



Darwin Initiative Main: Final Report

To be completed with reference to the "Project Reporting Information Note":
(<https://www.darwininitiative.org.uk/resources/information-notes/>).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes.

Submission Deadline: no later than 3 months after agreed end date.

Submit to: BCF-Reports@niras.com including your project ref in the subject line.

Darwin Initiative Project Information

Project reference	28-017
Project title	Establishing a biocultural heritage territory to protect Kenya's Kaya forests
Country(ies)	Kenya
Lead Organisation	International Institute for Environment & Development (IIED)
Project partner(s)	KEFRI (Kenya)
Darwin Initiative grant value	GBP £ 347,626.41
Start/end dates of project	Start 01/10/2021 End 31/12/2024
Project Leader name	Krystyna Swiderska
Project website/blog/social media	https://www.iied.org/establishing-biocultural-heritage-territory-protect-kenyas-kaya-forests
Report author(s) and date	Krystyna Swiderska, Chemuku Wekesa and Leila Ndalilo 15th April 2025

1 Project Summary

Biodiversity is declining rapidly in Kenya's sacred Kaya forests which form part of the Coastal Forest global biodiversity hotspot. These ancestral Mijikenda homesteads have traditionally been protected by Kaya elders through customary laws and taboos. But due to poverty, population pressure and weakening of traditional institutions and culture, exacerbated by drought and food insecurity, these forests are experiencing significant degradation particularly by youth and women for income. Most young people no longer respect Kaya elders' conservation rules due to modernisation and external religions. Water in rivers have significantly declined due to climate change, forest degradation and industrial use and pollution. Drought tolerant indigenous crops (sorghum, millets, cowpeas) have also significantly declined due to promotion of modern varieties. These problems were identified through meetings with National Museums of Kenya, Kaya elders, farmers, youth and women in Rabai; and through previous research by IIED, KEFRI and others.

The project was located in Rabai community/sub-county, Kilifi county, semi-arid coastal Kenya, about 19 km north of Mombasa. It aimed to protect and restore 4 Kaya forests, including: endangered endemic tree species, eg: *Bauhinia mombassae* (fuelwood/medicinal); *Combretum tenuipetiolatum* (fuelwood/charcoal); *Synsepalum subverticillatum* (fruit/construction poles); nutritious indigenous vegetables and wild relatives (eg. coffee) that provide genetic resources for food, climate adaptation and income; endangered endemic golden-rumped elephant shrew (*Rhynchocyon chrysopygus*); and endemic

butterflies which have become rare (eg. *Acraea aubyni*, *Euxanthe tiberius* and *Hypolimnas usambara*). It also aimed to restore resilient indigenous crops and landraces on-farm for climate resilience.

The project supported a community-led process to:

- establish a collectively governed Biocultural Heritage Territory (building on the successful Potato Park biocultural territory in Peru) that brings together 10 villages, empowers Kaya elders to enforce conservation rules and enables the community to protect land and resource rights;
- build capacity to generate alternative income for 1600 forest dependent households particularly women and youth;
- restore endangered trees and elephant-shrew habitats in 4 Kayas, halve fuelwood consumption and restore multi-purpose trees on-farm, to reduce pressure on Kayas;
- restore agrobiodiversity, butterflies and ecological connectivity on-farms surrounding Kayas.

2 Project Partnerships

The project was co-led by IIED and KEFRI. IIED provided guidance and mentoring for facilitating the establishment of a collectively governed biocultural territory, but devolved day to day decision-making for implementation to KEFRI, in order to promote a community-led approach. Rabai Cultural Village (a CBO) was also included as a project partner – it was envisaged that they would help to coordinate and facilitate community level activities, but a conflict arose in year 1 between the coordinators of RCV and the Kaya elders who accused them of financial mismanagement. Although the matter was resolved at a community meeting in April 2022 (see year 2 report), the Kaya elders and KEFRI still had some concerns and it was decided not to persist with RCV as a formal implementing partner. The project worked with five 'community researchers', each responsible for supporting project activities in 2 project villages each. The community researchers were employed by the project and selected in consultation with Kaya elders and village elders. They facilitated many of the activities, and were consulted in decision making along with Rabai's Kaya elders (responsible for conserving Rabai's 4 Kaya forests). Key government agencies and a few community representatives were also involved in a Project Advisory Committee which met twice a year (see previous annual reports).

IIED and KEFRI had a very good relationship for the first two years of the project. In the final year, IIED engaged a local NGO, SALT which has a track record of cultural revival in Kenya using community dialogues, to support the project since this loss of culture was identified as a key challenge by the mid-term M&E survey (see Annex 1). Differences of opinion as to the value of community dialogues and engaging SALT to facilitate dialogues put a strain on the relationship between IIED and KEFRI. The issue was addressed by consulting the community on whether or not to have further dialogues facilitated by SALT.

In the final year, it was decided not to renew the contracts of 2 community researchers (RCV coordinators) as they were not fulfilling the agreed tasks – the decision was made at a meeting with Kaya elders and village elders (see last annual report Annex). Following that, and a learning exchange visit to the Potato Park biocultural territory in Peru in May/June 2024, RCV submitted a letter of complaint about the project to IIED in early August 2024. The IIED project lead consulted the community researchers and Kaya elders and they confirmed that many of the accusations in the letter were unfounded, but also felt that there were some issues that needed to be addressed. IIED convened a meeting with Kaya elders, community researchers, village elders, biocultural territory committee chairpersons from the 10 villages and KEFRI, in early September 2024 to address the issues raised. The meeting agreed to establish a project steering committee involving the above actors that would meet monthly to address the issues and ensure active community engagement in decision-making. The PSC met in October and November 2024 and helped to restore trust (see minutes in Annex 2).

KEFRI was involved in preparing this final report – they commented on the draft report and led the work to conduct the final M&E survey working with community researchers and prepared the final M&E report. IIED has developed a good relationship with Rabai community and they are likely to continue collaboration. RCV now has two new coordinators who are trusted by Kaya elders (Daniel, Kaya elder, pers comm, IIED-Rabai meeting, 26 March 2025).

