme teams to manage current and future programming, main lessons learnt from the management of Blue Forests are summarised below. These lessons span internal processes, collaboration, and exit planning. Section F explores these themes in further detail.

Learning: Strong programme management requires robust knowledge retention systems, adaptive logframes with ambitious targets, early integration of VfM metrics, and clear sustainability and exit strategies from the outset.

³ <https://blueventures.org/publications/working-holistically-phe-factsheet/>

⁴ <https://blueventures.org/publications/new-partnerships-new-perspectives-the-relevance-of-sexual-and-reproductive-health-and-rights-for-sustainable-development/>

- **Programme logframe and metrics**

Defra, BV and NIRAS worked well together to regularly review the ToC and the programme logframe, which were adjusted accordingly in response to learning and changes in context. BF performed strongly against most of its final impact, outcome and output logframe targets. This was a success of the programme, however, the extent to which some targets (e.g. impact indicator 1 – tonnes of CO₂ emissions prevent or removed) were exceeded, and the number of indicators which achieved their final targets in earlier years with a relatively narrow focus (e.g. output indicator 5.2 – number of sites where community resource monitoring protocol is in place) suggests that there was an opportunity to set more ambitious aims and capture more people-centric impacts from the programme. Although this risks final results falling short of targets, it would indicate a more genuine trajectory that reinforces programme relevance and progression. Section C highlights some gaps in disaggregated data and provides recommendations for addressing these to enhance GEDSI reporting.

- **Value for Money (VfM)**

Value for Money (VfM) for BF was appraised broadly relying on qualitative evidence against the '4 Es' – economy, efficiency, effectiveness, and equity. Analysis was conducted on the quantitative results for key outcomes and impact indicators but integrating VfM-specific criteria and indicators into the programme Monitoring, Evaluation and Learning (MEL) framework as early as possible would ensure the right data are collected to inform a more comprehensive assessment of performance. An example might be cofinancing leveraged through the UK's contribution or unit costs, for example by hectare or beneficiary. VfM and recommendations are appraised in section D.

- **Programme sustainability and exit planning**

The programme evaluation recognised the importance of defining exit strategies from the outset, noting that 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. Exit strategies were not articulated in the business case, in part due to the inclusion of new sites which were not expected to reach independence within the programme period. Some progress on future funding is evident, with local partners YMI in Indonesia and the Velondriake Association in Madagascar securing their own grant funding. These examples show promise in transitioning leadership to community-based organisations is possible, but uncertainties remain, particularly following delays to the carbon credit scheme. For future programming, dedicated management team resource should be allocated to sustainability and exit planning with the delivery partner to follow programme closure. Future programmes should clearly outline exit strategies, timelines, and pathways from initial engagement to community independence.

A full list of recommendations and subsequent follow-up actions from the most recent 2023 annual review are summarised in Annex A.

B: Theory of Change and Outcome Assessment

Summarise the programme's [theory of change](#) and results framework, including any changes to outcome and impact indicators

Theory of Change

The programme's Theory of Change evolved across the lifespan of the programme. The ToC was first developed in 2016 alongside the business case, and Defra and BV worked collaboratively to review and update it again in 2019. In 2021, the consultancy NIRAS were selected through competition as the programme evaluators and made a recommendation to review the ToC again as part of their evaluation inception report in 2022. NIRAS completed the ToC review and refresh in March 2025 ahead of the final programme evaluation report to ensure it accurately reflected BF's programme activities and learnings. Figure A shows the updated BF ToC.

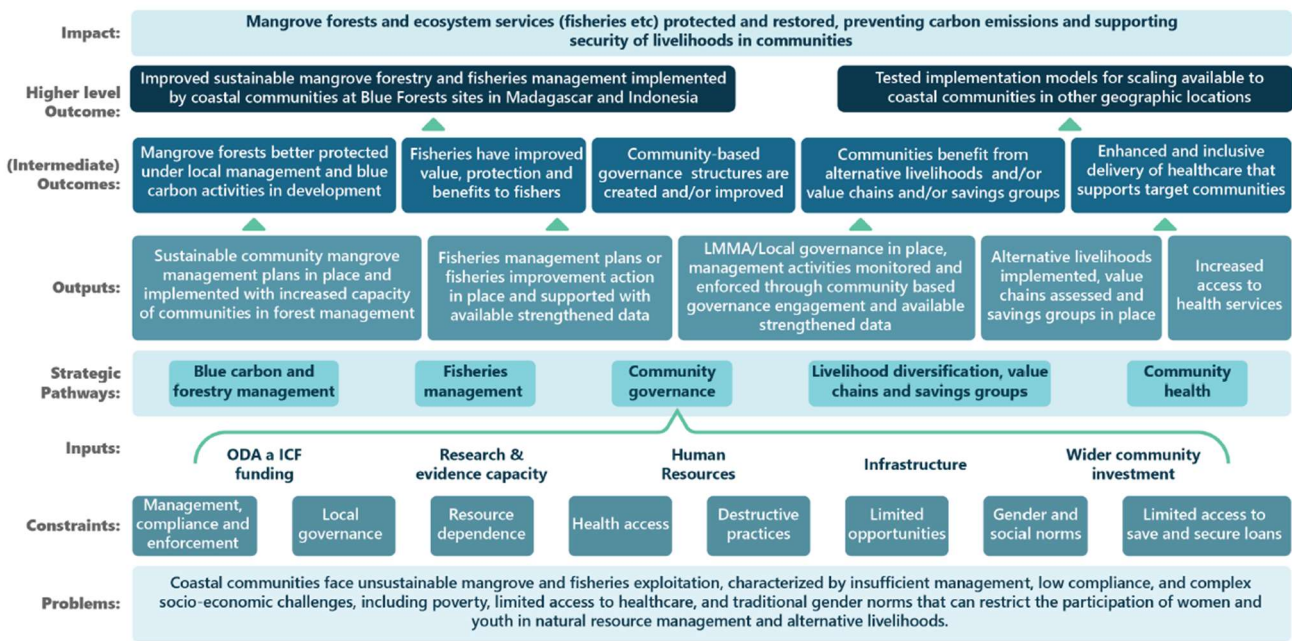


Figure A – Blue Forests’ Theory of Change

The ToC recognises 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 support livelihoods of the local communities. However, as the problem statement highlights, there are numerous complex barriers present at programme sites which serve as drivers for the programme’s activities and aims. For example, socio-economic pressures have caused unsustainable mangrove harvesting and fisheries exploitation, and poor access to health services can lead to inequality and frequent illness among community members, limiting their ability to work, and to engage with natural resource management efforts.

BF aims to use the five strategic pathways detailed in section A as avenues to address these issues through encouraging sustainable community-led management approaches, increasing economic opportunities and providing access to healthcare, with a strong focus on supporting women with family planning. SRHR interventions can play a transformative role in sustainable development, and the programme ToC and accompanying narrative observe how they can support the adaptive capacity and resilience of individuals and communities to climate change, including by enabling women’s climate leadership. Social barriers which can exclude the participation of women and youth are explicitly recognised in the ToC’s problem statement, and equity and inclusion are key aspects of the programme’s design. GEDSI considerations are embedded within primary outcomes for the programme’s delivery through its focus on inclusive livelihood diversification, community health and women’s empowerment. BF’s community led approach to delivery also helps to ensure that activities are appropriate and respond to the needs of beneficiaries.

Assumptions underlying the ToC were tested as part of the most recent NIRAS review undertaken prior to the final evaluation. Workshops held with the Indonesia and Madagascar implementation teams in December 2023 assessed whether programme activities and outputs remained feasible and realistic, and if all assumptions were holding true. Annex B contains the accompanying ToC narrative which houses the complete list of assumptions for the programme’s ToC. Section C sets out some of the challenges to these assumptions, and action taken in response.

Logframe

The programme’s logframe (see Annex C) has also undergone a consistent series of reviews and updates across the 8 years of programme delivery. An initial logframe was developed in 2017 during the programme’s first year, and this was reviewed by Defra and BV in 2019 where indicator targets primarily concerned with deforestation were reduced due to overly ambitious targets in the business case. In the following year, BV worked with Defra to review the logframe again, resulting in changes to targets for output 3 indicators. These changes reflected site-specific data and the impact of Covid-19 for alternative livelihoods activities. The 2022 BV logframe review was approved by Defra in summer 2023 and saw more substantial updates to better align with the ToC and NIRAS recommendations. This

included reclassifying indicators from impact to outcome levels and adding new health indicators to reflect differing community priorities in Madagascar and Indonesia, demonstrating adaptive programming.

Impact and outcome indicators were also adjusted following a shift in the programme to move from Sembilang to Inhil at site 4, and the carbon credit indicator was removed due to persistent sales barriers in both countries, an issue discussed further in section C. Another logframe review was completed in 2024 ahead of the final evaluation and used observations and learning from the alternative livelihoods activities to update targets and add new savings and loan group indicators under output 3. Regular logframe reviews and updates throughout the lifecycle allowed the programme to adapt to different changes and challenges across delivery, incorporate different lessons learned, and adjust targets accordingly.

The 2022 AR recommended that BV should consider how they could provide gender disaggregated data to enhance GEDSI reporting, whilst recognising that it was too late in the project lifecycle to overhaul how data was being recorded. BV were recommended to review what disaggregated data were already being recorded, identify gaps to inform future programming and share the available data for the remaining years of the programme. From the 2023 annual review onwards, gender disaggregation was provided separately to the logframe and added to the indicator results where available in annual review narratives, as can be seen in this PCR in sections B and C. Capturing other types of disaggregation, such as youth or disability, would have further strengthened the programme's GEDSI reporting, however, it is important to note that HMG ambition in this area continued to increase throughout delivery of BF. Table 1 below summarises programme logframe changes; see Annex D for a full, detailed breakdown.

Table 1 – Programme logframe changes by year

Year	Summary of Changes	Reason
2019	<ol style="list-style-type: none"> Alteration of targets for indicators relating to deforestation Reduction of targets for indicators measuring number of sites 	<ol style="list-style-type: none"> Updated data showed baseline deforestation rates at Indonesian sites was much lower than expected, reducing overall expected impact Programme chose to focus on 5 sites rather than 6 to enable greater investment in Indonesia and expand the footprint of the overall project
2020	<ol style="list-style-type: none"> Alteration of targets for alternative livelihoods indicators 	<ol style="list-style-type: none"> Covid-19 negatively affected some of the livelihoods activities within the programme
2023	<ol style="list-style-type: none"> Structure of logframe (impact indicators changed to outcomes) altered Names of health indicators amended Targets for deforestation related indicators increased Targets for livelihoods related indicators reduced 	<ol style="list-style-type: none"> NIRAS logframe evaluation suggested change in structure Health indicators amended to reflect localised contexts in country Site 4 changed to Inhil from Sembilang Reflects change in approach and strategy to livelihoods activities
2024	<ol style="list-style-type: none"> Targets for livelihoods indicators amended New indicators for savings and loans groups and value chains added 	<ol style="list-style-type: none"> Both changes further reflect adaptation in the approach to livelihoods and financial inclusion activities

Overall assessment of programme outcomes, impacts, sustainability and VfM

	Starting point	Final result
Budget	£10,145,972	£11,166,392
Timeframe	1 st January 2017 – 31 st December 2023	1 st January 2017 – 30 th September 2025 (programme delivery ended 31 st December 2024)

Impacts			
Impact Indicator (Units)	Starting Target	Final Logframe Target	Final Result Achieved
1) Tonnes of CO ₂ emissions prevented or removed	5,262,036 (February 2018)	1,805,263	5,039,928
2) Total number of hectares where deforestation has been avoided	4,000 (February 2018)	1,230	2,413

Impact Indicators

The programme surpassed both its impact indicator final targets. It has successfully prevented or removed over five million tonnes of CO₂ emissions, almost three times over final expectations, and avoided 2,413 hectares of mangrove deforestation, almost double the target. The margin of overperformance demonstrates excellent results, however, it also illustrates the challenges of setting realistic and achievable targets for indicators 7 years in advance and in areas prior to scoping activities. In hindsight, the final targets could have been more challenging if reductions were smaller. The starting target for both indicators received large reductions in 2019 due to reduced deforestation baselines in sites 4 and 5 and a reduction in expected restoration potential for site 5. Nevertheless, the programme has still performed strongly in these metrics and has been instrumental in protecting vast amounts of mangrove coverage.

These results reflect the successes arising from community-led governance and the sustainable management of mangrove areas within the sites. Through establishing sustainable community mangrove management plans and creating community-based monitoring and enforcement structures, mangrove forest areas were better protected and restored. Programme communities saw wide ranging benefits as a result of a larger, healthier mangrove ecosystem. Fish stocks in coastal areas increased, leading to improved food security and better income opportunities for fishers, and the mangroves offer more resilient coastal protection from storm surges or wave action. Mangrove ecosystems also act as highly effective carbon sinks. By protecting and cultivating more expansive mangrove coverage at the sites, larger amounts of CO₂ emissions are stored, helping to contribute to wider climate change resilience. A first-hand account of the impact and benefits of improved mangrove protection and restoration in Madagascar can be seen from programme beneficiaries in this [video](#) produced by BV in 2025.

Methodology

These indicators were reported as modelled figures in the 2023 annual review as they are calculated using area of mangrove cover. This is determined using community data collection and the Google Earth Engine Mangrove Mapping Methodology (GEM) tool. Verification of data, via forest change analysis, was completed in 2024 ahead of programme closure, with the previous verification process undertaken in 2020. Impact indicator 1 is calculated using the area of mangrove where deforestation has been avoided along with knowledge of how much carbon is stored per hectare of mangrove forest and how much of this is emitted as CO₂ when mangroves are lost (determined by fieldwork and published literature), as well as volume of carbon stored by growing reforested areas. For impact indicator 2, the difference between the current area of mangrove (measured through community data and GEM) and what would have been the area of mangroves left without the programme (determined by the historical deforestation rate) is calculated.

BV noted that programme funding has played a crucial role in unlocking community access to the GEM methodology. GEM is a simplified and accessible alternative to conventional remote sensing techniques that often require costly resources and technical expertise. The tool was made freely available online for non-profit use and has since been evolved into a mobile app. It enables non-specialist coastal managers and communities to map mangroves globally and support local conservation efforts. In 2023, BV hosted a global exchange in Ambanja (site 1), where they fostered peer to peer learning and training in mangrove monitoring and using the GEM methodology. This initiative contributed to measuring data for impact indicator 2, and with continued development, BV intend to use GEM to empower communities further to track additional environmental changes independently over time.