3 Project Achievements

3.1 Outputs

Output 1: *Collective gender-balanced culturally-rooted Rabai Biocultural Heritage institution (or 'Association') established for Kaya forest conservation and sustainable development, legally registered, and internationally recognised.*

This output has been largely achieved. Biocultural Heritage Territory (BCHT) village committees have been established in 10 villages, and a BCHT landscape committee has been established linking the 10 villages and Rabai Kaya elders. The landscape committee includes at least 10 women out of 30 members ie. 33% women (Annex 3). The BCHT institution has not yet been legally registered - the document for registration is being finalised following a meeting with Rabai community on 24-25 March 2025, where a few changes were agreed to enhance sustainability. IIED and KEFRI plan to submit the application for legal registration by the end of April 2025. The BCHT goals, guiding principles and by-laws are culturally rooted (see Annex 3).

International recognition of Rabai's BCHT has been promoted through the following events and publications disseminated through the main IIED website and biocultural heritage website, IIED newsletters and social media:

- 2 IIED blogs: [Indigenous Peoples are the real solutions to the nature and climate crises | International Institute for Environment and Development](#); [Achieving 30x30: supporting Indigenous and traditional territories and cultures | Biocultural Heritage](#)
- Presentations at CBD COP15 and CBD Working group on article 8J, and related newstory, see: [CBD Working Group 8J & FAO Treaty: protecting traditional knowledge | Biocultural Heritage](#);
- Presentation at Darwin Initiative side event at CBD COP16: https://www.linkedin.com/posts/iied_cop16-kmgbf-cop16colombia-activity-7254435022714163201-Oa55?utm_source=share&utm_medium=member_desktop&rcm=ACoAAAt19tIBrFna-BIBwaaTfMIYljL6ZFPs7Uc
- Session on the BCHT in Rabai at the International Society of Ethnobiology Congress, 2023.
- A podcast [Establishing a biocultural territory in Kenya | Biocultural Heritage](#), and
- A box in an IIED briefing paper (November 2022). [Traditional mountain landscapes: crucial for meeting biodiversity and climate targets | IIED Publications Library](#)
- Reports of three annual project workshops:

[Establishing a Biocultural Heritage Territory to protect Kenya's Kaya forests - project launch workshop report | IIED Publications Library](#);

[Establishing a biocultural heritage territory to protect Kenya's Kaya Forests: mid-term project workshop | IIED Publications Library](#);

[Establishing a biocultural heritage territory to protect Kenya's Kaya forests: third annual project workshop | IIED Publications Library](#)

In addition, a book chapter on Rabai's BCHT has been prepared for a Satoyama Initiative publication (Annex 4).

Indicator 1.1 By mid-2022, Kaya elders and 10 village leaders have agreed to establish a collective BCHT institution comprising 30-50% women; and by mid-2023 have agreed culturally-rooted objectives, guiding principles and rules for conservation and equity (eg. prohibitions on felling trees, grazing in Kayas, selling land).

This has been fully achieved: the 10 villages and Kaya elders agreed to establish a collectively governed BCHT by May 2022, and the village level and landscape level committee culturally rooted goals, principles and rules were agreed by April 2023 (see mid term workshop report under Output 1 above). The landscape committee includes 33% women (Annex 3). Although the committees had been constituted by April 2023, the village level committees are not active

as there are not enough committed individuals (beyond the chairpersons). Landscape level meetings have not been held as the elected chairperson is not active and it is difficult to cover the meeting costs for 33 people. However, a follow-up event was organised by IIED and Rabai community on 24-25 March 2025 to enhance sustainability, where Rabai's Kaya elders and clans agreed to hold regular clan meetings and dialogues at landscape level to revive traditional culture, bringing together the 10 villages, with members contributing food and a small fee to support meetings (Annex 5). There seems to be real energy to continue these clan meetings. A key lesson from this is that a BCHT institution should build on traditional governance systems to be self-sustaining. Even though there are Kaya elders in only 4 of the 10 villages, through the clan system the other villages can be represented. The clan meetings will help to revive and strengthen the traditional governance system and this can provide the basis for a self-sustaining BCHT institution. The document for registration of the BCHT institution is being revised to ensure it does not conflict with a possible future structure/model which incorporates clan governance (Annex 3). The original log frame does include an assumption on 'different village authorities are committed to working together' but not that village level committees would be sustained.

Indicator 1.2 By September 2024, proposed BCHT institution has been presented to local government agencies; suitable option for registration identified; and documents for registration submitted. A proposal for registering a BCHT association has been presented to and agreed by local government agencies and the County Government of Kilifi (see final workshop report under Output 1 above).

Indicator 1.3 By 2024, process for legal registration of BCHT institution is completed or underway.

The document for registration is being finalised (Annex 3) and will be submitted in April 2025.

Indicator 1.4 By June 2023, blog on the project is downloaded 100 times. By 2024, briefing paper, case study (English, Swahili) and news-story on the BCHT are downloaded 100 times each; Rabai BCHT is presented at CBD and FAO side events; and journal article on the BCHT and biodiversity-culture-livelihoods links is submitted to open access journal.

This was largely achieved. Blogs on the BCHT were published in 2023 and 2024 and each has been downloaded over 100 times. It was not possible to also produce a briefing paper and case study due to funding and time constraints (additional funding was needed for the Project Steering Committee). However, a podcast was produced instead and the Rabai BCHT was included as a boxed example in an IIED briefing paper (see Output 1 above). IIED has set aside funding to produce a case study on the BCHT in Rabai in 2025. The Rabai BCHT was presented at 3 CBD side events and an FAO Treaty side event and a news story was published on these events (see Output 1 above). An article on the BCHT has been submitted to Satoyama Initiative – a book chapter on 'Enhancing ecological connectivity in Kaya forests landscape through a Biocultural Heritage Territory (BCHT) model' is due for publication in March 2025 (see Annex 4).

Output 2: *Rabai Cultural Village (RCV) is strengthened and scaled-out to 1 other Kaya and capacity of 3200 forest-dependent women and youth is built, tripling incomes from sustainable products with high demand.*

This output has been fully achieved. RCV has been strengthened through training in book-keeping and appointment of new coordinators who support community interests (following a conflict with Kaya elders in 2022), and members of the Rabai Cultural Village have been incorporated into project micro-enterprises such as beekeeping, briquette making, coconut oil and broom making. RCV (adjacent to Kaya Mudzi Muvya) was scaled out to establish Bofu Cultural Village adjacent to Kaya Fimboni. Households adjacent to 4 Kaya forests participating in microenterprises generated an average of \$303 per month in 2024 (Annex 6), compared to an average baseline of \$109/month at the start of the project (Annex 7), representing a tripling of incomes, for an estimated 1,650 households. A total of 431 people were trained who in turn trained ten people hence 4,310 people were trained (see Annex 6).

Indicator 2.1: *By March 2023, 1 new Cultural Village with enterprise groups comprising c.80% women established in Kaya Bomu including 3-4 traditional houses with basic facilities (toilet, water); and new micro-enterprises established in villages adjacent to 4 Kayas (Bomu, Fimboni, Mudzi Mwiru and Mudzi Mwiru).*

In Bofu Cultural Village, the project supported the construction of four traditional houses (see Annex 8) and incorporated a seed bank in the village to store traditional seeds and facilitate seed sharing amongst community members for agrobiodiversity conservation. Households adjacent to Kayas Bomu, Fimboni, Mudzi Muvya and Mudzi Mwiru have been incorporated into project micro-enterprises such as beekeeping, briquette making, coconut oil and broom making, resulting in enhanced incomes amongst forest-adjacent households. Women form 80% of micro-enterprises beneficiaries, which suggests that a large proportion of income earned from micro-enterprises is invested in improving the wellbeing of their families (see Annex 6).

Indicator 2.2: *By March 2023, in each of 4 Kayas, 25 beehives are installed and 50 forest-degrading households (200 in total), particularly women and youth, are trained in beekeeping and honey value addition and linked to bulk buyers. By 2023, Kenya Bureau of Standards (KEBS) quality mark obtained; and each Kaya honey group (50 households) is selling 500 litres of honey per year, generating \$5,000/year or \$100/year per household (ie. \$8/month).*

100 beehives have been installed in 10 villages for 50 households near Kaya forests and 70% have been colonised. Drought in 2024 is thought to have affected colonisation. By December 2024, beekeeping households across all 10 villages generated a total of KES 80,300 (\$622.5) per year or an average of \$ 51.9 per month (ie. more than the indicator target of \$100/year although the quantity of honey produced was lower at 75.5 litres) (see Annex 6). 146 community members (80% women and youth) have been trained in beekeeping. KEBS quality mark is yet to be obtained - certification require periodic sampling of honey for laboratory testing. Regular production of honey in some villages was a challenge and this delayed the process. KEFRI will continue following up subject to regular production of honey for sampling.

Indicator 2.3: *By March 2023, 3200 forest-dependent women and youth (1600 households, c.400 per Kaya, c.80% women) are trained in sustainable broom making, basketry, natural coconut oil production, and value addition (branding) and business skills and are linked to bulk buyers in Rabai, Mombasa and Nairobi. Each person sells sufficient products to make \$200 per month by 2023; and \$300 per month by end of 2024.*

A total of 431 forest-dependent people from different households adjacent to 4 Kaya forests (mainly women and youth) were trained by the project in broom-making, basketry, stove-making, coconut oil production and briquette-making (by 2023, as per year 2 report), and they each trained ten other people, hence 4,310 people were trained. A survey of 200 households found an average income of \$303 per month from sustainable microenterprises, being generated by an estimated 1650 households (see final M&E report, Annex 6). Linkages to bulk buyers was delayed due to low quantities of products produced (eg. due to drought and shortage of low materials), so products were mainly sold in local markets.

Output 3: *800 fuel-efficient stoves and 4 briquette presses are installed, halving fuelwood consumption, reducing pressure on endangered fuelwood trees and enhancing income.*

The output was largely achieved: 699 fuel-efficient stoves were installed and fuelwood consumption was reduced by 40%.

Indicator 3.1 *By December 2024, micro-enterprise groups in 4 Kaya Cultural Villages (at least 50% women) are trained to produce fuel-efficient stoves, and produce 800 fuel efficient stoves for project purchase (which they can continue to make and sell to generate income).*

In Years 2 and 3, training for production of fuel-efficient stoves (jikos) was undertaken for 211 community members living adjacent to Kayas Mudzi Mwiru, Mudzi Muvya, Bomu and Fimboni, comprising of 70% women and 30% men (training of 157 people was reported in last annual report plus 54 people trained in 2024 (Annex 6 & 9). The project has installed 699 fuel efficient

stoves (Annex 6). It was not possible to produce more stoves (jikos) or for the community to continue making and selling them for income because suitable soil could not be found in Rabai community. This specific constraint was not foreseen or identified as an assumption.

Indicator 3.2 *By December 2024, fuel efficient stoves are installed and used in 800 forest-dependent households (c.200 per Kaya), leading to c.30% reduction in fuelwood consumption.*

Fuel efficient stoves have been installed and are being used in 699 forest dependent households adjacent to Rabai's 4 Kaya forests. This has led to approximately 5% reduction in fuelwood consumption (see Annex 6).