Outcomes			
Outcome Indicator (Units)	Starting Target	Final Logframe Target	Final Result Achieved
1.1 Hectares of mangrove forest area protected or under sustainable local management (ha)	89,100 (February 2018)	74,395	75,727
1.2 Ecosystem services: Difference in mangrove forest ecosystem services income (shoreline protections; pollution abatement; protection from sedimentation) provided by standing mangroves compared to without project scenario (\$/yr)	1,061,901 (February 2018)	848,122	1,581,803

1.3 Number of sites implicated in Fisheries Management including but not limited to Fisheries Improvement Projects (registered or action plans being implemented)	6 (February 2018)	5	5
1.4 Number of forest dependent people (ASSUMPTION: all people we work with are forest dependent) with livelihoods benefits (INCOME GENERATION AND FOOD SECURITY) protected or improved	91,659 (February 2018)	69,380	77,302
1.5a % of active producers making agreed model profit from alternative activity	60 (February 2018)	33	65
1.5b Average savings per group member in monitored groups (\$)	N/A (indicator added to logframe in 2024 review)	72	41
1.6 % of health service delivery points that provide support and/or referral appropriate to meet the needs of Blue Forests programme communities	N/A (indicator added to logframe in 2023 review)	77	75
2.1 Extent to which ICF intervention is likely to have a transformational impact: Number of additional sites adopting models tested and proved within this project (outside of 5 sites)	29 (February 2018)	99	167

Outcomes

Overall, performance across outcome indicators was also strong. Of the 8 indicators, 5 surpassed final targets, 1 met its target and 2 fell short of expectation. Achievements and challenges associated with each individual indicator are summarised below:

Outcome indicator 1.1 – Hectares of mangrove forest area protected or under sustainable local management (ha):

The programme surpassed the final target for outcome indicator 1.1. This indicator saw an increase in protected area year by year up to 2023, however, the final result for the programme is slightly lower than the previous year. The decrease is due to changes in site 5, where Dabong village took a different approach to managing their mangrove area and is receiving reduced support from the programme. For this reason, BV chose to remove their mangrove forest area from the data for 2024, resulting in a lower overall figure than the previous year. Whilst this negatively affects data for the indicator, it demonstrates that the community are taking more autonomous ownership of their management methods and that BV are happy to respect their decision. Sites 1 and 3 saw an increase in protected area in 2024, and sites 2 and 4 remained the same.

The indicator set a baseline of 250ha of mangrove forest area protected or under sustainable local management in the first year of delivery, and a final result of 75,727ha demonstrates the positive impact that the programme has had through this intervention. Similarly to the impact indicators, results for this outcome were delivered by successful community-led management of mangrove areas which provide multi-faceted benefits and contribute towards mitigating climate change in the coastal communities.

Outcome indicator 1.2 - Ecosystem services: Difference in mangrove forest ecosystem services income (shoreline protections; pollution abatement; protection from sedimentation) provided by standing mangroves compared to without project scenario (\$/yr):

In a similar trend to both impact indicators, the final result overperformed its revised final target by almost twofold. Data in this indicator looks at the social, economic and cultural benefits provided by the mangrove forest ecosystem for communities and demonstrates a \$1.58 million increase per year in mangrove forest ecosystem services income. Similarly to impact indicators 1 and 2, data for outcome indicator 1.2 was verified in 2024 prior to programme closure.

Outcome indicator 1.3 – Number of sites implicated in Fisheries Management including but not limited to Fisheries Improvement Projects (registered or action plans being implemented): The final target for output indicator 1.3 was met in 2023 when all five sites adopted fisheries management approaches. Progress under this indicator was influenced by site maturity. Sites 1 and 2 were the first to implement fisheries management as the most established and were followed by both Indonesia sites and finally site 3. Sites are ‘implicated in fisheries management’ once they start implementing some kind of fisheries management approach. They may implement temporary closures, have a full management plan approved at government level, or have a Fisheries Improvement Project in place. Sustainable fisheries management improves food security in communities and provides fishers with better economic rewards for their work.

Outcome indicator 1.4 – Number of forest dependent people (ASSUMPTION: all people we work with are forest dependent) with livelihoods benefits (INCOME GENERATION AND FOOD SECURITY) protected or improved: Outcome indicator 1.4 also exceeded its final target and performed strongly. The final target was initially reduced in 2019 to reflect the decision not to expand the programme into a sixth site, and it was adjusted again in 2023 to align with the change to Inhil at site 4. Data for the indicator includes the total population of the villages where the programme works. People are included in the figures under this indicator even if their livelihood does not directly depend on fishing or mangroves as it’s assumed that all village inhabitants are dependent on mangrove forests to some extent. Although validation of this assumption underpinning the indicator may help to show how total populations benefit due to their proximity to mangrove forests, the programme has still recorded excellent progress in this area. Additionally, gender disaggregation is unavailable due to the method that the data is recorded. The absence of this for one of the key poverty related metrics reduces the programme’s ability to demonstrate GEDSI impacts. Nevertheless, over 77,000 people were recorded as benefitting from improved or protected income generation and food security as a result of the programme’s interventions, illustrating the programme’s strong contributions to poverty reduction within communities.

Outcome indicator 1.5a – % of active producers making agreed model profit from alternative activity (\$): Outcome indicator 1.5a saw an improvement in the final year of delivery, increasing from 16% to 65%. This represents a large increase in the number of beneficiaries who were able to make the agreed profit levels from their alternative livelihood activities. Many different alternative livelihoods activities were introduced during the programme, with examples ranging from beekeeping to meal catering. The total percentage given for the overall result is calculated as the mean average percentage across all sites. Site 1 recorded 100%, and site 4 demonstrated high income, with 138 people (98 women and 40 men) making the agreed profit from a total of 208 people (66%) engaged in alternative livelihoods. Variations in success were linked to specific challenges with some of the livelihoods activities, such as tropical cyclone damage and theft. These issues prompted the programme to expand its financial inclusion efforts through savings groups and value chain development to strengthen community resilience and income generation, an area discussed further in section C.

As a result of this, **outcome indicator 1.5b – Average savings per group member in monitored groups (\$)** – was added to the logframe in 2024 and focuses on financial inclusion activities. This indicator is the mean average and divides the total cumulative savings in dollars by the total group members. The final target for the indicator was based on results from 2023, the first year where these activities were monitored in line with BV’s expansion in approach. Final results fell short of the target by just over 40%; figures were not available for Inhil (site 4) since it joined the programme at a later date and savings and loans groups are yet to be established there. Although this result appears disappointing, the monetary amounts used to calculate this indicator are a snapshot of how much is saved at the particular time the groups are monitored and therefore do not fully reflect the financial situation in communities. In 2023, savings figures were higher because data was collected near to the time of savings share-outs, while in 2024, data was gathered at a different time due to changes in partner collaboration, resulting in a lower reported figure. Results in sites 2, 3 and 5 were closer to expected targets and show positive signs that the savings groups are working effectively. Applying a consistent method to collect the data for this indicator could have helped to provide a clearer picture and trajectory of the benefits of savings groups per individual.

Outcome indicator 1.6 – % of health service delivery points that provide support and/or referral appropriate to meet the needs of Blue Forests programme communities: Outcome indicator 1.6 narrowly missed its final target. As noted above, the indicator was adopted in the logframe as part of the wider 2023 updates to monitor health activities of the programme. Results under the indicator are also calculated as a mean average across all sites. Improvements in final results for sites 2 and 4 were negated by poorer performance in sites 1 and 3. BV noted that

this was due to a new government survey introduced in July 2024 in Madagascar which changed how community health workers were evaluated and now considered different factors out of the health workers' control, leading to lower performance ratings in site 3 in particular. Going forwards, the Ministry in Madagascar is adapting the survey to remove factors outside of health workers' control, which should lead to a return to more positive results. By considering the needs of communities in Madagascar and Indonesia, the programme successfully adapted to meet specific health priorities in both countries. For example, in Madagascar, the programme focused on improving women's healthcare, especially family planning, which ultimately helped reduce barriers to participation and promoted gender equality in community management.

Outcome 2.1 - Extent to which ICF intervention is likely to have a transformational impact: Number of additional sites adopting models tested and proved within this project (outside of 5 sites): The programme surpassed its final target for Outcome Indicator 2.1, adding 20 new sites since the previous reporting period in 2023. The final result of 167 sites compares to a baseline of 6, set in the first year of delivery. Progress is largely driven by the growing number of sites in Madagascar and Indonesia implementing fishery closures. A larger final result was tempered by the slower uptake of alternative livelihood initiatives and difficulties with the carbon credit scheme, with specific challenges outlined in more detail in section C.

Results show that the programme has helped to foster transformational change by empowering communities to manage and sustainably use the coastal resources available to them for economic, social and health benefits. For example, community leaders from the Barren Isles, mid-west Madagascar, visited Velondriake's (site 2) no-take zones (NTZs) in 2024 to hear why the communities put management measures in place and observe the impacts. Velondriake's example and sharing of experience led to deep engagement and interest from the Barren Isles communities, who subsequently put eight new NTZs in place covering 26.8 ha across the islands. Velondriake leaders and BV's ecological science team provided guidance on where and how to set them up and supported their monitoring of the established zones. As such, the impact experienced and shared by Velondriake communities became a catalyst for the adoption of similar locally led management measures throughout Madagascar and the Velondriake Association became a mentor and pioneer in community-led fisheries management.

As part of the programme's summative evaluation, NIRAS assessed the programme's contribution to Transformational Change (ICF KPI 15). The assessment looked at six different criteria and assigned a score between 1-5 for each area, with 5 being the highest mark. Results are summarised below:

Transformational Change Criteria	Score
Political will and 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

Criteria were equally weighted and used to calculate an overall average score of 4 out of 5. BF scored particularly highly for the increased capacity and capability of communities to bring about change, and political will and local ownership. This is a further reflection of the strong community buy-in and engagement with the programme and highlights the broader impact of the programme's approach to put local stewardship first.

Programme Sustainability

BF scored a 3 for sustainability in the transformational change assessment, the lowest across the six criteria. Beyond Defra funding, questions remain on the sustainability of some programme activities and pathways. The evaluation concluded that sustainability across the strategic pathways is only clearly assured for community governance across the sites. Sustainability of other pathways is questioned in part due to an absence of exit strategies to support long-term continuation of other activities. Sustainability of the programme in Indonesia is generally weaker than in Madagascar, but there are variations across pathways in both countries. For instance, in Inhil (site 4), despite successful mangrove reforestation efforts, community members indicated that they would not continue with these activities without external support. However, in Kubu Raya (site 5), the health pathway is more robust, with trained health workers and ongoing patient visits expected to continue independently. Activity in Madagascar showed

stronger overall sustainability, though some activities such as patrolling and enforcement remain vulnerable due to reliance on external payments, which communities fear may cease.

The lack of an agreed exit strategy was highlighted in the programme evaluation, which noted a need for a clearer plan on financial sustainability post-Defra funding to avoid programme activities ceasing due to resource and capacity constraints. There has been evidence of positive progress on co-financing, with partner organisation YMI receiving a separate OCEAN⁵ grant of £243,216 in 2024 and the Velondriake Association community group securing a \$108,000 Global Environment Facility (GEF) grant. BV have successfully secured a further £593,193.94 in COAST⁶ funding to run from November 2025 through to 2027. This recent funding award is intended to enable Locally Managed Marine Areas (LMMAs) to independently manage marine conservation and fisheries through capacity building, systems development, and inclusive governance. The award of the COAST funding comes as a result of a recommendation from the British Embassy in Madagascar to follow up on the BF programme and continue to provide long-term investment to achieve transformational change. Whilst the Defra programme team discussed plans for the sites after programme closure in the final Steering Group Meetings and have been open to supporting BV applications for additional funding, sustainability is an area that could have been better integrated into programme design.

Recommendation: Defra and its delivery partners should clearly define exit strategies early in programme design to establish sustainability plans beyond Defra funding.

Following programme closure in November 2025, the BV team received a \$62M gift from philanthropist Mackenzie Scott. Of this, they acknowledged that \$25M will immediately expand the Frontline Community Fund, supporting locally-led efforts to strengthen fisheries management, marine conservation, food security, and economic resilience. Whilst the full plans for this funding boost are not known to Defra, this provides added confidence to the team that BV will be able to continue to provide long-term support to the communities who have previously benefitted through UK funding in BF.

C: Detailed Output Assessment

The narrative under each output is structured to give a short description of output activities and aims, summarise indicator performance and then outline brief achievements and progress in this area at one of the five sites. Case studies are integrated into this section to help demonstrate context and results, and relevant lessons learned and recommendations complete each section.

Output Number and Title	Output 1: Sustainable community owned mangrove forestry management plans in place		
Output Score	A		
Impact weighting (%)	30%	Impact weighting revised since last AR?	No
Output Indicator	Starting Target	Final Logframe Target	Final Result Achieved
1.1 Number of sites with community-led mangrove management plans	6 (February 2018)	5	5
1.2 Number of sites with an estimated carbon baseline scenario	5 (February 2018)	5	5

Briefly describe the output's activities and achievements during its lifetime, and provide supporting narrative for the score

Output indicators 1.1 (sites with community-led mangrove management plans) and 1.2 (sites with carbon baseline scenarios) met expectations and achieved their final targets, **scoring an A overall for output 1.**

⁵ The OCEAN Grants Programme is part of the Blue Planet Fund and operates as a grants scheme, supporting local coastal communities to deliver marine protection and reduce poverty worldwide.

⁶ The Climate and Ocean Adaptation and Sustainable Transition (COAST) programme is part of the Blue Planet Fund and provides grants and technical assistance to vulnerable coastal communities.

Output indicator 1.1 measures the number of sites which have established mangrove management plans led by communities. Community management plays a critical role in preventing further damage to the mangrove ecosystems through inclusively engaging community members in protection and restoration activities. Carbon baseline scenarios, measured by output indicator 1.2, assess the level of greenhouse gas emissions that would have occurred without the project's intervention. They serve as a reference point to demonstrate that the emission reductions achieved and measured in impact indicator 1.1 are real, additional, and represent genuine climate benefits beyond what would have happened otherwise.

Results show that every site of delivery was able to agree community-led management plans and establish estimated carbon baseline scenarios within the delivery timeframe. Whilst output indicator 1.2 reached its target in the final year of delivery following an assessment in site 4, output 1.1 had already met its target in 2021. Since then, annual mangrove management plans have continued to be followed across every site. A summary of key achievements under this output is broken down by site in Annex E. The example below details the progress made across the programme's lifetime under this output specifically at site 2, in Velondriake.

The development of community owned mangrove forestry management plans in Site 2 – Velondriake

In 2017, Velondriake was the first site to develop its carbon baseline, which estimated annual emission reductions of 1,300 tCO₂. In the same year, the Velondriake Association developed a local mangrove management plan and began the development of a legislative framework for Tahiry Honko - meaning "preserving mangroves" - the world's largest community-led mangrove carbon conservation project. Community involvement, especially the inclusion and representation of women, was central to the project's design, with an emphasis on women's participation and decision-making in resource management meetings.