Indicator 3.3 *By 2022, briquette presses are installed in 4 Cultural Villages (for shared use), and by March 2023 800 forest-dependent households (c. 200 per Kaya, particularly women and youth) are trained in their use and maintenance. By 2023 briquette presses are being used, reducing fuelwood consumption by c.30%.*

The project installed 4 briquette presses in Mwele, Ruruma, Mgumo wa Patsa and Mwamtsunga villages for shared use by forest-dependent households living adjacent to four Kaya forests. 163 households were trained in briquette making in total: 106 people in year 2 and 37 people in year 3 (see Annex 6 and annual reports submitted), and additional training was provided to 20 households in 2024 (see Annex 10). Although the target was to train 800 households, each person (ie. household) shared what they learnt with about 10 others households (Annex 6). A total of 1,013kg of briquettes have been produced by micro-enterprise groups leading to about 35% reduction in fuelwood consumption, and enhanced household income from sale of briquettes locally (Annex 6). Shortage of raw materials for briquettes (charcoal waste) poses a challenge for briquette production (as it is no longer available for free). Briquette making micro-enterprise groups (20 people) were further trained for 2 days on the use of alternative raw materials (eg. twigs and farm organic waste) by the County Government of Kilifi Energy Department in early November 2024 (Annex 10).

Output 4: *Endangered endemic fuelwood species, threatened native trees and elephant-shrew food/habitat are restored in degraded Kayas (50 ha), and on-farm (80 ha) providing alternative fuelwood, medicine and fruit and enhancing ecological connectivity.*

This output was fully achieved. Although the average survival rate was lower than the 75% target in indicator 4.2 (59% in Kayas and 65% on farm), the survival rate of small native palms (elephant shrew habitat) was 76% (see end of project M&E report, Annex 6).

Indicator 4.1. *By 2022, 4 endangered fuelwood/ medicinal/fruit species, 2 native palms, and small native palm (elephant-shrew food/ habitat) and c. 15 associated species, are planted in 4 Kaya forests, covering 50 ha of degraded forest in total; and 10 native fuelwood/ multi-purpose tree species are planted on 400 farms surrounding Kayas (amounting to 80 ha). Tree conservation and management plans are agreed for Kayas and farmland, with elders and farmers.*

The above native trees were planted in 4 Kaya forests by May 2022, covering a total of 50 ha of degraded forest land (see mid term M&E report, Annex 3), although only 1 native palm was planted rather than 2 (plus small native palm):

- 4 endangered endemic fuelwood/medicinal/fruit species: *Bauhinia mombassae*, *Anglocalyx braunii*, *Combretum tenuipetiolatum*, *Coffea pseudozanguebariae* and *Afrocanthium kilifiense*
- 1 native palm (*Hyphaene compressa*) and small native palm (elephant shrew habitat/food) (*Encephalartos hildebrandtii*)
- 15 associated species: *Afzelia quanzensis*, *Sclerocarya birrea*, *Ziziphus mucronata*, *Brachystegia spiciformis*, *Terminalia spinosa*, *Vernonia hildebrandtii*, *Hymenaea verrucosa*, *Annona senegalensis*, *Hyphaene compressa*, *Tamarindus indica*, *Julbernardia magnistipulata*, *Bombax rhodognaphalon*, *Lannea schweinfurthii*, *Maytenus buchananii* and *Acalypha fruticosa*.

On 400 farms surrounding Kayas, totalling an area of about 80 ha, the project has planted 10 native tree species to provide alternative sources of fuelwood, medicine and fruit and enhance ecological connectivity: *Azadirachta indica*, *Senna siamea*, *Melia volkensii*, *Cocos nucifera*, *Milicia excels*, *Anacardium occidentale*, *Mangifera indica*, *Psidium guajava*, *Tamarindus indica* and *Citrus limon*. Tree conservation and management plans were agreed for Kayas and farmland, with elders and farmers (see annual report submitted in 2023).

Indicator 4.2 By 2023, 75% of seedlings survive and double in size. By 2024, trees are well established on 50 ha of Kayas and 80 ha of farmland; and are protected and sustainably used once matured.

The end of project M&E survey (Annex 6) found a 59% survival rate on average for all the above indigenous trees planted in 4 Kaya forests (ranging from 42% to 83%). This was lower than expected due to persistent drought and browsing by livestock (particularly cows) (see Annex 6). However, small native palm had a survival rate of 76%. Monitoring and assessment of trees planted on-farm was undertaken for 400 households adjacent to 4 Kaya forests (Mudzi Mwiru, Mudzi Muvya, Bomu and Fimboni) in 10 villages, and found a mean survival rate of 65%, down from 80% recorded in the mid-term survey. This is attributed to the ongoing drought and browsing by livestock. The Log Frame identified 'rainfall patterns remain largely unchanged' as an assumption, but not livestock grazing.

Output 5: *Traditional crops and agroecological practices are restored and indigenous vegetables domesticated on 800 farms, enhancing resilience, nutrition, ecological connectivity and butterflies, and reducing pressure on Kayas*

This output has been largely achieved. A survey of 400 farming households (see Annex 6) found that 60.2% of the 382 farmers that participated in FFS ie. 230 farmers have restored traditional crops and each one has shared seeds with at least 2 neighbouring farmers who have restored traditional crops, bringing the total number of farms that have restored traditional crops and agroecological practices to 690 (230 x 3 = 690). See Annex 6.

Indicator 5.1 By 2022, awareness of the importance of traditional crops and indigenous vegetables for nutrition, health and resilience has been raised through 5 large village meetings involving 10 villages, and Rabai's annual Biocultural Festival; and by mid 2023 400 farmers (c.100 per Kaya, 50% women) have been trained to restore traditional crops and agroecological practices and domesticate indigenous vegetables through 8 Farmer Field Schools.

Farmers have been continuously sensitized on the importance of traditional crops and indigenous vegetables during community meetings, cultural ceremonies, the annual Rabai biocultural festival, and farmers field schools. At least 10 project meetings have been held in each village, 3 annual biocultural festivals, and 2 cultural ceremonies during annual project workshops. Additionally, 15 farmer field schools were held in three series (5 in each series, each involving 2 villages) with a KARLO scientist, to provide training on restoring traditional crops and indigenous vegetables using agroecological practices, building on traditional knowledge. In September 2023, 133 farmers participated in FFS, in December 2023 183 farmers participated, and in August 2024 66 farmers participated in FFS (Annex 11). A total of 382 farmers comprising c.60% women and 40% men attended the FFS. The FFS also enabled sharing of traditional seeds. 60% of the farmers that attended restored traditional crops and shared seeds and knowledge acquired with neighbours. See Annex 6.