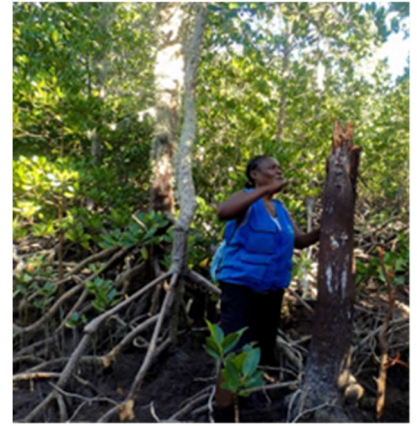
In 2019, Tahiry Honko was formally validated under the Plan Vivo carbon standard. The project gained international recognition when it was chosen as the winner of the IUCN Pathfinder Award at COP26 in 2021. Progress towards the sale of carbon credits was made in 2023 with validation from Madagascar's Ministry of Environment, followed by a draft Emission Reduction Purchase Agreement (ERPA) review in 2024. Following the completion of the final ERPA requirement (due after programme closure in 2025), the Velondriake Association will receive approval to sell carbon credits at a value of \$10 per tonne. From the first five years of the project (2018-2022), 6,855 tonnes of carbon credits have been verified, which will generate an estimated \$68,550 in revenue. This will be managed by the Velondriake Association and distributed between ten villages in line with the agreed usage plan. The revenue received in each village will fund activities such as mangrove management, community infrastructure development, and educational support. Allocation of the funds will be determined annually through consultations with local and national level stakeholders. None of the revenue generated is distributed at the household level, rather it is focused on sustainable financing to support local communities and fund future conservation activities in the area.

Reforestation within the managed areas also progressed during the programme and successfully engaged a diverse range of participants. The case study below details how the programme supported more gender inclusive participation at this site:

Case study - Community participation in the Tahiry Honko mangrove conservation project

In order to achieve good community participation in Tahiry Honko, BV learned that creating a comfortable space for women in group discussions with men is vital to promote their participation in decision making. Overall, the average participation of women in 200 village meetings reached 50%. The highest recorded participation of women was 76% in 2019, during the consultation with parents about school subsidies.

Despite the traditional attitudes and stereotypes harmful to conservation, such as the belief that women are incapable of participating together with men in decision-making regarding natural resources management, BV meeting records show that women and men were proportionately represented in village meetings, including decision making. This is in line with the results of a gender analysis in the same region (i.e. Southwest Madagascar) where many women were present in meetings organised by NGOs and people from outside the communities⁷. Social marketing initiatives promoting the participation of women in the Velondriake LMMA resulted in an increase of female representation on the Velondriake board.⁸ BV found that the approach used to promote women's participation, such as splitting men and women in separate groups when developing the Dina governing mangrove use, and anonymous voting to decide on the project, helped women to voice their opinion and to overcome their lack of confidence to speak in front of men.



Although mangrove replanting is often considered as a woman's duty (as a local social norm), women have demonstrated their strong leadership and successfully promoted male participation in this activity. Male participation was 21% in 2015 and increased to 40% in 2020.

Overall, encouraging inclusive participation for community members to contribute to mangrove protection and restoration efforts have supported longer term alternative livelihoods and sustainable financing opportunities, as well as improving the surrounding mangrove ecosystem.

Lessons learned through this output, and recommendations for future programming

Lesson learned: Early logframes for the programme included an output indicator 1.3 named “Number of carbon credits produced (with a minimum of 50% revenue shared with community)” as a method of monitoring this activity.

A core objective of the programme's original business case and a significant element of BF's early design centred around the generation and sale of accredited carbon credits. The programme planned to recognise the value of carbon saved by avoiding mangrove deforestation using tradable certificates which could be purchased by organisations and individuals wishing to offset their carbon emissions. In the original business case, £10m in funding was expected to generate £52m in carbon credit sales over 20 years. Proceeds of the sales could then be reinvested in communities for development projects and fund ongoing project costs to significantly contribute to programme sustainability.

Establishing such schemes is a timely process, and BV recognised that it was a challenge to maintain community engagement on the carbon credits when beneficiaries require interventions which can provide more immediate economic returns. When it became clear that the sale of credits was going to be difficult to achieve during Defra's funding period in both countries, the relevant output was removed from the logframe in 2022. Where progress has been made in this area of the programme, such as in the Tahiry Honko project described above, communities are still waiting to receive carbon credit revenue over 7 years since beginning the initiative. As noted, this is set to generate approximately \$68,550. This is a significant sum of money for the community in isolation, however, the length of time taken and the complications faced to generate this revenue raises questions over the reliability of carbon credits income streams. Although \$68,550 is a small portion of the anticipated £52 million expected in income from the sale of carbon credits, the business case noted that the majority of the carbon income will be generated after year 9 of the programme. Carbon income was projected to generate £66,000 in year 8, making this figure a more meaningful comparison to current estimates. BV continue to pursue the establishment and sale of carbon credits, and a relaxation on the Indonesia moratorium on carbon credit issuances in 2025 offers promise for future schemes in programme sites, but the associated challenges should not be underestimated.

Recommendation: When conceptualising a programme which incorporates interventions which are heavily dependent on externalities sitting outside of HMG or delivery partner control, programmes should extensively engage

⁷ Hill Rojas, Mary, Jon Dain and Constance Campbell. 2001. Community Conservation and Protected Area Management with a Gender Perspective: A Synthesis. A Woman in Development Technical Assistance Project (WIDTECH). Information Bulletin, August

⁸ Razafiarimanana H., and Ramanan Johnny V.; 2021. Gender Analysis Report, MAHARO Project, Catholic Relief Services

with host governments to test proposed approaches and obtain buy-in and agreement prior to committing to programme design.

Recommendation: Due to external complications and the extended period of time required to establish carbon credits schemes, programmes should aim to incorporate alternative sources of sustainable financing to avoid overreliance on these schemes.

Output Number and Title	Output 2: Mangrove fisheries improvement projects in place		
Output Score	A		
Impact weighting (%)	25%	Impact weighting revised since last AR?	No
Output Indicator	Starting Target	Final Logframe Target	Final Result Achieved
2.1 Number of fisheries being monitored	9 (February 2018)	10	12
2.2 Number of sites trialling/piloting locally relevant fisheries management (e.g. periodic closures, gear restrictions)	6 (February 2018)	5	5
2.3 Number of local fisheries management plans developed (e.g. Agreed harvest rules concerning a fishery or wider management contracts)	6 (February 2018)	5	6

Briefly describe the output's activities and achievements during its lifetime, and provide supporting narrative for the score

Output indicators 2.1 (monitored fisheries) and 2.3 (local fisheries management plans developed) slightly exceeded final expectations and output indicator 2.2 (sites trialling fisheries management) met the final target, **giving output 2 an overall A rating**.

Indicators under this output measure which sites successfully trialled sustainable fishing methods and implemented fisheries management plans. Through these activities, local communities can benefit from increased economic rewards and improved food security, whilst also helping to protect ocean biodiversity from overfishing.

The final target for output indicator 2.1 was achieved in 2022 and another 2 fisheries were monitored from 2023 onwards. A baseline of 5 fisheries was set for this indicator in 2017, and the final result of 12 shows consistent progress under this activity. In the final year of delivery, site 3 implemented new NTZs and developed its own fisheries management plan to increase results for output indicators 2.2 and 2.3. Fisheries improvements and management plans developed earlier in the programme continued to deliver positive outcomes and results through 2024. A summary of key achievements under this output is broken down by site in Annex E. The example below details the progress made across the programme's lifetime under this output at Site 1, in Ambanja.

The development of mangrove fisheries improvement projects in Site 1 – Ambanja

Between 2017 and 2024, a community-led fisheries monitoring and management initiative evolved across nine villages in Ambanja. Fisheries improvement activities began in 2017 with 14 local data collectors trained to record monthly data on crab, sea cucumber, and finfish. The first year of the programme also focused on preparing a fisheries management plan that would integrate best practices, reserve zones, and governance into local laws (Dina) at the village level. By 2019, the management plan was validated by 36 communities, and four priority management measures were ratified by the area's Federation of Associations. Five permanent reserves were established by 2019 and prohibited all forms of fishing and mangrove harvesting with four additional crab reserves added under the

management plan in 2020 and 2021, bringing the total to nine. Monitoring expanded in 2023 to include shrimp, and the number of data collectors grew to 44, including 17 women (39%). That same year, a new management plan was developed covering 13,022ha of ocean, including 2,849ha of seagrass and 15ha of coral reef, and a new 14ha crab NTZ was also created. Through the development and implementation of inclusive mangrove fisheries improvement projects, the programme has successfully increased fish stocks at the site, demonstrated through post-closure harvests of 18 and 20 tonnes of mackerel in the final two consecutive years of the programme. This has led to better food security and expanded economic opportunities for fishers within local coastal communities. The case study below demonstrates how women were empowered to contribute to this area of the programme:

Case study – Female data collectors

Female data collectors working in Madagascar and Indonesia play a leading role in community-based fisheries management through landings monitoring. BV empowers women by training them to monitor fisheries catches and communicate information back to their communities in an understandable form. In 2023 alone, 58 women gleaners in Velondriake (site 2) were trained in fisheries management, catch per unit effort, fish biology, and sustainable fishing methods. Monitoring results are shared amongst the whole community, including women and children, and at the same site in 2023, 50% male and 50% female fishers engaged in educational sessions delivered on marine biology and the benefits of No Take Zones. Data training is part of a broader set of apparatus in BV’s Gender Toolbox. Blue Ventures’ approach to tackle gender inequality goes further to provide women with tailored training in leadership skills, public speaking, participatory fisheries management and the technical skills underpinning programme activities.

Benefits for female data collectors include:

- *Diversified or additional income, especially during times such as cyclone seasons when fishing is not possible*
- *Education/knowledge on fisheries management*
- *Training opportunities (e.g. on data collection, snorkelling)*
- *Being informed and part of management decision making*

This approach put data and insights in the hands of women in Velondriake, opening the way for them to participate actively in fisheries and mangrove management discussions.



Output Number and Title	Output 3: Implementation of improved livelihood mechanisms		
Output Score	A		
Impact weighting (%)	25%	Impact weighting revised since last AR?	No
Output Indicator	Starting Target	Final Logframe Target	Final Result Achieved
3.1a Number of people engaged in alternative livelihoods	5,235 (February 2018)	744	910 Male: 362 Female: 540 (59%) Unknown: 8

3.1b Number of people engaged in monitored savings and loans groups (VSLA)	N/A (added to logframe as part of 2024 review)	3,378	3,171 Male: 1,140 Female: 2,031 (64%)
3.2a Total income generated (\$)	1,319,094 (February 2018)	45,710	83,920
3.2b Total cumulative savings in monitored groups (\$)	N/A (added to logframe as part of 2024 review)	252,219	125,320
3.3a Number of new alternative livelihoods developed by site (cumulative)	9 (February 2018)	17	20
3.3b(i) Number of savings and loans groups (VSLA) established (cumulative)	N/A (added to logframe as part of 2024 review)	160	160
3.3b(ii) Number of monitored savings and loans groups (VSLA)	N/A (added to logframe as part of 2024 review)	113	105
3.3c(i) Number of new approaches to value chain improvement implemented/piloted (cumulative)	N/A (added to logframe as part of 2024 review)	9	11
3.3c(ii) Number of value chain assessments completed (cumulative)	N/A (added to logframe as part of 2024 review)	18	19

Briefly describe the output's activities and achievements during its lifetime, and provide supporting narrative for the score

Indicators under output 3 focus on the programme's interventions which aim to directly address poverty within the communities. Alternative livelihoods comprise a wide range of economic activities, such as beekeeping or home gardening, and they are complemented by value chain improvements, which seek to analyse activities to increase the value of livelihoods products. Village savings and loans associations (VSLAs) were a later addition to the programme as described in section B and are community-based groups where members regularly contribute into a communal fund, from which they can take out loans for personal or business needs.

Five of the indicators for output 3 moderately exceeded expectations, and results for output indicator 3.2a (total income generated) surpassed the final target by approximately 84%. Output indicators 3.1b (people engaged in VSLA) and 3.3b(ii) (number of VSLAs) narrowly missed targets, while output indicator 3.2b (total cumulative savings) was around half its target. Results for output 3.2b are affected by the same issue as outcome indicator 1.5b (average savings per group member), in that the figures collected are the savings held in the groups at the time of monitoring, rather than the total amount saved throughout the year. Adjusting the data collection methods for this indicator to focus on cumulative income throughout the year would have helped to provide a clearer picture of amounts saved across the communities. Output indicator 3.1a (number of people in alternative livelihoods) set a baseline of 336 people in 2017, and the final result of 910 exceeded the final target and shows how the programme has expanded alternative livelihoods opportunities across its lifetime. Conversely, it is important to note that this final target was reduced in three different logframe reviews. In 2020, the final target for output indicator 3.1a was lowered from 5,235 to 1,875 people as a result of site-specific data that highlighted challenges in replicating seaweed and sea cucumber aquaculture at other sites, as well as a decision to cancel the sea cucumber hatchery at site 1. The target was further reduced to 1,223 in 2023 and then down to 744 in 2024 due to severe difficulties in sea cucumber and seaweed farming in Madagascar and delays in establishing alternative livelihoods in less mature sites in Indonesia. Output indicator 3.2a (total income generated) followed a similar trend. Its target was also revised downward during the same three logframe reviews, reflecting the reduced expectations for the number of livelihoods supported by the programme. Consequently, the original final target of \$1,319,094 in income generated was reduced to \$45,710 by

programme closure. When compared to the original targets of 5,235 people engaged in alternative livelihoods, and \$1,319,094 in income generated, the final results for output indicators 3.1a and 3.2a raise questions about the overall success of these activities, despite exceeding their adjusted logframe targets. Although adaptive programme management and the application of lessons learned enabled this output to largely achieve its aims, overall, this area did not perform as originally planned. Persistent challenges in both the design and delivery of output 3 activities remained and are explored further in the lessons learned section below. The variance in indicator performance reflects these challenges and the adjustments made across output 3. While some indicators underachieved, strong performance in other areas helped balance the overall results. Despite reduced targets diminishing the final achievements, **output 3 scores an overall A rating.**

Under output indicators 3.1a and 3.1b, the programme showed positive results for inclusion. Women made up 59% of the people engaged in alternative livelihoods, and 64% of those engaged in monitored savings and loans groups. Along with health activities, the livelihoods and financial inclusion interventions proved to be an essential pathway for the programme to address equity challenges and increase the resilience of the most marginalised communities. Alternative livelihoods enable women to feel more autonomous, whilst communities can diversify their income streams, which is particularly important during unpredictable market changes, for example during COVID-19. Increased and diversified income enables greater sustenance and resilience of fisher communities, particularly for women and youth. Examples from the programme have shown that the women involved in alternative livelihoods are often proud of contributing to the family income, especially since they may face challenges where fishing is the main livelihood. For example, in Madagascar, negative stigma associated with female diving restricts their participation to traditional gleaning methods when undertaking octopus fishing.

The livelihoods work helped to challenge these inclusion issues and gender perceptions, for example, through female farmers providing security for sea cucumber farms during the day, followed by the men during the night. Women's visibility and the value and recognition of diverse women's roles in fisheries value chains is another key area in which this was achieved. BV acknowledged the vital role of women in gleaning, post-harvest handling and trading. To support women's livelihoods, even if they are not directly involved in fishing, women have been more broadly included in business training and activities on value chain improvements and financial inclusion. BF has shown some success in empowering women in these aspects, as demonstrated through the case study below:

Case Study – Women-led Entrepreneurship in Kubu Raya (Site 5)

From a home kitchen in West Kalimantan to regional markets; Ayu Veronika's amplang fish cracker business is transforming her coastal community in Medan Mas village.

Her entrepreneurial efforts are a blueprint for sustainable coastal development. What started as a simple home-based operation has grown into "Amplang Ayu," now processing over a tonne of orders per season.

Through the Blue Forests project, supported by the Blue Action Fund and implemented with Blue Forests (Yayasan Hutan Biru), Ayu received training in business development, sustainable sourcing, and eco-friendly packaging.

The results speak for themselves: local fishers now have reliable buyers for their catch, women in the village have gained employment, and the business operates with a commitment to protecting the mangrove ecosystems that sustain it all.

Ayu's vision extends beyond her own success: "If this business continues to grow, I also want to empower more local residents so that they can also benefit."



A summary of key achievements under this output is broken down by site in Annex E. The example below details the progress made across the programme's lifetime under this output at Site 4, in Inhil.

Improving livelihoods and financial inclusion in communities in Site 4 – Inhil

Early efforts to expand alternative livelihoods opportunities at the site focused on training community groups to produce Non-Timber Forest Products (NTFP) such as mangrove tea, nipah palm sugar, and a wide range of coconut coir-based items including brooches, mats, and sandals. Coconut coir producers received equipment training, and village governments pledged support by committing to purchase production machinery. Women in the communities received training in eco-printing, and social forestry groups in two villages built drying houses for nipah stick production. A market survey conducted in three regional cities helped identify potential buyers for these products, and delivery partner YMI's strong community ties and understanding of local business needs and opportunities also helped benefit livelihoods development. By 2024, 208 community members (153 women and 55 men) were actively engaged in four livelihood streams: coconut coir, eco-printing, home gardening, and nipah stick production. Income from these activities grew significantly, from an initial total of \$91 in 2023 increasing to \$4,979 in 2024. Additionally, a value chain assessment of the mud crab supply chain revealed strong commercial potential, and fish-based products from two villages were showcased at a regional Business Meeting Forum in Tembilahan to connect local enterprises with potential partners. By diversifying livelihoods opportunities and strengthening product value chains at the site, the programme has provided new sources of income for the communities which also encourage environmentally sustainable practices as alternatives to harmful economic activities such as overfishing.

Lessons learned through this output, and recommendations for future programming

Output 3 logframe indicators underwent several amendments as part of the 2024 logframe review (outlined in section B), following a 2023 AR recommendation for BF to adapt to challenges that the alternative livelihoods interventions faced. For example, in site 2, there was significant damage to the sea cucumber hatchery following Cyclone Freddy in 2023, resulting in a lack of sea cucumber juveniles for the community to farm. In addition, boats belonging to private sector companies who purchase the products were damaged, meaning the community had no market to sell to for several months. Communities also faced the private sector buyers providing variable and unfair prices for products due to the limited routes to market, and staffing issues in the private companies along with a lack of communication further complicated the situation, ultimately leading to the farmers losing trust in the private organisation's ability to support the farm. Later in 2023, two separate incidents of sea cucumber theft occurred and led to the temporary suspension of cucumber farms for one year. BV introduced mitigation efforts and increased support and communication between the communities and private sector, but the breakdown of trust due to previous events are anticipated to be long-lasting in this area.

In Indonesia, establishing alternative livelihoods methods proved more time consuming than initially anticipated, and many of the community business groups remain in early stages of business development, which resulted in delays to original targets. Although the \$4,979 in income raised from the activities in the example above is relatively limited, the results demonstrate new opportunities for improving the economic conditions of community members and their households. These new livelihoods have also contributed to enhancing women's economic participation by providing opportunities to earn independently where they previously had no source of income. Some of the livelihoods, such as eco-printing and coconut coir, show potential to continue to generate increased income for communities provided that they continue beyond programme closure. The programme evaluation found that at the Inhil site (site 4), few activities have reached a stage where they can be maintained independently, and community dependence on programme support remains high, which is to be somewhat expected as Inhil is the youngest programme site. New sites included in the business case were not expected to reach independence within the programme period, as building leadership in new community-based organisations requires longer-term timeframes to sustain efforts beyond programme support with total independence. In all of the Indonesia sites, partner NGOs have secured their own funding to sustain work beyond the programme, such as Yayasan Mitra Insani (YMI) securing an OCEAN grant in year 8 to fund activities in site 4.

Lesson learned: The issues that some of the livelihoods activities faced challenged ToC assumptions that new livelihoods methods could reliably reduce dependence on fishing through providing alternative stable income, as well as the assumption that the markets for the products would be stable/increasing and people would be fairly paid. As can be seen from the above example in site 4, efforts were made to understand potential markets for new livelihoods products, for example, through undertaking surveys, but the range of issues faced indicate that more extensive

market assessments were required to better identify potential risks and blockers. Insights gained through delivery prompted a shift in programme strategy towards enhancing existing livelihoods and promoting financial inclusion. Efforts included establishing community-led savings systems and addressing post-capture losses and pricing transparency. Where communities still relied on fishing practices as key sources of income, the successful implementation of fisheries monitoring and sustainable management plans across all programme sites helped to mitigate pressures on fish stocks, as described under output 2. BV noted that taking a wider approach to financial inclusion by tackling challenges around existing as well as possible new livelihoods and assisting financial planning can safeguard the livelihoods and income of the whole community, address issues of inclusion, and deliver long-term sustainable outcomes and financial resilience. The final evaluation acknowledged that the programme's adaptive approach "demonstrates the value of continual assessment and responsiveness to gender-specific needs over time, ultimately fostering more inclusive and effective management outcomes".

This approach was incorporated into the programme in 2024, with new indicators for savings and loans groups and value chains added into the logframe as a responsive measure to the livelihoods challenges. Although HMG GEDSI ambition grew throughout programme delivery, embedding this approach into the programme's design at an earlier stage and using this as a core strategy for building resilience would likely have delivered greater final results. Though impactful evidence such as the case study above helps to show how activities included and impacted women within communities, the logframe could also have been adapted to include empowerment indicators, for example, a specific metric to measure skill development and training for women. These changes and additions would have enabled the programme to better evidence poverty and GEDSI impacts under output 3 activities and should be considered for future programming.

Recommendation: Programmes should aim to integrate holistic financial inclusion strategies from inception and ensure that MEL frameworks are in place to fully demonstrate poverty and GEDSI results.

Recommendation: Where programmes are exploring new livelihoods activities, they should ensure that full market assessments are undertaken in advance. Analysis and lessons learned on the viability and sustainability of livelihoods activities and value chain improvements should be captured and applied to relevant future programming to further aid successful design and delivery.

Output Number and Title	Output 4: Increased access to health services		
Output Score	A		
Impact weighting (%)	10%	Impact weighting revised since last AR?	No
Output Indicator	Starting Target	Final Logframe Target	Final Result Achieved
4.1a Number of women accessing sexual and reproductive health and rights services (Madagascar only)	12,721 (added to logframe as part of 2022 review)	12,721	11,346
4.1b Number of outpatient consultations (Indonesia only)	1,314 (added to logframe as part of 2022 review)	1,314	1,442 Male: 440 Female: 1,002 (69%)
4.2 Number of people attending community health sessions or health promotion activities	12,374 (added to logframe as part of 2022 review)	12,374	16,517 Sites 4 and 5 only: Male: 273 Female: 600 (69%)
4.3 Number of healthcare workers or community health ambassadors who	274 (added to logframe as part of 2022 review)	274	290 Male: 36

report improved skills and knowledge in health delivery			Female: 254 (88%)
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Briefly describe the output's activities and achievements during its lifetime, and provide supporting narrative for the score

Output 4 indicators measure sexual and reproductive health and rights (SRHR), health consultations, and health promotion activities, designed to empower women and other community members and strengthen their resilience and adaptive capacity to climate change. Initially, the indicators focused on family planning services in response to community needs in Madagascar, but these were revised and expanded in 2022 to reflect differing challenges within the nascent Indonesian sites, along with the health impacts of Covid-19. The new indicators capture reproductive health and general health activities in localised contexts, helping to measure broader health outcomes in communities.

In general, output 4 made good progress across the final three years and output indicators 4.1b (outpatient consultations in Indonesia), 4.2 (people attending community health activities) and 4.3 (healthcare workers with improved skills and knowledge) all exceeded final targets. Results for target 4.1a (women in Madagascar accessing sexual health services) were slightly below expectations, with figures reducing for sites 1 and 3 in the final year of the programme despite a significant increase at site 2 between 2023 and 2024. At site 3, frequent movement between villages makes it hard to track women's use of family planning, and Marie Stopes International⁹ - the downstream partner with world-leading expertise in delivering rights-based SRHR interventions - no longer operate in the area, reducing site access to family planning services. To help address this, BV has facilitated one outreach tour delivered by MSI for long-acting contraceptives in the past year. It is important to reinforce that SRHR services were deployed to afford women autonomous decision-making over their health and family planning, consistent with the UK's voluntary and non-coercive policy on SRHR. Good performance across the 3 other indicators mitigate indicator 4.1a narrowly missing its final target, and as a result **output 4 scores an overall A rating**.

The health work under the project varies between sites and countries as it is led by the needs and priorities of the communities but generally focuses on the ability of communities to access government-run healthcare that often does not inclusively reach all groups. In certain contexts, the basic needs and rights of coastal communities, such as health and family planning, are unmet, deepening poverty. In Madagascar, health activities are predominantly focused on family planning via the 'Safidy' or 'choice' programme that gives women and families the choice of how many children they have and provides access to maternal and child healthcare. Results under this output also show strong levels of inclusion, with female ratios of 69% and 88% across indicators 4.1b and 4.3 respectively. Under output 4.2, gender disaggregation was only available for sites 4 and 5, but also showed similarly strong female ratios, with 273 men and 600 women (69% in total) attending community health sessions and health promotion activities across the Indonesian sites.

A summary of key achievements under this output is broken down by site in Annex E. The case study below details the progress made across the programme's lifetime under this output at Site 5, in Kubu Raya.

Increasing access to health services in Site 5 – Kubu Raya

Health-focused initiatives in Kubu Raya, Indonesia, began with a needs assessment in 2019. In the following year, 13 new health ambassadors were recruited and trained, and refresher training was provided for 17 pre-existing ambassadors. The ambassadors were trained in a wide range of areas including emergency first aid, national vaccination programmes, non-communicable diseases, counselling for drug use, maternal and child mortality and occupational health and safety. In 2021, 641 community members attended outpatient consultations at the site, and by 2022, BF had expanded into two additional villages, where it helped to set up new health working groups. Outpatient consultation numbers grew to 1,493 in 2023, with more community members able to access medical appointments. In the final year of the programme, 587 people (465 women – 79%) attended community health sessions, and healthcare promotion activities at the site included a public health clinic offering BMI, blood pressure, cholesterol, blood sugar, uric acid and haemoglobin assessments. A learning exchange on waste and local food management was also attended by 68 community members and health ambassadors (50 women – 74%) in 2024 to share best practices that could be adopted in other villages.

⁹ [Marie Stopes International](#) (MSI) provide SRHR services to women across 36 countries and deliver these components of the Blue Forests programme.

By the end of the programme, 133 health ambassadors (128 women – 96%) were active and operating at the site, contributing to improved health awareness and environmental practices in their communities. Increased access to healthcare at the site has introduced wide-ranging benefits beyond improved community health, and through improved healthcare for women and children the programme has reduced barriers to community participation and supported gender equality in community management activities.

Lessons learned through this output, and recommendations for future programming

BF's design acknowledges that equitable access to health care has wide-ranging benefits beyond improved community health, as demonstrated in the example activities in Kubu Raya above. The programme placed great importance on improving access to healthcare and increasing knowledge and awareness in response to community needs. BV first established the community health programme known as 'Safidy' (meaning 'choice' in Malagasy) in Velondriake in 2007 in response to the unmet need for family planning expressed by communities. While the programme was not funded by Defra at this time, funding for the Blue Forests programme has enabled Safidy to continue and expand. Family planning services offered through Safidy were always entirely optional to communities, and recipients received support in making their own choices on family size, timing of pregnancies and when to remove or stop contraceptive methods. In short, the programme's health interventions are designed to empower women and girls to make autonomous decisions about their bodies, providing them with better health and enhancing their ability to adapt to climate change. BV's multisectoral approach combines community health with economic need, recognising the important role and potential of women and girls, transforming their ability to contribute to and advance the effectiveness of coastal communities in managing their resources.

Lesson learned: The programme's health interventions and activities relating to SRHR are relatively novel to environmental programming, however, HMG has delivered numerous ODA programmes focused on SRHR via the FCDO which provide access to valuable information and examples of the localised complexities which SRHR interventions operate within. In addition, the BF GEDSI analysis considered the deeply intertwined social norms, cultural practices and gender inequalities that restrict women's choices regarding their reproductive health. Specific risks relating to this area are explored further in section E. The following case study is taken from the BF GEDSI analysis and describes cultural complexities relating to these activities in Madagascar:

Case Study - Resistance from Spouses in Madagascar

In many communities within southwest Madagascar, women have begun utilising long-term family planning methods, such as intrauterine devices (IUDs) and Implanon, to manage their reproductive health and prevent unplanned pregnancies. However, the strong opposition from husbands creates a significant barrier. In some cases, husbands accept it; but in most cases, husbands do not approve of their wives using contraception, leading women to hide it until their husbands eventually find out, which can result in marital issues. Husbands often hold the belief that women should be continuously pregnant, viewing childbirth as an inherent duty aligned with cultural convictions. This perspective not only undermines women's autonomy but also perpetuates gender-based power imbalances within families.

In this context, many women resort to using contraceptive methods in secrecy, attempting to convince their husbands of the benefits associated with family planning, such as improved family well-being and the ability to allocate limited resources more effectively. They argue that in light of the current economic challenges, including diminishing marine resources that are crucial for sustenance and income, it is imperative to consider family planning for the overall health of the family.

Safidy's interventions in this area involves comprehensive community education programmes aimed at informing both men and women about the advantages of family planning for maternal and child health, as well as for economic stability. BV works with Youth Groups and Community Health Workers (CHWs) to train them on communication techniques, family planning and peer education approaches. With the support of BV technicians, Youth Groups and CHWs engage in dialogue sessions to encourage open conversations between couples, thereby fostering a supportive environment where reproductive health decisions can be made collaboratively. Furthermore, BV actively collaborate with local leaders (Leaders of Mothers Groups; Youth Groups) to promote an understanding of women's rights and their entitlement to make decisions about their reproductive health.



By focusing on improving the health of women and children, BF has seen barriers to community participation and education reduced. As a result, there have been advances in gender equality in local marine resource management and livelihoods activities. However, there are challenges in how this increased participation and involvement is captured, with case studies proving to be the most effective method available to the programme to communicate these links but being limited in number.

Recommendation: Defra programmes delivering SRHR and health activities should ensure that delivery partners conduct a robust GEDSI analysis prior to implementation. In addition, they should ensure that SRHR activities are always delivered through experienced, specialist organisations which are fully aligned with rights-based approaches.

Recommendation: Programme teams should encourage delivery partners to regularly share case studies which can demonstrate the links between health activities and increased climate resilience within communities to validate ToC assumptions and widen the evidence base in this area of development.