Indicator 5.2. By 2023, FFS participants have each shared knowledge and seeds obtained with 2 neighbouring farmers; and regular farmer-scientist meetings have been established to provide follow-up support.

At least 60.2% of the 382 farmers who participated in farmer field schools in 2023 and 2024 (ie. 230 farmers) have since restored 4 traditional crops and 4 traditional vegetables on their farms, and reported having shared traditional seeds with at least 2 neighbours (based on a survey of all farmers who participated, Annex 6). Follow-up technical backstopping for FFS was provided by KEFRI during routine field visits and community BCHAT visioning meetings at village level, where emerging farmers' concerns were addressed.

Indicator 5.3 *By 2024, 800 farmers have restored 4 open-pollinated traditional crop varieties, domesticated 4 indigenous vegetables and restored agroecological practices, enhancing resilience and nutrition; and 10 landraces/ indigenous varieties have been added to Rabai's community seed bank and TK register.*

At least 60.2% of the 382 farmers who participated in farmer field schools (ie. 230 farmers) have restored 4 traditional crops and 4 traditional vegetables and agroecological practices on their farms, and reported having shared traditional seeds with at least 2 neighbours. who have also restored at least 4 traditional crops and 4 traditional vegetables on their farms. The total number of farmers who have restored traditional crops, vegetables and agroecological practices is at least $230 \times 3 = 690$ farmers. A new community seed bank has been established at Bofu cultural village with at least 10 traditional varieties.

Indicator 5.4. *By 2024, endemic butterfly numbers and species diversity have increased on 400 farms compared to a baseline established in 2022.*

The abundance of butterflies has increased on 200 farms sampled compared to the 2022 baseline, and overall species diversity has stayed the same. Butterfly surveys in 4 Kaya forests found that: species richness increased from 51 recorded in the mid-term survey to 55 in the end of project survey. Overall, the most common species in the 4 Kaya forests was *Charaxes varanes* (9.17%) followed by *Tirumala petiverana* (6.25%). The 4 new butterfly species recorded were *Henolesia perspicua*, *Ornipholidotos peucetia*, *Graphium leunidas* and *Papilio Dardanus*, each with a frequency of 0.42%. (Annex 6).

Outcome: *Biodiversity and endangered species are protected and restored in Rabai's Kaya forests and surrounding farming landscapes, poverty is reduced, culture and TK revitalised, and indigenous peoples and women empowered.*

The project has largely achieved this outcome but some challenges remain with respect to Kaya forest conservation due to factors outside our control.

Indicator 0.1: *By 2024, forest degradation is significantly reduced or halted in Kaya Bomu, Kaya Fimboni, Kaya Mudzi Muvya and Kaya Mudzi Mwiru, as indicated by little or no reduction in the density and diversity of endangered or threatened trees (excluding restored trees), and an increase in elephant shrew and butterfly populations, compared to baselines established in 2022.*

The final M&E survey in 2024 found that tree species diversity in the four Kaya forests remained high and slightly increased – 116 species were recorded (not including restored trees) compared to 114 in 2023 and 2022 (Annex 6, 1 & 7) . The diversity of shrubs in Kaya forests remained high, with 82 shrub species found in the four Kaya forests. As in the previous survey, endangered endemic *Zanthoxylum holtzianum* and *Vitex ferruginea* had low occurrence in Kaya forests due to overharvesting from the wild for edible fruits. The survey also shows that butterfly species richness increased from 51 recorded in 2022 and 2023 to 55 species recorded at the end of the project in four Kaya forests. The project reduced the extent of forest degradation in Kaya Bomu through tree planting in a participatory manner. It helped to reduce degradation of all 4 Kaya forests by reducing demand for fuelwood, enhancing awareness of youth and enhancing alternative incomes of forest adjacent households. But significant threats remain from the community - eg. grazing, charcoal making, and degradation by households further away and migrants - and also from outside. For example, in 2023 an MP cleared an area of Kaya forest to create a football pitch – after an outcry from the community, KEFRI, National Museums of Kenya (NMK) and others, the plan was dropped and seedlings were planted to regenerate the area (supported by other initiatives). An area of forest was also cleared to build a school (but replanted). An elephant shrew survey could not be conducted at the end of the project because of the high costs of hiring cameras from Kenya Wildlife Service. Elephant shrew habitats have been enhanced by planting small native palms in 4 Kayas, but at the final project workshop in March 2024, Kaya elders reported that poaching for bushmeat continues to put pressure on elephant shrew (see link under Output 1 above).

Indicator 0.2: By 2024, 4 endangered endemic and 2 threatened native tree species, c. 15 associated species, and small native palm (elephant-shrew habitat), are restored in a total area of 50 ha of degraded forest in 4 Kayas; and 10 native fuelwood/multi-purpose tree species are restored on 400 surrounding farms (100 farms/ Kaya), covering 80 ha in total (0.2 ha per farm) – with at least 75% survival rate.

The stated trees were restored on 50ha of degraded kayas (although only 1 rather than 2 threatened native palms) and on 80ha of farmland (at least 400 farms) but the survival rate was lower than the 75% target: 59% in Kayas and 65% on farm due to drought and grazing by livestock – see Output 4 above. The assumptions include that ‘planted sites are protected from grazing animals’, and that rainfall patterns remain unchanged and ‘if not water will be obtained from a perennial stream or seedlings kept in KEFRI field stations’. These assumptions were monitored quarterly but prolonged drought over 3 years was a major challenge. Grazing was most serious in Kaya Fimboni. After the final workshop in March 2024, the issue of livestock grazing in forests was raised with the County government, local administration (Chiefs) and Kenya Forest Service and they promised to put in place measures to address it (see link to workshop report under Output 1 above). Livestock grazing in Kaya forests remains a challenge due to weak enforcement of forest laws by relevant authorities.

Indicator 0.3: Sustainable products increase incomes of 3200 forest-dependent women and youth (1600 households) from 2022 baseline of \$109/month to: c.\$200/month by 2023, and c.\$300/month by 2024 .