Output Number and Title	Output 5: Organisational and financial structures in place to support 20-year project vision		
Output Score	A		
Impact weighting (%)	10%	Impact weighting revised since last AR?	No
Output Indicator	Starting Target	Final Logframe Target	Final Result Achieved
5.1 Organisational capacity – number of relevant community structures (organisational / financial / administrative) in place to support local mangrove and fisheries management	6 (February 2018)	23	31
5.2 Monitoring capacity – number of sites where community resource monitoring protocol is in place	6 (February 2018)	5	5
5.3 Enforcement capacity – number of sites where a community-led coastal management law enforcement protocol is in place	6 (February 2018)	5	5

5.4 Conservation agreements – number of sites with functioning, transparent community conservation agreements	6 (February 2018)	5	5
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Briefly describe the output's activities and achievements during its lifetime, and provide supporting narrative for the score

Indicators under output 5 record the organisational structures and community protocols that enable communities to implement sustainable management approaches. Conservation agreements, described in output indicator 5.4, serve as a voluntary and legally binding contract between a community and implementing stakeholders or partners, to ensure the conservation activities carried out are aligned with community needs and longer-term vision, support improvement of community wellbeing and maintain local stewardship of natural resources.

Output indicator 5.1 (organisational capacity) exceeded final expectations, and output indicators 5.2 (monitoring capacity), 5.3 (enforcement capacity) and 5.4 (conservation agreements) met final targets, **giving output 5 an overall A rating.**

The reduction in final targets from 6 to 5 in output indicators 5.2, 5.3 and 5.4 was due to the decision to not pursue an additional sixth site for delivery. All five programme sites successfully introduced community resource monitoring and community led enforcement protocols, as well as community conservation agreements within the programme timeframe. Output indicator 5.1 set a baseline of 2 community structures in 2017, and a final figure of 31 structures in place demonstrates substantial progress in this area. The programme evaluation concluded that BF has strengthened sustainable governance led by communities across all sites, and that community-based governance is the only programme pathway that has assured sustainability in each of the five sites. Establishing different community structures under this output has also provided a platform for enhancing women's representation and leadership in governance and monitoring. This is discussed further in the lessons learned section below.

Notable achievements under this output are summarised by site in Annex E, with a specific example from site 3, Mahajamba, provided below:

Establishing community structures for long term environmental impacts at Site 3 – Mahajamba

Communities in Mahajamba began strengthening resource and land management in 2020, forming a management unit comprising seven fisher associations. The protocol for community resource monitoring was introduced in 2021, and enforcement activities commenced in 2022 after the local mangrove law (Dina) was approved. Monitoring capacity was built amongst community leaders, patrol agents and board and committee members who were trained on management tools, the mangrove reforestation monitoring protocol and patrol techniques. In 2023, monitoring capacity was strengthened further through a learning exchange with Ambanja (site 1) involving 10 mangrove patrollers; a new fisher association was also established with 8 board members (2 women), and the existing 7 fisher associations received a three-year renewal of their board from the governor.

By 2024, the management unit had expanded to include five village forest management groups, in addition to the established fisher associations. The government fisheries monitoring centre trained 43 mangrove patrollers (11 women – 26%) in patrol and infraction reporting, and board members were trained on the use of management tools for work plan implementation. Youth groups played a key role in raising awareness at the site through different initiatives focused on sustainable mangrove forestry and marine protection. In 2024, they delivered eight radio broadcasts on these themes to 23 communities, reaching 372 people. During the programme's lifespan, local communities have benefitted from increased equitable access to management activities, and the representation and participation of women and youth in governance groups and leadership roles has helped break down traditional social barriers for marginalised groups.

Lessons learned through this output, and recommendations for future programming

Lesson Learned: As noted above, women's representation, voice, participation and role in decision making in governance and leadership is a key area that the programme focuses on for female empowerment. The programme's GEDSI analysis acknowledges that data disaggregation is more difficult in this area, noting that whilst the number of female elected association members can be measured, wider engagement and the consideration given to female voices is hard to assess. Three of the output 5 indicators capture when sites established certain protocols and agreements, and all of these achieved final targets in advance of programme closure. Whilst the programme

continued to deliver activities related to these indicators and enact community conservation protocols and agreements through to 2024, the early achievement of final targets and the fairly limited scope of the indicators question their effectiveness and ambition.

Despite these logframe limitations, BV collect additional information which can demonstrate the progress being made in terms of ensuring female representation and participation, for example, through recording the number of women that constitute elected representatives in the local management committees. Furthermore, BV record evidence on awareness raising and the use of diverse and underrepresented groups in this area, both as the focus of the awareness raising and the delivery method. For example, in Kubu Raya (site 5), programme data shows that 96% of health ambassadors raising awareness in the project communities are known to be women. Whilst this information is not included in the project logframe, it is crucial for gaining a stronger understanding of the GEDSI impacts under the community governance and management models, and expanding further on the initial logframe indicators would have helped to capture more detail and better understand the range of benefits from this output.

Recommendation: Programmes with community governance models should aim to embed participatory MEL approaches to capture community voices and assess governance quality, representation, and empowerment, as well as focusing on the establishment and existence of structures.

Output Number and Title	Output 6: Increased evidence base for conservation models		
Output Score	A		
Impact weighting (%)	0%	Impact weighting revised since last AR?	No
Output Indicator	Starting Target	Final Logframe Target	Final Result Achieved
6.1 Number of new pieces of evidence (per year) for individual conservation models (e.g. crab fishery closure model, Plan Vivo model)	For year 2024: 5 (February 2018) Cumulative starting target across programme lifetime: 25 (February 2018)	For year 2024: 5 Cumulative final target across programme lifetime: 30	For year 2024: 2 Cumulative final results achieved across programme lifetime: 34

Briefly describe the output's activities and achievements during its lifetime, and provide supporting narrative for the score

Output 6 is designed to record BF's contribution to increasing the global knowledge base for conservation models used in the programme. The evidence pieces that were generated are wide-ranging and publicly available for reference. Topics covered focus on marine conservation, sustainable fishery practices, ecosystem services, and community-based resource management in Madagascar and Indonesia. A list of key evidence pieces produced under the programme can be found in Annex F.

The final year target for output indicator 6.1 was not met. This was due to a realignment of BV organisational strategy which led to a shift in focus to develop areas such as a blue carbon methodology in partnership with Plan Vivo, rather than publishing pieces of evidence. However, when assessing the cumulative results for the indicator over the whole lifetime of the programme, the number of new pieces of evidence exceeds the sum of all targets due to strong performance in earlier years of delivery. Assessing results cumulatively gives a more accurate overview of the indicator's performance over the whole programme. The output holds no impact weighting and therefore does not influence the overall scoring for the programme, but the indicator **scores an A overall**.

Lessons learned through this output, and recommendations for future programming

Lesson learned: Logframe results for the indicator provide a simple sum of the pieces of evidence produced for each year of delivery. To strengthen the understanding around the impact of this output, the programme could have incorporated a method of recording what the evidence was used for and its impacts, rather than only counting the pieces of evidence produced.

Community knowledge sharing

In addition to the new pieces of evidence produced during the programme, BV have also facilitated knowledge exchanges between different communities and sites. In 2024, an exchange visit took place between community leaders and association committee members from the three Madagascar sites, where they shared their experiences and ideas for governance, leadership and financial tools used by the associations. This was beneficial to the capacity development of board members of a management group from Ambanja (site 1) who visited the Velondriake LMMA (site 2), Madagascar's first official LMMA association. To date, Madagascar has over 200 LMMAs working towards similar objectives: they form a network called MIHARI, which brings LMMA representatives from throughout Madagascar together. BV and BF's work help to support MIHARI, the national LMMA network, through attendance at regular meetings to share experiences, explore common issues and develop solutions collaboratively. Additionally, a two-week Blue Carbon Ecosystems Learning Exchange was hosted in Site 1 in 2023, with knowledge in community-led mangrove management and governance, mangrove fisheries management, mapping and ecological monitoring, policy and advocacy, and carbon markets shared from across the globe. BV's competence in this area is further highlighted through feedback provided from colleagues at the British Embassy in Madagascar, who stated that they are aware of BV sharing learning efforts in the region through regular workshops, papers and reports. These methods have proven to be a powerful and unifying tool for enabling communities to share and learn from successful management approaches used in other regions.

Recommendation: Where possible, peer-to-peer learning, especially across remote areas at programme sites, should be encouraged and used to help enhance efficient capacity building across communities by expanding the reach of proven conservation efforts and avoiding repeated mistakes or challenges.

D: Value for Money

VfM Overview and Cost-Effectiveness

The headline finding on Value for Money (VfM) from the Blue Forests Summative Evaluation was that *“there is some evidence that the programme delivers fair VfM overall, achieving results and adapting to challenging contexts to improve delivery and obtain results.”*

The conclusion was reached through an assessment of the evidence against the 4 Es framework (Economy, Efficiency, Effectiveness and Equity), supported by results data for key logframe indicators. As seen previously in this PCR, Blue Forests met or exceeded targets for both impact indicators, and six out of eight outcome indicators. There were positive results against each of the four Es criteria, but there are also examples where performance was below expectation. This includes challenges in Indonesia, particularly against Economy and Efficiency.

It was noted that the assessment was limited due to the fact that “Specific VfM indicators were not set in the lifetime of the programme”, reducing the amount of VfM-specific quantitative data that could be used to support an overarching conclusion. A key VfM learning from the programme is therefore to integrate VfM criteria and indicators into the programme MEL framework as early as possible, to ensure the right data is collected to inform a comprehensive assessment. This learning has already been applied in the newest BPF programmes, OCEAN and COAST.

The VfM section below summarises the key findings against the 4 Es, to provide an overarching narrative assessment of the VfM performance of the programme. This is supported by an analysis of the monetary benefits achieved during the programme's lifetime, with comparisons to the forecasts made at business case stage. This combination of qualitative and quantitative evidence leads to the conclusion that the Blue Forests programme **did achieve high Value for Money**, but there are opportunities for learning that can be applied to future BPF programming to ensure VfM is strong as possible. This conclusion is more positive than that reached by the summative evaluation, and this is due to the prior evidence gap for monetary benefits achieved being filled.

Progress Against AR Recommendations

There were four headline recommendations with regards to VfM at the last programme Annual Review in 2023. These recommendations were:

1. Verify data for impact indicators (**achieved**)
2. Include disaggregation by gender and disability in the logframe (**partially achieved**)
3. Review strategy towards Output 3 (Implementation of improved livelihood mechanisms) (**achieved**)
4. Review procurement processes and share more evidence on Economy and Efficiency (**partially achieved**)

The first recommendation to verify the data for impact indicators was **achieved**. Blue Forests undertook a verification exercise to validate the results being reported for logframe indicators impact 1 (CO₂ emissions), impact 2 (deforestation avoided) and outcome 1.1 (area under sustainable management). This exercise was essential for confirming the real-world impact of the programme and has allowed for the testing of monetary benefits achieved.

The second recommendation was **partially achieved**, as noted in the Equity section below. GEDSI disaggregated data was not incorporated into the logframe, however, it has been provided separately to Defra on request, in line with an agreement made in the 2022 AR, as mentioned in section B. Including this data in the logframe would have helped to identify strengths and weaknesses for Equity outcomes, improving our ability to make changes to programme delivery based on adaptive learning.

The third recommendation was **achieved**, through the Blue Forests logframe review in 2024. BV learnt that taking a wider approach to financial inclusion by tackling challenges around livelihoods and assisting financial planning can help safeguard the income of the whole community. This therefore helps to address issues of inclusion and delivers long-term sustainable outcomes and financial resilience. Using this learning, further elements of value chain additions and savings and loans groups were included in programme implementation, and seven new indicators were added to the logframe under output 3 in 2024. The performance was mixed, with 3 of the 7 indicators meeting final targets.

The fourth and final recommendation was **partially achieved**. It is unclear what the outcomes of the review of procurement processes were, but there was more evidence shared on Economy and Efficiency as part of the Final Evaluation process.

Monetary Benefits Forecasted and Achieved

Business Case Forecast

An estimate for the Benefit-Cost Ratio (BCR) that could be achieved by the programme was carried out for the full business case in 2016. The monetised benefits included in this analysis included mangrove ecosystem services, carbon savings, and benefits to small-scale fisheries and aquaculture. This analysis produced a BCR of 12.6:1, showing “Very High” VfM according to the new Defra VfM Framework criteria. The analysis was updated in 2020 where the BCR was revised down to **8.3:1** using the latest assumptions. However, this still represented “Very High” VfM as per the scoring criteria.

Monetary Benefits Achieved by the Programme

As verified outcome and impact data became available towards the end of the programme, there was an opportunity to estimate the monetary benefits achieved by Blue Forests due to Defra’s investment. Reflecting similar assumptions to the business case forecast, the benefits that were monetised were:

1. **Carbon savings** (impact indicator 1: Tonnes of CO₂ emissions prevented or removed)
2. **Ecosystem services** (using impact indicator 2: Total number of hectares where deforestation has been avoided)
3. **Income benefits** (outcome indicator 1.4: Number of forest dependent people with livelihood benefits)

The results for these indicators that were used in the monetary benefits assessment were as follows:

Table 2: Results for outcome and impact indicators used for monetary benefits assessment

Indicator	Cumulative target (2024)	Cumulative result (2024)
Tonnes of CO ₂ emissions prevented or removed (tCO ₂ e)	1,805,263	Total: 5,039,928

Total number of hectares where deforestation has been avoided (ha)	1,230	Total: 2,413 Madagascar: 1,429 Indonesia: 984
Number of forest dependent people with livelihood benefits (#)	69,380	Total: 77,302 Madagascar: 45,773 Indonesia: 31,529

The BCR from this analysis was estimated to be **37.83**, meaning that for every £1 invested by Defra, £37.83 of benefits were delivered. This significantly exceeds the previous forecast and represents “Very High” VfM as per the Defra VfM Framework. The Net Present Value (NPV) was estimated to be **£502.0m**: the NPV refers to the total benefits experienced in the present day, minus the total costs currently incurred to achieve those benefits. While these figures do appear to be very high, studies have estimated that the BCR for mangrove conservation has the potential to be significant, with one study finding a BCR of 88:1¹⁰ (though values from other studies are lower).

Table 3: Blue Forests Benefit-Cost Ratio – updated analysis Annual Review 2025 (optimism bias adjustment of 20%)

	Result
<i>Net Present Benefits</i>	£515.7m
Ecosystem service benefits	£12.8m
Carbon value benefits	£456.1m
Income benefits	£46.8m
Net Present Costs	£13.6m
Net Present Value	£502.0m
Benefit-Cost Ratio	37.83

This result was mostly driven by the 5 million tonnes of CO₂ emissions prevented or removed over the lifetime of the programme. This was calculated by Blue Forests by combining their estimates for mangrove ecosystem loss avoided (using GIS mapping tools) with the amount of carbon stored per hectare of mangrove, how much of this is emitted as CO₂ when mangroves are lost (determined by fieldwork and published literature) and the volume of carbon stored by growing, reforested areas. The project delivered emissions avoided (through deforestation avoided) and reduced (through reforestation).

A detailed description of the methodology used to calculate the BCR will be provided separately to this PCR.

Assessment of the 4 Es

As noted above, the Summative Evaluation captured narrative evidence around the 4 Es of Value for Money. This includes Economy, Efficiency, Effectiveness and Equity. The section below summarises this evidence and reflects on whether the programme made sufficient progress against the recommendations presented in previous annual reviews.

Economy

Economy considers whether the inputs required for a programme are being procured at the best price. The Summative Evaluation found generally good examples of best practice concerning Economy.

- The main cost drivers were identified as being total site costs for Madagascar and Indonesia, BV’s global programme management and support, and cross-region staff costs.
 - It was noted that the percentage of spend on staff costs in Indonesia was a larger portion of the country total compared to Madagascar. Possible reasons for this could be 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 which is a more expensive part of Indonesia.
 - It was suggested during stakeholder interviews that costs in Indonesia were more expensive than for other NGOs. However, those NGOs are much more established in Indonesia, and examples of comparable budgets for conservation projects similar in scale to Blue Forests were identified.

¹⁰ Konar and Ding (2019) [A Sustainable Ocean Economy for 2050: Approximating Its Benefits and Costs | SpringerLink](#)

- In Indonesia, BV had originally operated through a BV-established local entity – Yayasan Pesisir Lestari (YPL) - which hindered efficiency but was the most appropriate action at the time. This approach was discontinued when YPL became independent and focused predominantly on advocacy, which was not a key pillar of this project.
 - The summative evaluation found that the decision to ultimately transition delivery through local implementing partners with oversight from global BV was necessary and justified to avoid wastage of resources, and that Indonesia is recognised as a challenging country for organisations to establish local operations.
- Further examples of good practice with relation to Economy that were identified in the Summative Evaluation included:
 - The procurement of local people and organisations kept staffing costs low;
 - Training of local community members which was enforced due to the pandemic represented a positive adaptation, improving programme monitoring and evaluation and therefore VfM;
 - Continuing operations in Madagascar during the pandemic represented good VfM, as having to re-establish the programme would have incurred greater costs;
 - Standardising the use of translation was a positive, as this reduced the time and costs associated with repeated translation (and also strengthened Equity through inclusion).

Efficiency

Efficiency relates to how inputs can be turned into desired outputs.

- The Summative Evaluation concluded that the delivery of outputs across the programme duration was efficient on the whole, with limited exceptions for outputs 3 (Implementation of improved livelihood mechanisms) and 6 (Increased evidence base for conservation models).
- The pandemic presented many challenges to programme delivery, but changing the focus of some interventions (such as focusing on community health in Madagascar) created long-term efficiencies, as did the decision to continue operations as noted in the Economy section above.
- The level of efficiency of outputs varied between the two countries:
 - Delivery in Madagascar was generally efficient, although there were issues relating to blue carbon and on occasion the strategic health and livelihoods pathways. It was noted that seasonal cyclones hampered delivery by restricting sites through flooding.
 - Stakeholders noted that the team in Indonesia “struggled to get the work off the ground”, as the organisation was new to the country.

Effectiveness

Effectiveness refers to the ability of funding to deliver the selection of outputs most likely to result in the desired outcomes and impacts.

- The Summative Evaluation concludes that “*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*”. However, there was more mixed success for livelihood diversification, with activities remaining limited in scale.
- As seen above, Blue Forests performed well against outcome and impact indicators, meeting or exceeding targets for all but two (outcome 1.5b - Average savings per group member in monitored groups (\$) and 1.6 - % of health service delivery points that provide support and /or referral appropriate to meet the needs of Blue Forest programme communities). The Evaluation concluded that “*the programme has consistently demonstrated its ability to achieve output and outcome-level results*”
 - This includes impressive results for greenhouse gas (GHG) emissions reduced or avoided (5,039,928 tCO₂e), area under sustainable management (75,727 ha), and number of forest dependent people with sustainable livelihoods protected or improved (77,302) in particular.
 - However, as noted previously in this PCR, targets were revised down for a number of indicators for a number of reasons in the early stages of the programme, including finalising site selection and Covid-19. Results far exceeding targets could therefore be a reflection of under-ambitious final targets, and an over-cautious approach to their revision in 2019.

- The strategic design of the programme was noted as an important reason for the effective delivery against targets.
 - This included the programme’s adaptive and flexible design, allowing swift response to emerging setbacks, the long-term nature of the funding which allowed for the development of strong relationships with communities over time, and strategic engagement with influential stakeholders such as UK officials.

Some challenges to effectiveness were identified, however, including external factors such as the pandemic, environmental conditions (such as seasonal weather patterns) and legal and political complexities. Internal challenges including occasional slow approval processes on the Defra side were also noted.

- One of the most notable challenges already discussed in this PCR concerned the carbon credits scheme. This was a key element of the business case with an expected £52m of income generated over 20 years, but due to complexities and delays, this was not realised. Defra have noted lessons learned for the benefit of future programming, but this represented a significant limitation to the effectiveness of the Blue Forests programme overall (and a risk to VfM given the predicted size of the income generation), especially in reference to the original plans of the business case.

Equity

Equity assesses the degree to which the results of the intervention – both positive and negative – are equitably distributed, with consideration of different vulnerable groups in the population such as women and girls, those whose livelihoods are most at risk, and the young and elderly.

- The Evaluation summarised that while there is no financial or VfM data on the cost of GEDSI across sites, there is evidence of *“the programme’s journey toward greater equity and consideration of GEDSI throughout its lifecycle”*.
- The GEDSI Action Plan developed in 2024 discussed ways to elevate the programme from “GEDSI Sensitive” to “GEDSI Empowering”, but the programme was not officially designated as Empowering despite positive progress in the final months of delivery.
 - The GEDSI analysis found that *“GEDSI is strongly embedded in BV’s values and policies, and the programme has demonstrated good awareness and responsiveness to the needs of disadvantaged and vulnerable groups”*.
- The Summative Evaluation found examples where Blue Forests developed an inclusive approach which included encouraging equity within the constraints of local contexts:
 - In Madagascar, women were included in a number of activities, including fish processing, community health initiatives and mangrove patrolling. Risks do remain, however, in areas such as fisheries where safety concerns were identified.
 - In Indonesia, women were involved in catch enumeration, community health and alternative livelihoods. However, gender disparities in engagement do continue – with male-domination in certain environments such as patrol groups being identified as a concern for safeguarding and female participation. Women have expressed interest in taking more of a role in these areas, highlighting potential for future inclusion.
 - However, these are only two limited examples within the remit of the entire programme. These positive examples should be built on, and the lessons learned should be taken forward to make improvements in future programming. It is important that safeguarding concerns are addressed, and effort is made to avoid entrenching gender roles.
- A limitation of the data collected for Blue Forests is that there were no disaggregated results reported regularly in the logframe. Defra had to request disaggregated results as a separate exercise following an agreement to take this approach in the 2022 AR, as noted in section B, and the greatest amount of disaggregated data provided was at the Final Evaluation. Annex G provides a summary of gender disaggregation across the available indicators. Being able to regularly provide results for indicators (such as individuals with sustainable livelihoods protected or improved) disaggregated by key characteristics by GEDSI characteristics such as gender, disability or age, would provide a stronger quantitative evidence base to more frequently assess the impact on different groups.
 - In addition, there is no disaggregation for key outcome indicator 1.4 (number of forest dependent people with livelihoods benefits). Having this disaggregation would improve the evidence around Blue Forests’ impact on poverty reduction and women or disadvantaged groups.

- However, the results from the disaggregated data that were shared with Defra show promising outcomes for women. For example, women form the majority of beneficiaries for each of the six output indicators that are able to disaggregate their results by gender.

Conclusion and Recommendations

Having assessed the VfM evidence surrounding the programme, the conclusion is that Blue Forests achieved good VfM over its lifetime. This conclusion is based on mixed narrative evidence for the 4 Es, but impressive results for key outcome and impact indicators such as CO₂ emissions reduced or avoided, area under sustainable management, and livelihood benefits. These were quantified in the monetary benefits assessment, returning an estimated BCR of 49.3 – which was largely driven by the monetising of the 5 million tonnes of CO₂ emissions reduced or avoided.

There were likely positive impacts on poverty reduction and benefits specifically for women and girls, as evidenced by the disaggregated results supplied by the Blue Forests team (although these were not reported regularly in the logframe). For example, the target for outcome Indicator 1.4: “Number of forest dependent people with livelihood benefits protected or improved” was exceeded by nearly 8,000 (77,302 achieved compared to 69,380 planned). To improve evidence here, regularly providing GEDSI disaggregated data with the annual logframe – and providing disaggregated results for the key outcome indicator 1.4 – would have been preferable.

The Blue Forests programme has also provided important learnings that should be noted for the benefit of future programming. For example, leveraging BV’s existing relationships in Madagascar was an enabler of VfM, through Economy, Efficiency and Effectiveness. Also, the decision to transition delivery through local implementing partners in Indonesia with oversight from global BV was necessary and justified to avoid wastage of resources, highlighting the importance of identifying and acting on VfM concerns early to avoid greater losses in future periods.

Recommendations for VfM best practice coming out of this assessment that can be applied for other ODA programmes include the following:

1. **Establish VfM criteria and indicators** to ensure data is collected:
 - The Summative Evaluation largely relied on narrative evidence for the 4 Es, as there were no VfM indicators established for the programme. This meant that there was a lack of important quantitative evidence that could be used to evaluate the programme’s VfM, and to compare these results with other BPF or Defra ODA programmes. It is critical that VfM criteria and indicators are established early on in the programme, to ensure this data is collected – strengthening the quantitative evidence base.
2. **Require regular reporting of disaggregated data to be included from the outset** as part of standard programme MEL requirements
 - A lack of disaggregated data in the regular updates to the programme logframe meant that the quantitative evidence for Equity and poverty reduction was incomplete. Requiring people-focused indicators to be disaggregated by GEDSI characteristics as standard will allow us to more easily see whether certain groups are benefitting from interventions more than others, and whether resources need to be allocated to ensure more equitable results, especially with respect to poverty reduction. Only receiving this data towards the end of the programme through AR narratives means that our ability to adapt and improve was reduced.

E: Risk

Overview of programme risk during the past year and over the life of the programme, drawing on Defra’s Risk Management Policy and wider risk guidance

Risk Management

Throughout the life of the programme there has been continued effort to improve risk management across all Defra ODA programmes. To align with this, the programme team have adopted a standardised risk register (see Annex H) to better define risk ownership and risk categories and developed a risk appetite document (see Annex I) for the programme. Risk levels for each category were set in line with the overall BPF and Defra ODA portfolio level risk appetites and were formally approved by the programme’s SRO in 2024 and 2025. Risk appetite for Blue Forests did not change over the course of the programme and retained the following levels, broken down by risk category:

Risk Category	Blue Forests Risk Appetite
Strategic and Context	Open
Delivery and Operational	Cautious
Financial and Fiduciary	Cautious
Project / Programme	Open
Reputational	Cautious
Safeguarding	Cautious

The programme team incorporated the risk appetite into regular risk register reviews, and it enabled them to identify where particular risks fall outside of appetite and require attention and potential escalation. Frequent engagement with the BPF PMO team, as well as attending ODA Hub Risk Drop-in sessions provided the team with opportunities to ask questions and seek regular feedback on the risk register and risk management practices. Additionally, increased ambition on fraud risk and due diligence across the Defra ODA portfolio led to focused efforts to strengthen these elements of individual programmes in 2024. Given the proximity to the agreed programme closure date, the ODA Counter-Fraud, Risk and Due Diligence Lead confirmed that a full new Fraud Risk Assessment was not required for Blue Forests. However, delivery chain mapping conducted in 2024 shows BV have policies in place to monitor fiduciary risk and provided the team with confidence that fraud prevention measures are in place.

Defra did not receive any reported instances of fraud, suggesting that BV's policies could be strengthened to provide more assurance that incidents will be captured and reported.

Recommendation: With additional HMG funding to BV approved beyond BF's closure through the COAST programme, due diligence should be conducted for a new full assessment of BV's fraud mitigations and policies.

Programme Risks

In 2016, the business case identified 13 key risks to both the delivery and outcomes of the programme. These included areas such as political instability, challenges in securing private sector leverage, fraud, natural disasters, and limited technical capacity, as well as risks to long-term sustainability, community support, and the ability to scale or measure impact effectively. The business case risks are set out in separate columns below:

Table 4 – Blue Forests Business Case Risks

Business Case Risks to Delivery	Business Case Risks to Outcomes
Political risks of countries – instability	Support for sustainable forestry and fisheries displaces unsustainable activities into other locations through “leakage”
Political risks of countries – changes in Ministry support for conservation initiatives, support to international NGOs	Lack of M&E means that outcomes cannot be effectively measured and the project cannot report effectively against the KPIs
Difficulty securing further private sector leverage	Lack of support from within communities for the projects
Fraud risk	Projects fail to create interventions that are sustainable in the long term
Risk of natural disaster, for example, cyclones, flooding, etc.	Not possible to scale up interventions
Difficulty in NGO registration in new countries and/or enabling BV to employ staff in new countries	Limited pool of people globally with technical competence to support target communities and implement projects at scale, in line with standards and values of Blue Ventures
Opposition from other NGOs for BV to start work in new countries	

The business case also included mitigating actions for each of the above risks and demonstrated how BV were already looking to address potential issues. Whilst the risk descriptions were quite general in some cases, many of the themes originally highlighted were present throughout the programme's lifecycle and still sit within the programme's final risk register (see Annex H), suggesting that risk identification and contextual understanding of the programme was strong at the conceptual phase. Risks identified in the business case above that went on to materialise into challenges during programme delivery are outlined below:

Strategy and Context: Political Risks of Countries (Risk BF-R011): *There is a risk that changes in administration and host country priorities and processes could lead to reduced ambition and an inability to protect the marine environment, leading to faltering programme delivery.*

BV, YHB, YMI and YPI have fostered close engagement with multiple layers of government in Madagascar and Indonesia. However, the programme has still faced significant challenges when navigating some activities reliant on host government processes and rules. A crucial part of the initial design of the programme focused on the development and sale of voluntary carbon credits to support long-term, sustainable financing for the communities. However, the programme faced significant blockers in this area, due to the complex processes in establishing the carbon credit sales models in both countries of delivery, as described in Section C. **One lesson to take** from this issue and noted in section C was the need to ensure strong coordination and buy-in from governments at an early stage before committing to this pathway.

Delivery and Operational: Risk of Natural Disaster (Risk BF-R005): *There is a risk that extreme weather and climatic events could cause major disruption and damage at delivery sites, reducing value for money and impact towards the programme's objectives.*

Sites based in Madagascar endure annual cyclone seasons, with the worst of conditions often encountered between January and March. Cyclones caused damage and disruption at various points across the programme lifespan, for example, in 2023 Cyclone Freddy caused damage to one of the programme's sea cucumber hatcheries as noted in section C. The Blue Forests 2021 annual review noted extreme weather events in Madagascar had become more prevalent and unpredictable throughout delivery and used this as the basis for a **key lesson learnt**, with BV scheduling certain programme activities around periods known to be less prone to bad weather. This demonstrated another way in which the programme applied lessons learned to adapt.