A total of 431 people from different households around the 4 Kayas were trained by the project in broom-making, basketry, stove-making, coconut oil production and briquette-making, who in turn have trained ten people each hence 4,310 people were trained. About 1650 households are generating an average of \$303 per month from sustainable microenterprises (Annex 6).

Indicator 0.4: By 2024, 800 forest-dependent farmers (at least 50% women) have restored 4 traditional crops and domesticated 4 indigenous vegetables on-farm compared to a baseline in 2022.

An estimated 690 farmers have restored 4 traditional crops and 4 indigenous vegetables, about 60% women (see indicator 5.3 above and Annex 6).

Indicator 0.5: By 2024, Kaya elders are better respected by youth and relations between them improve; the number of conservation resolutions passed by the Kaya Elders’ Council being successfully implemented increases; attendance of traditional cultural ceremonies and rituals increases by 50%; and 50 women have taken on leadership roles (in Kaya Elders’ Council, BCHAT institution, Cultural Villages and micro-enterprises, and as community researchers), compared to baselines in 2022.

The relationship between youth and Kaya elders has improved significantly owing to the numerous community visioning meetings supported by the project as well as cultural ceremonies which have strongly engaged youth to interact with the elders. Youth participation in traditional ceremonies has increased and currently stands at about 52%, compared to less than 30% in 2023 (see mid-term M&E report, Annex 3). At least one conservation resolution/rule has been passed by Kaya elders in the past year and successfully implemented. Kaya elders successfully petitioned against construction of a school within Kaya Fimboni which had been influenced by local politicians. The project was abandoned and the Kaya areas were successfully replanted. The level of recognition of Kaya Council of elders and its rulings and resolutions by community members has marginally increased but is still relatively low owing to cultural erosion (Annex 6). However, the project has empowered Kaya elders in general (eg. by centering their voice in annual workshops, see 3.1) - they are certainly more confident to speak out during meetings and speak about Rabai culture than at the start of the project. One Kaya elders was a community researcher and travelled to Peru for a learning exchange in June 2024. At the follow-up workshop in Rabai on 24-25 March, a Kaya elder facilitated the workshop and his confidence visibly grew.

Womens’ involvement in leadership positions has significantly increased thanks to the project. 56 women are involved in leadership positions in the Kaya Elders’ Council, BCHAT institutions,

Cultural Villages and micro-enterprises (Annex 6). In addition 3 women were engaged in leading implementation of project activities as community researchers, which enhanced their capacity. One female community researcher co-facilitated the workshop on 24-25 March.

3.2 Monitoring of assumptions

The assumptions were reviewed and monitored by KEFRI every three months. They were also reviewed jointly by IIED and KEFRI at least twice a year. Changes in the assumptions or additions were identified in each annual report and requested through change requests.

Our basic assumption that alternative livelihoods alone are not enough to achieve change (reduce pressure on Kaya forests), but need to be combined with empowerment of Kaya elders to enforce conservation rules and revival of cultural values, still holds true. As a Kaya elder noted “we were exemplary in conserving our forest and environment but nowadays we’re becoming destructive, because of so-called ‘development’; we need to go back to our old culture and preserve it” (see final workshop report, Output 1, section 3.1). The drivers of forest degradation are not only economic but also cultural – Kaya elders’ rules are being sidelined as 15% of youth and many middle-aged people no longer respect traditional knowledge and culture (mid term M&E survey, Annex 3). One thing we had not originally fully considered in the pathway to change is the impact of external religions and in-migration on cultural erosion and forest degradation – Christian churches in particular do not allow people to practice traditional beliefs and Kaya elders are accused of witchcraft (and have been physically threatened).

The assumption that integrated landscape management and collective self-governance is needed to actively engage forest users and farmers in Kaya forest conservation also appears to hold true. We had originally assumed that establishing a collective BCHT institution linking Kaya elders and village elders (leaders) from the 10 villages would empower Kaya elders to enforce conservation rules. However, village elders are not elected by village members and accountable to them but are appointed by the government, and only 4 of the 10 BCHT villages have Kaya elders, so traditional governance is weak or absent at village level. Kaya elders are unlikely to be empowered to enforce conservation rules in a hybrid body that includes village elders employed by the government, given power differences. Although BCHT committees were established at village and landscape level in 2023, these have not met. The idea of establishing BCHT committees came from the community but they are not part of traditional governance. However, at a recent workshop in Rabai on 24-25 March, 50 community members agreed to hold regular meetings to revive traditional clans and there appears to be real energy behind reviving clans, which are part of the traditional governance system and cut across all villages. This reaffirms the assumption that strengthening and building on traditional governance systems is likely to generate more local ownership and self-sustainability than creating something new. Other assumptions also hold true: that jikos and briquette making can reduce pressure on forests also hold true, especially briquettes which reduced fuelwood consumption by 35% (Annex 6); and farmers want to restore drought tolerant traditional crops. It appears that planting trees on farm reduces pressure on forests but it is too early to tell from this project.

3.3 Impact

Impact: *Self-sustaining Biocultural Heritage Territory is established in Rabai, conserving biodiversity in 4 Kaya forests (580 ha) and farmland (14,000 ha) and reducing poverty, and scaled-out across Kilifi and Kwale counties.*

The project has contributed to establishing a self-sustaining BCHT by engaging several village members and leaders from 10 villages in a series of village and community level meetings to shape the BCHT objectives, principles and rules. It has also strengthened cohesion between villages (see project workshops section 3.1). Although the BCHT village and landscape committees have not met, during the workshop in Rabai on 24-25 March there was real energy behind the idea of reviving clans, and the community themselves developed a plan to hold monthly clan meetings to revive culture (the first meeting was held on 10th April, as confirmed by Tsui a community researcher). This could strengthen the traditional governance system at

landscape level and is more likely to be self-sustaining than a system based on an external model. The project has also contributed to self-sustainability by enhancing respect for Kaya elders and by engaging local government – Rabai Chiefs and Assistant Chiefs – in all project workshops. Chiefs from all 3 areas of Rabai were represented at the recent workshop on 24-25 March and expressed commitment to supporting the BCHT.