Project and Programme: Risk of NGO Registration in New Countries (Risk BF-R002):

BV have built a strong track record of 20 years of delivery in Madagascar but potential hurdles relating to registration in new countries were recognised at the outset of the programme. Despite this, the process to register within Indonesia ahead of beginning activities at new sites in the country proved to be more protracted and difficult than first anticipated. This caused delays and slower progress than predicted within Indonesia, however, BV's model to deliver in the country via three other NGOs as downstream delivery partners rather than directly delivering themselves was outlined in the original business case. The Defra team have continued to be cognisant of the potential risk of legal non-compliance within the country, but BV have provided regular assurance that they have sought legal advice, and this is not an issue. Frequent communication with the BPF South-east Asia Regional Coordinator, as well as Indonesia Post have ensured that the Defra team fully understood any risks and implications associated with the programme.

Recommendation: Where Defra ODA programmes plan to deliver in Indonesia, or other new country partners in the future, they should ensure that they conduct sufficient engagement and due diligence to be fully aware of any potential registration issues and whether their delivery partner complies with local requirements to avoid delivery and reputational risks.

Delivery and Operational: Risk of Displacing Unsustainable Activities Elsewhere (BF-R001): *There is a risk that efforts to implement sustainable forestry and fisheries interventions in project sites will displace the unsustainable activities into other areas through "leakage", leading to negative environmental and socio-economic outcomes and reducing the credibility of the programme.*

The programme has shown great success in introducing new, sustainable forestry and fishery management practices and receiving buy-in from communities. An area which is less clear and more difficult to monitor is the extent to which this displaced unsustainable or illegal practices to other areas. The Indonesia case study which informed the programme's final evaluation noted that a government official informed the evaluation team that they are aware of this being an issue. One interview provides a small evidence base, and it is difficult to assess the scale of this issue as illegal activities will naturally take place outside of programme site areas too. Successfully shifting regional thought processes on sustainable practices still represents a significant challenge despite the introduction of protected areas, and BV continue to focus on addressing the drivers of unsustainable activities and providing alternative livelihoods to communities to counter this.

The risks discussed above remained present during the programme's final year of delivery. **Risks and challenges specific to 2024 and 2025** related to the approaching closure of the programme and are outlined below:

Strategy and Context: Risk of Reliance on Defra Funding (BF-R012): *There is a risk that an overreliance on Defra funding could lead to slow and inadequate finance mobilisation, resulting in poor delivery or closure of programmes and reputational damage to the UK.*

The business case states, “Blue Ventures needs to raise around £1.3m per year from year 8-11 for maintenance and monitoring of the Madagascar Sites and the remaining implementation activities for Indonesia”. As part of the 2023 AR, BV expressed that they were confident in securing the £1.3m necessary for all sites. The Defra team continued to seek updates on post-programme funding during the quarterly Steering Group Meetings and met with the newly appointed BV CEO to better understand BV’s future plans for the programme sites. Additionally, Defra shared advice and contacts from across the BPF portfolio to attempt to assist BV with blue finance mobilisation efforts. BV has successfully secured additional grant funding from different sources, but it remained a challenge for the team to understand the longer-term financial plan and sustainability for programme sites as discussed in section B. The programme’s final evaluation noted that other funds have been leveraged from donors, for example, BV received a £372,547 grant from the Coca Cola Foundation in 2024, but it was recommended that BV should improve their reporting and tracking of leveraged funds to provide a better understanding in this area.

Delivery and Operational: Risk of Break/Delay in Programme Delivery (BF-R017): *There is a risk that the restricted window of opportunity to implement an extension to encompass the delivery of the final evaluation could cause a break in programme delivery, leading to disruption and delay in achieving BF outcomes.*

Due to the uncertainty surrounding the 2024 Spending Review and the absence of an agreed future plan for the programme, the Defra team faced the possibility of the agreement with BV expiring before an extension could be implemented. The Change Control Note 002 had extended the project until December 2024, meaning the team needed confirmation on the programme’s future by a point which left enough notice to extend the agreement if required. Although it was agreed that the BPF would not provide more funding for BF, the team were still required to secure an extension to the programme end date via a Change Control Note to allow the final deliverable, the programme evaluation, to be completed under an active agreement.

Safeguarding Processes and Policies

Safeguarding and Sexual Exploitation, Abuse and Harassment (SEAH) safeguarding are priority areas for all HMG ODA programmes, and Blue Forests has focused on strengthening the identification and mitigation of potential risks in this area over the course of delivery to align with this ambition.

Social and environmental safeguarding risks were briefly mentioned in the original business case and requirements to report safeguarding issues were not included in the original grant agreement signed in December 2016. Safeguarding and associated risks were mentioned from the third AR for the programme (calendar year 2019) onwards. This annual review highlighted the programme’s first safeguarding incident and reflected on BV’s response, as well as their safeguarding policies that were in place. Although potential safeguarding risks had not been fully captured in the Defra risk register, the findings suggest BV had effective policies and reporting measures in place.

The AR also noted that BV were actioning extra steps to mitigate any further issues though providing additional safeguarding training to all staff members and hiring an external consultant to review their safeguarding policies. BV undertook significant work to develop and improve their Protection Policy for Children and Vulnerable Adults, Whistleblowing and Reporting procedure and Code of Conduct in 2019, and a quarterly Safeguarding and Reporting Committee (SRC) was also created to oversee these elements of BV’s work. The SRC has responsibility for safeguarding and reporting, reviewing safeguarding policies and procedures, and developing new initiatives to strengthen organisational safeguarding practice, while reporting quarterly to BV’s Board of Trustees. Additionally, all BV staff receive mandatory safeguarding training on how to recognise and report a safeguarding concern.

From 2021 onwards, Defra annual reviews included sections that discussed any programmatic safeguarding issues, and a safeguarding risk was first included in the risk register in the 2021 AR showing a growing awareness of its importance. In the latter years of delivery of the programme there have been concerted efforts to improve the management and mitigations of safeguarding risks. In 2024, the Defra programme team conducted a SEAH safeguarding self-assessment (see Annex J) and delivery chain map for Blue Forests. An outcome from the self-assessment led to the development of the programme’s SEAH Action Plan (see Annex K) which laid out improvements for different areas of SEAH ambition. One action involved the joint signature of the Blue Forests Safeguarding Declaration (seen Annex L), which sought to address the absence of safeguarding reporting requirements and wording in the grant agreement. Although the approach to safeguarding at the inception of the

programme would not comply with current HMG ODA standards, the improvements made throughout the lifecycle have provided Defra with confidence that programme complies with the do-no-harm approach to delivery.

Health Services

Community health interventions are a relatively novel aspect of ODA programming within the Defra and BPF portfolio. Blue Forests delivers sexual reproductive health and rights services (SRHR), provides outpatient consultations, facilitates community health sessions and health promotion activities and helps to upskill healthcare workers in health delivery. Due to the contexts of these outputs, the health elements inherently carry a high level of risk. The programme's GEDSI analysis outlined how some of the challenges that the health activities face are deeply intertwined with social norms, cultural practices, and existing gender inequalities that restrict women's and adolescent girls' ability to make autonomous decisions regarding their reproductive health. The case study below provides an example of this:

Case study – The practice of 'Somonjara'

A significant cultural challenge in Velondriake (southwest Madagascar) is the practice known as Somonjara, particularly within the Vezo community. This practice encourages adolescent girls, typically between the ages of 12 and 16, to visit bars and nightclubs to find male companions. In Vezo culture, there is a historical belief that marrying young girls is a way to secure their future and honour the family. Parents often perceive this practice as a rite of passage for their daughters, which reflects a complex interplay between cultural traditions and economic pressures. Parents may indirectly encourage their daughters to engage in Somonjara, viewing it as a means for their daughters to demonstrate their social standing and attractiveness to potential husbands. Additionally, there is a misconception that engaging in such behaviour may yield financial benefits, however minor, for the girls' personal needs. This practice exposes young girls to sexual exploitation, early pregnancies, and health risks, while simultaneously hindering their educational opportunities and future prospects.

To combat this issue, BV's Safidy programme implements a range of targeted interventions designed to educate both adolescents and their parents about the risks associated with Somonjara. BV organise awareness-raising sessions that explore the potential dangers of early sexual relationships, emphasising the importance of personal safety, health education, and empowerment. Furthermore, BV have established Youth Groups, providing safe spaces for adolescents to discuss their rights, learn about contraceptive options, and explore their aspirations beyond marriage. These groups serve as a platform for fostering critical discussions about gender roles and expectations, ultimately empowering young girls to assert their autonomy and make informed choices about their futures. Additionally, BV use the Safidy programme to deliver a general campaign which promotes safe sexual practices to all young people within the communities.

Another key risk relating to the SRHR interventions involves the possibility of unintended health and welfare consequences due to the sensitive nature and context of delivery. There were no reports of such risks materialising during programme delivery, however, if this were to be realised within the Blue Forests context, it could result in negative implications for women, family and communities, in addition to reputational damage for the UK and BV who may be seen to be using family planning as a climate mitigation mechanism. These risks were mitigated by ensuring all interventions are demand-led and any family planning work was voluntary and rights-based, with informed consent being sought. The SRHR interventions are part of holistic and sustainable healthcare provision serving the needs of the community and are delivered via downstream partner Marie Stopes International (MSI), which has world-leading expertise and experience delivering rights-based SRHR interventions. Colleagues at Post in Madagascar were also consulted for their input on the health activities implemented, and they were supportive of the efforts to fill gaps in access to medical care. Despite this, health interventions generally fall outside the areas of expertise for environmental programme teams, and as mentioned, carry an inherent level of risk.

Recommendation: Defra ODA programme teams delivering SRHR should commit to establishing an agreed position on whether these activities should be included in future programmes and in what contexts, given the inherent safeguarding risks highlighted.

Safeguarding Incidents

BV reported 11 safeguarding concerns to the SRC during the programme's lifetime. Incidents were always promptly reported to Defra, and each was investigated in accordance with BV's safeguarding protocols and policies. BV also used each investigation to identify lessons learned and make necessary improvements to their policies and response systems in efforts to prevent future safeguarding issues. Some of the strengthening actions taken included more frequent refresher training on safeguarding for BV staff, and engaging external organisations, such as Every Child Protected Against Trafficking (ECPAT), to visit programme sites and provide training and awareness raising on child exploitation and protection.

The receipt of safeguarding concerns across the programme provides Defra with confidence that the reporting mechanisms in place are effective and well-advertised. As demonstrated in the example above, case handling and follow-up actions were consistently agreed with the guidance of the ODA Hub's Safeguarding Lead, and BV have continually committed to strengthening their organisational safeguarding practices.

F: Programme Management: Commercial and Financial Performance, Monitoring and Evaluation

Summarise the performance of partners and Defra, notably on commercial and financial issues, and including VfM measures of economy and efficiency

Gender Equality and Social Inclusion (GEDSI)

Over the course of the programme's lifecycle, Defra has sought to raise the profile and strengthen the integration of Gender Equality, Disability and Social Inclusion (GEDSI), previously GESI, in its programmes. The establishment of the Social Development Unit within Defra has supported increased capacity and capability in this area through GEDSI specific assessments, guidance and training. In line with this, the Blue Forests programme has put significant effort into improving its GEDSI approach since it was first conceived at the end of 2016. The original business case made no reference to GEDSI, but over the course of the programme both Defra and BV have endeavoured to mainstream these principles and aims into activities and outcomes. The GEDSI term first appears in the programme's 2022 annual review as part of a recommendation to strengthen this area of the programme alongside wider BPF portfolio efforts. ARs prior to this had made reference to the programme's work towards improved gender outcomes and BV's commitment to Equality, Diversity and Inclusion, and the 2018 AR committed to disaggregating data by gender from 2019. Although UK GEDSI ambition in ODA programming increased relatively late in BF's lifecycle, the programme's business case set out the importance of including the most marginalised community members and the programme's health activities were specifically designed to provide women with additional opportunities. Defra and BV continued to make progress in this area throughout programme delivery.

Data Disaggregation

As noted in section B, BV reviewed their data collection system to identify areas and indicators where gender disaggregated data could be provided or collected in future programming in response to previous AR recommendations. Despite not including gender disaggregation for people focused indicators in the logframe, BV have access to this data and provided it as part of the PCR process. Sections B and C have recognised where data disaggregation and MEL frameworks could have been stronger and have included this in relevant lessons learned and recommendations. Overall, where gender disaggregation is available, the programme can be seen to have effectively targeted women, with all 5 of the indicators comprising a higher number of women beneficiaries.

GEDSI Action Plan

BF was assessed as a "GEDSI sensitive" programme in 2023, and Defra held an in-person GEDSI workshop with the BV team in July 2024. The workshop gave an overview of Defra ODA requirements and facilitated the agreement of a GEDSI Action Plan (see Annex M) to identify ways to elevate the programme to meet the "GEDSI empowering" criteria.

Significant progress was achieved against key actions in the final months of delivery. Highlights include completing the programme's GEDSI Analysis (see below and Annex N) and amplifying the voices of marginalised groups at international forums. These efforts aimed to influence global policy dialogue by sharing lessons on locally led marine conservation and inclusive governance. A key example of this was BV's participation in the [Wilton Park event](#), "Transformative Change for Global Biodiversity: The Role of Gender Equality and Social Inclusion" in September

2024. The event brought together 55 delegates from governments (Global South and North), indigenous organisations, civil society, multilaterals, and academia to explore practical measures ensuring women, girls, and marginalised groups are central to tackling the biodiversity crisis. Through this engagement, the programme contributed learning and best practice to the development of the Principles for Inclusive Nature Action¹¹.

However, further progress was needed to fully meet the GEDSI empowering criteria. In the final year of the programme, updated HMG guidance required programmes to demonstrate that disability inclusion had been considered throughout the programme lifecycle to meet GEDSI empowering. While this does not suggest it was absent from BF, Defra resourcing constraints and the imminent programme closure meant that the required evidence-gathering could not be completed. As a result, it was not possible to formally transition the programme to GEDSI empowering status before closure.

GEDSI Analysis

The GEDSI Analysis (Annex N) was conducted in August 2024 to better understand the social contexts that the programme operates in within Indonesia and Madagascar. Economic vulnerability emerged as a significant barrier to equality across both country contexts, with households heavily dependent on unpredictable marine resources and lacking access to formal financial services. Women and other marginalised groups face barriers to participating in governance and resource management, compounded by patriarchal norms, limited educational opportunities, and restrictive cultural practices. The presence of migrant fishers and diverse ethnic identities adds further complexity, necessitating adaptive approaches that respect local traditions while actively promoting inclusion. An example of this is that women, in particular, are disproportionately affected by management measures such as temporary closures, as their livelihoods often depend on nearshore gleaning. Structural barriers such as asset ownership, time constraints, and limited financial literacy compound these challenges. Health inequalities are also a key factor, with restricted access to reproductive healthcare and contextual cultural practices, such as early marriage, deepening gender-based power imbalances and limiting opportunities for girls and women.

The analysis showcased how the programme's interventions (ranging from inclusive governance mechanisms and alternative livelihoods to health education and financial inclusion) are designed to address these intersecting challenges. For example, by training women as data collectors, promoting equitable fisheries management, and creating safe spaces for participation, the programme challenges structural norms and amplifies marginalised voices. These strategies reflect BV's nuanced understanding of the social, cultural, and economic contexts required to ensure inclusive delivery and impact.