The project has contributed to biodiversity conservation in 4 Kaya forests through forest restoration, alternative livelihoods, and by reducing demand for fuelwood (through briquettes, jikos and planting trees on farm), as well as by raising awareness of the importance of conserving Kaya forests and traditional culture (see section 3.1). The BCHT is expected to enhance conservation of biodiversity in 4 Kaya forests and farmland by engaging 10 villages in collective self-governance of the landscape. While pressures on Kayas remain, the project has put in place the building blocks for wider community engagement – the clan meetings will be combined with Rome (a forum to transmit traditional knowledge) at village level to engage more and more people in cultural revival. The clan meetings aim to strengthen traditional beliefs and then engage religious leaders to address the threats posed by external religions. The BCHT process and institution has strengthened organisation at landscape level and hence capacity to resist external threats and speak with one voice – and legal registration of the BCHT association (this month) should enhance community representation and agency in discussions with policy makers etc. Importantly, registering the BCHT association will also enable the community to register Kaya forests under the Community Lands Act which will enhance the capacity of Rabai community to protect Kaya forests. Currently they are legally protected under the National Museums and Heritage Act but this is very weakly enforced. The project has enhanced conservation of butterflies, restored trees and agrobiodiversity on farmland and restored elephant shrew habitat in Kayas (see section 3.1).

The project has contributed to poverty reduction in Rabai. The final M&E survey (Annex 6) shows that incomes of about 1650 households participating in community enterprises have tripled on average, and 80% of beneficiaries are women. The project has put in place the building blocks for wider poverty reduction as successful enterprises are likely to grow. Shortage of raw materials was cited a constraint for some enterprises due to drought – but Rabai has potential to also generate income from ecotourism through promotion as a BCHT or ‘Coconut Park’ given proximity to Mombasa. The project contributed to scaling out the BCHT across Kilifi and Kwale counties by engaging Kaya elders from Digo and Duruma sub-tribes (Kwale county) in the final annual workshop (1 of whom has also visited the Potato Park), and by engaging the Kilifi county Director for Culture and NMK in all project workshops (section 3.1) and presenting the project to national policy makers (IUFRO conference).

4 Contribution to Darwin Initiative Programme Objectives

This project started in October 2021 and did not use the Darwin Initiative Standard Indicators – we did not select standard indicators or use them for monitoring.

4.1 Project support to the Conventions, Treaties or Agreements

The project has contributed to implementation of the CBD in Kenya, including conservation and sustainable use of forest biodiversity and agrobiodiversity, and Article 8(J) on maintaining and protecting traditional knowledge and 10 (C) on customary sustainable use. The project has also contributed to the implementation of the Kunming-Montreal Global Biodiversity Framework Target 3 on area based conservation and Indigenous and Traditional Territories by supporting the establishment of a Biocultural Territory of 20,000 ha; and Target 10 on sustainable agriculture by restoring agroecology and agrobiodiversity (see section 3.1, Output 5).

In Kenya, the outputs of the project have contributed to the process to develop a national and county government mainstreaming framework for biodiversity conservation. The outputs also contributed to implementation of The Kenya National Biodiversity Strategy and Action Plan. The BCHT concept has been included in the resource mobilization strategy for biodiversity

conservation by county government of Kilifi and Ministry of Environment, Forestry and Climate Change (see 2024 annual report). The project has contributed to integration of the GBF targets into the NBSAP for Kenya. It also contributed to the '15 billion trees by 2032' initiative of the Kenyan government.

At international level, the project has informed CBD Parties and observers of the role of biocultural territories in implementing the CBD and GBF Target 3, through presentations at COP16 (Darwin Initiative side event), the CBD Working Group on article 8J in November 2023, and CBD COP15. The project has also informed the FAO Treaty of the importance of conserving evolving in situ genetic resources in IP&LC governed landscapes to enhance conservation and sustainable use of vital genetic resources (including wild relatives) and protect farmers' rights, through a side event at the Treaty Governing Body attended by the Treaty Secretary in November 2023 (see section 3.1, Output 1).

4.2 Project support for multidimensional poverty reduction

Income poverty: Kilifi county is one of the poorest counties in Kenya, and in Rabai about 71% of people live below the poverty line (Republic of Kenya, 2013). The project has on average tripled household incomes for about 1650 households participating in community enterprises. A total of 431 people were trained by the project in broom-making, basketry, stove-making, coconut oil production and briquette-making who in turn have trained ten people each hence 4,310 people were effectively trained. Women form 80% of micro-enterprises beneficiaries, which means that a large proportion of income earned is likely to be invested in improving the wellbeing of their families. All villages generated income from honey although production was low in some villages (eg. due to drought). Coconut oil generated the most income (over \$800 in 2024) but the group members are only from one village (Mwele). Brooms were the second highest followed by briquettes (brooms were only produced by villages with sufficient access to raw materials for sustainable use) (see Annex 6). The diversity of enterprises established is likely to enhance resilience to climatic and market changes. In addition, the project employed 5 community researchers from Rabai as part of the project team, and provided Kaya elders with a small fee/token for attending project meetings, recognising that they do not receive a salary.

Food security: The project has enhanced community awareness of nutritional/health and resilience benefits of traditional crops and vegetables. Through farmers field schools, community members have been able to restore traditional crops (maize, cassava, millet sorghum and cowpeas) and vegetables (Mnavu, Mtsunga, Mchicha and Dzalakushe) leading to increased food and nutrition security and climate resilience. The Farmers field schools also enhanced seed sharing, peer to peer learning and adoption of traditional agro-ecological practices amongst farmers leading to increased cultivation of traditional crops over the last two years.