The analysis also outlines BV's strong commitments to safeguarding and acknowledges the organisation's Code of Conduct and Protection for Children and Vulnerable Adults policies, in addition to their Whistleblowing and Reporting procedures (safeguarding measures outlined in the analysis are discussed further in section E). It also details BF's adaptive approach in incorporating GEDSI elements into the programme pathways and activities through a series of case studies which have been integrated throughout this programme closure report to illustrate where women and youth have been given greater inclusion and opportunity in alternative livelihoods options, data collection and awareness raising. Overall, the analysis found GEDSI is strongly embedded in BV's values and policies, and the programme has demonstrated good awareness and responsiveness to the needs of disadvantaged and vulnerable groups. The programme evaluation corroborated that gender inclusion has been incorporated effectively into programme design and activities, but it also recognised that disparities in engagement persist due to cultural contexts and gender norms in the communities. For example, in Indonesia women expressed interest in wider engagement in patrol activities, but face barriers to participation in traditionally male-dominated environments where they may be viewed as unsuitable for the task. Encouragingly, this was received positively by the men present during the evaluation interview, and two women already participating in the surveillance groups discussed their experience positively, with no safeguarding concerns. Furthermore, an all-female patrol group has been established in Kubu Raya (site 5) following programme closure. BV recognise there is a future opportunity to challenge these cultural barriers and address unequal power dynamics within the communities to achieve wider societal change. This future ambition is welcomed by Defra.

Recommendation: Programme teams providing BV with future funding (COAST) should ensure that updated requirements on disability inclusion are communicated with BV at the earliest opportunity to effectively integrate this aspect into BV's future interventions.

¹¹ [Principles for inclusive nature action | International Institute for Environment and Development](#)

Recommendation: BV should consider integrating the Principles of Inclusive Nature Action into their policies to support and scale up transformative action to conserve, restore and sustainably use and manage biodiversity in ways that are locally-led, gender-responsive and inclusive of a wide diversity of rights holders.

SRHR Approach

The SRHR component of the programme is designed to empower women to make autonomous decisions about their bodies, providing them with better health and enhancing their ability to adapt to climate change. The link between conservation and SRHR and population dynamics is a sensitive and potentially controversial area. In response to this, BV conducted the programme's GEDSI Analysis and the Defra team used this alongside other evidence to assess the programme's alignment against a Defra guidance note on programmes using SRHR activities. Within the guidance note (see Annex O), there is a checklist provided which gives programme teams examples of best practice for these activities. A summary of how BF meets the Defra recommendations outlined in the checklist is provided in the paragraphs below.

Family planning services offered by the programme were entirely voluntary, offering multiple options to support informed choices around family size, pregnancy timing, and contraceptive use. Health interventions varied by site, and were guided by community-led needs assessments, with the aim of improving access to inclusive healthcare. The SRHR interventions were part of holistic and sustainable healthcare provision delivered via downstream partner Marie Stopes International (MSI) which has world-leading expertise and experience delivering rights-based SRHR interventions. SRHR work is delivered in Madagascar, via the 'Safidy' or 'choice' programme, which has been operating since 2007 and gives women and families the choice of how many children they have, and provides access to maternal and child healthcare. To address some of the societal challenges identified in the programme's GEDSI analysis, SRHR activities are implemented through a multifaceted approach involving education, training, and community support structures, with a strong emphasis on respecting local cultural contexts while advancing health rights.

The programme's logframe was updated in 2023 to reflect evolving health strategies, with indicators added to track women's access to SRHR services and the capacity of health service delivery points to meet community needs. Although programme MEL tools do not disaggregate contraceptive choices, BV's end of programme report includes specific figures for which contraceptive measure had been used at different sites, suggesting potential for improved data capture. Communications around SRHR have consistently aligned with HMG's rights-based and voluntary approach, with communications content always cleared by the Defra team. While Defra funds were not earmarked specifically for SRHR activities, BV maintained transparency through regular financial updates, and no budgetary issues were reported in relation to this aspect of the programme.

Potential SRHR safeguarding risks were a priority, with risks monitored through quarterly Steering Group meetings and managed by BV's Safeguarding and Reporting Committee. Eleven safeguarding incidents were reported overall during the programme and are outlined in more detail in section E. Whilst these incidents were not related to SRHR activities, active reporting indicates that BV have effective grievance mechanisms established. Post-programme sustainability in this area is uncertain, but efforts such as training health ambassadors and BV's recent success in securing additional funding offer positive mitigations. Strategic exit planning has been identified as an area for improvement to ensure long-term impact of the programme overall, and this also applies to the work covered by SRHR activities, although the programme has mitigated this through training a network of health ambassadors and securing additional funding from other sources.

Poverty Reduction

Blue Forests supported poverty reduction through community-led initiatives that focus on the improved management and sustainability of small-scale fisheries. Additionally, the programme provided healthcare assistance to beneficiaries, and it developed sustainable livelihoods in coastal communities in Madagascar and Indonesia. BV's delivery model that was employed in the programme is world-leading and lays a blueprint for transferring the rights to communities through protected areas. The communities that the NGO worked with are upskilled to conduct monitoring of the marine environment, which ultimately leads to increased knowledge of the positive impacts of protected areas and a sense of ownership and knowledge which helps inform decision making. This, over time, results in pay offs, such as implementing sustainable value chains, and increases inclusive community access to marine resources.

An internal review by Defra in 2025 concluded that BF shows strong links to environmental change, with a partial understanding of poverty and inequality. This is backed up by a series of mangrove knowledge products developed by the programme which focus on these three areas. BF takes an intersectional approach that explores how overlapping forms of exclusion (e.g. gender, ethnicity, disability, or age) interact to shape people's experiences of poverty and environmental change. Although the term intersectionality is not explicitly mentioned in programme documentation, BF acknowledges that women in Indigenous Peoples and Local Communities (IPLCs) or marginalised groups often face overlapping barriers, including lack of healthcare, education, and access to resources, and appeared to target such groups.

The 2023 annual review recognised the logframe's limitations with regards to measuring the overall impact that the programme is having on poverty alleviation and supporting vulnerable community members, particularly with regards to disaggregation of data. As mentioned in section B, the logframe underwent a review and update in 2024 to adapt in line with BV's changing strategy around alternative livelihoods activities. BV learnt that taking a wider approach to financial inclusion by tackling challenges around existing as well as possible new livelihoods and assisting financial planning can safeguard the livelihoods and income of the whole community (addressing issues of inclusion) and deliver long-term sustainable outcomes and financial resilience. In response to these learnings, additional elements of value chain additions and savings and loans groups were included in programme implementation and qualitative narrative reporting, and seven new indicators relating to this were added to the logframe in 2024.

Blue Ventures Performance

Throughout the programme the relationship between Defra and BV remained consistently productive and positive. BV were proactive in data collection, responsive to procedural requirements, and transparent around risks and issues. They consistently adapted to meet changing HMG requirements, even when outside their standard operations, and they worked diligently to strengthen the programme in alignment with enhanced ODA ambition in areas such as GEDSI and safeguarding. Wider feedback from colleagues at Madagascar Post noted that BV has worked well with partner governments and local communities in the country over the programme's lifetime. The BPF East-Africa Regional Coordinator also recognised that the programme is well integrated with other initiatives in the country, pointing to BV and BF supporting MIHARI, the national LMMA network, now under creation with the support from WIOMSA, IUCN and OCPP. Communication was open and collaborative, with BV receptive to strategic guidance and committed to high-quality delivery. Financial reporting was also clear and timely, delivered through regular updates via quarterly Steering Group meetings and internal monthly finance reviews. Staff turnover and transitions within the BV team were managed effectively.

BV continued to work through the following different partners in Indonesia via annual sub granting:

- Yayasan Hutan Biru (YHB, also known as Blue Forests);
- Yayasan Planet Indonesia (YPI);
- Yayasan Mitri Insani (YMI).

Yayasan Pesisir Lestari (YPL) was set up by BV to run the Indonesia programme and managed it until July 2023, after which they matured into an independent organisation. Following this, BV took over the programme in Indonesia through a new social enterprise, retaining many of the same staff. After procuring NIRAS as the programme evaluator in 2021, BV staff worked effectively with them through different stages of the evaluation process, successfully delivering ToC and logframe reviews, as well as assisting with the logistics and planning for the evaluation site visits. During the BF evaluation dissemination session, NIRAS provided positive feedback on their collaboration with BV, particularly regarding their logistical planning and itineraries for the evaluation site visits. NIRAS and BV also established and chaired the Evaluation Steering Committee, and this helped to oversee its successful delivery according to the deadline.

BV's end of programme report was delivered within the set deadline and to a high standard. The report contains a detailed overview of the programme and its achievements, and it formed an important part of the evidence base for this PCR. Prior to drafting the report, BV sought steer from Defra on its contents. The BPF portfolio and wider ODA Hub currently don't have guidance to provide to delivery partners for an end of programme report, and as such, the Defra team shared a blank ODA PCR template with them as a broad guideline on what it should help to inform. As a result, the BV report follows a similar structure to this PCR. Whilst this proved incredibly beneficial and informative, some areas of this PCR and BV's report are relatively duplicative, and if the programme team were able to provide

more detailed and specific guidance to the delivery partner, they could use the delivery partner report to commission for more tailored information, for example, case studies on certain areas of the programme.

Recommendation: Defra ODA Hub colleagues should work with Defra programme teams to develop guidance or a template for end of programme reports which can be easily shared to provide better steer to delivery partners on report content.

Summary of Defra performance

Defra Performance

BV noted that Defra's eight-year funding of BF has provided stability to beneficiaries and local partners and enabled long-term transformational change. However, the programme was also subject to multiple changes to align with Defra's increasing ambition on ODA requirements that sought to demonstrate commitment to HMG values and ensure impact of the programme. While the changes were aligned with strategic intent, they could unintentionally result in an increased burden on delivery partners through frequent adjustments to requirements, terminology (e.g. GESI to GEDSI), and expectations. In their feedback on working with Defra, BV noted this as a challenge, as heightened requirements can lead to heavier workloads for delivery partners and the need to retrospectively search for information. In addition, BV noted that report approval processes occasionally faced delays due to multiple rounds of questions and feedback from Defra, although this did not hamper programme delivery overall.

Recommendation: To support more effective delivery, Defra should ensure clarity and coordination in the communication of requirements and expectations across all ODA programmes. Establishing structured and reasonable timelines for changes and reports will help enable delivery partners to better align with UK priorities and contribute more efficiently to shared outcomes whilst avoiding overburdening delivery partner resources.

Despite the above challenges, the BV-Defra partnership was strong, and BV provided positive feedback on the Defra team, noting them as being engaged, supportive and accommodating. BV also emphasised that the flexibility in Defra funding enabled adaptive learning that was incorporated throughout the programme into project budgets and logframes. This was supported by the programme's final evaluation, which recommended that Defra should continue to enable flexible funding for delivery partners so that they may adapt according to the challenges observed and contexts on the ground. Overall, BV valued the trust placed in their community-first approach and encourage Defra to continue similar funding models in future programmes.

Feedback from the British Embassy in Madagascar noted that although UK support to BF and the positive impacts of the programme are visible in-country, the Defra team could have strengthened this further through more frequent field visits. The Defra team did not make site visits as part of this programme closure review, and the last visit that the team made was to Madagascar in 2023. Constrained ODA budgets may reduce visit opportunities for programme teams in the future, but it is important to recognise that these are a critical way of increasing UK visibility, as well as qualitatively assessing the programme. BF is not seen as discrete and is packaged up with wider BV work, limiting external visibility and making it difficult to attribute and monitor programme impacts. A higher frequency of communications pieces could have helped to share the strong results and changes that the programme has been successful in achieving.

Programme-level approach to monitoring and evaluation

Paris Alignment

In line with the FCDO Programme Operating Framework (PrOF) which sets out mandatory rules and guiding principles for the implementation of policy programming, BF aligned with the Paris Agreement and delivered high positive impacts for the climate, nature, and biodiversity by providing financing and capacity building to developing countries to mitigate climate change, strengthen resilience and enhance abilities to adapt to climate impacts.

Contribution to UK ICF Ambitions

Five ICF KPIs were set out in the business case as additional metrics that the programme would be measured against. Climate finance plays a crucial role in assisting developing nations to mitigate and adapt to climate impacts, helping the UK deliver on commitments made to developing countries under the Paris Climate Agreement. The inclusion of ICF KPIs enabled the programme to contribute to the UK's pledge to spend £11.6 billion of ICF between

2021/2022 and 2025/2026, including at least £3 billion on protecting, restoring, and sustainably managing nature, with £1.5 billion on forests. From the outset, BF was classified as 100% International Climate Finance until the final year of delivery where it was amended to 90% due to the community healthcare interventions lacking direct links to climate outcomes. Upon programme closure, BF continues to report against five ICF KPI indicators (see section A), four of which have remained throughout. Annual ICF KPI returns involved quality assurance from BPF and ODA Hub analysts to ensure accurate reporting.

Monitoring and Evaluation

The business case recognised that BV was already in the process of monitoring the ecological and social impacts of their work through integrated and participatory approaches. It proposed working with BV to create a streamlined Monitoring and Evaluation approach that would provide HMG with assurances on delivery while also aligning with their existing practices. Overall, this approach was followed, and Defra and BV worked together to create and improve monitoring and evaluation methods.

As discussed in section B, the ToC and logframe went through a number of reviews throughout delivery to adapt to challenges and wider changes in community needs. Targets for both impact indicators and the majority of outcome and output indicators were achieved, showing positive results for the programme. However, the extent to which some indicators were exceeded suggests that some targets could have been more ambitious, as mentioned in section C.

During programme delivery, Defra undertook site visits to Madagascar in 2018 and 2023. Although the team did not visit programme sites in Indonesia, regular contact with the BPF Southeast Asia Regional Coordinator helped to provide localised insight and context to delivery. NIRAS began the programme evaluation process at the end of 2021, first delivering the evaluation inception report in 2022, followed by the final evaluation in August 2025. A summary of the evaluation's key findings can be found in Annex P. In the intermediary period between the inception report and the final summative evaluation, a logframe and ToC refresh was agreed to reflect programme adaptations and better integrate changing priorities.

Section A notes that the evaluator, NIRAS, held a dissemination session with Defra and BV in August 2025 following the completion of the final evaluation. The session provided a platform for the BF Evaluation Steering Group to give reflections on the methodology and process, key findings, successes, recommendations and challenges. It was felt by the Defra team that a more tailored dissemination would be better suited for a wider BPF audience, and this is planned to be delivered following the completion of this PCR.

Recommendation: Defra programme and evidence teams should work together to plan and deliver a tailored dissemination session for BPF colleagues, picking out key learnings and recommendations from this PCR and the evaluation which can be applied in new and existing programmes across the portfolio. The Defra programme team should also seek opportunities for BV to collaborate and share lessons learned with other ODA programmes across the BPF portfolio and wider IBC.

Date of last narrative financial report	17/12/2026	Date of last audited annual statement	17/12/2026
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