Marginalised groups, culture and rights: The project targeted the Rabai sub-tribe of the Mijikenda, a marginalised indigenous group. The Kaya elders that conserve sacred Kaya forests and used to govern the whole landscape are often sidelined by local government (Chiefs, Assistant Chiefs and Village Elders who are now appointed by the government). The project activities, meetings and workshops, recognised the importance of Kaya elders and the value of their traditional knowledge. The final project workshop included a community dialogue to revive Rabai culture (see section 3.1, Output 1). Cultural revival was further strengthened at the learning exchange workshop on 24-25 March 2025 (intended to enhance project impact and sustainability) (Annex). The project also enhanced support and recognition of the importance of Kaya elders by Chiefs by engaging them in annual workshops, in the visit to the Potato Park and in the learning exchange on 24-25 March 2025 (where they committed to support leadership by Kaya elders).

The project sought to empower the Rabai community and Kaya elders by establishing a collective biocultural territory association that will enable the 10 villages and Kaya elders to speak with one voice. It also strengthened cohesion between the 10 project villages, and enhanced recognition of the importance of Rabai cultural values, wellbeing concepts and cultural identity. Rabai's traditional values and wellbeing concept (Mudzini) are included in the

document to register the BCHT association as the guiding principles and goal for the governance of the territory (Annex 6). This document also identifies key customary laws that need to be applied in a villages, empowering Kaya elders to enforce customary laws. Furthermore, the chair of the BCHT association is a Kaya elder. The visit to the self-governed Potato Park in Peru for 6 Rabai community members was also an empowering experience.

The establishment of the collective Rabai association should strengthen the capacity of Rabai community to defend land rights against external threats and to influence external actors so that their rights are better respected. Registration of Kaya forests under the Community Lands Act is being explored which would strengthen community rights and conservation (Kaya forests are gazetted under the National Museums and Heritage Act but this is weakly enforced).

4.3 Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board ¹ .		The Project Advisory Committee included 2 women, ie. 30% of community representatives were women. The project employed 5 community researchers, 3 of whom were women.
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women ² .		None
GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups and the project will not contribute to or create further inequalities.	
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	X

Empowering women and Indigenous Peoples is included in the project Outcome and indicator 0.5, and in Output 1 on establishing a gender-balanced cultural rooted BCHT governance institution and indicator 1.1 – see the text on the Outcome and Output 1 in Section 3.1 above.

¹ A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

² Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

Thanks to the project 56 women have gained leadership roles, enhancing participation in decision-making, recognition and capacity. The microenterprises members are 80% women ensuring economic empowerment of women (Annex 6). Although Kaya elders are traditionally all men, the Kaya elders' council now includes 6 women (Tsui, community researcher, pers comm. 15 April 2025). This has restored the traditional complementary role of women in cultural activities (eg. preparing inputs for rituals) and enhanced the role of women in decisions on Kaya forest conservation. Although there are still more men than women in governance positions, the project ensured that some women are included in all leadership roles; and that women participants are actively engaged in all project meetings, workshops and activities.

The participation of women and Kaya elders was actively sought from the start through inclusive facilitation of project meetings and workshops. All structures established by the project eg. BCHT committees and Project Steering Committee (Annex 6 and 5), and all meetings and workshops were careful to ensure women's active involvement (see section 3.1, Output 1). The learning exchange on 24-25 March included 10 women and youth (in addition to those represented as community researchers and BCHT committee chairs). It was co-designed with Kaya elders, BCHT chairpersons and community researchers including women through 3 planning meetings, and the 2-day exchange was itself facilitated largely by a Kaya elder and a female community researcher. Efforts were also made to actively engage youth in all project meetings, workshops and structures, to raise awareness of the importance of traditional culture. IIED helped to enhance recognition of the importance of traditional knowledge and women's participation through project workshops (section 3.1).

The project took an empowering and transformative approach in relation to GESI because:

- Gender dynamics were explored as part of the baseline study to understand potential barriers to women's participation; and an IIED gender specialist has provided guidance on how to overcome perceptions that men are the leaders on traditional cultural issues.
- Activities are designed to strengthen the voice and decision-making power of women by ensuring at least 50% of participants are women, and inclusive facilitation, and by having women-only focus groups where women can articulate their concerns and positions. The project has highlighted the importance of women as custodians of traditional seeds and related knowledge to enhance climate resilience and nutrition.
- The project has actively promoted women in leadership roles – women comprise 3 out of 5 community researchers, lead 3 out of 5 enterprise groups, are 4 out of 10 village elders (elected as part of the project), and are 2 out of 10 village BCHT committees chairs. The BCHT landscape committee/association includes 33% women.
- Empowering women and indigenous peoples is part of the project Outcome, and the indicator target is that 50 women take on leadership roles.
- The project has encouraged Kaya elders to allow women to join the Kaya Elders' council and become Kaya elders.
- The project targeted Indigenous People – the Rabai community, a sub-tribe of the Mijikenda people, who are marginalised in Kenya, and within Rabai it targets marginalised Kaya elders.
- Establishing a BCHT association will strengthen the collective voice and agency of the Rabai community and their capacity to assert and defend their rights to land, resources and culture (self-determination).

The process has highlighted that where traditional culture considers that men are the leaders on cultural issues this can be a barrier to women's empowerment and leadership. Lessons include the importance of women as facilitators, and of gender-empowering facilitation, eg. highlighting examples of the critical importance of women's role and knowledge for the community, and ensuring separate women's groups to strengthen their collective voice and agency.

4.4 Transfer of knowledge

The project sought to transfer knowledge between, amongst and to communities to address conservation challenges directly. It supported a learning exchange visit for Rabai Kaya elders, community researchers, women and youth to the Tharaka community in Kenya, which has revitalised culture and customary governance through dialogues (see 2024 annual report); and the Tharaka community shared its experience through a community dialogue as part of the final project workshop (3.1) and the learning exchange on 24-25 March 2025 (Annex 5). IIED secured co-funds for Rabai Kaya elders, community researchers, women and youth to visit the Potato Park biocultural territory in Peru for an empowering community to community learning exchange, centred on direct exchange of traditional knowledge on landscape governance and biocultural heritage. The exchange culminated in a Declaration to inform COP16 and COP 29 (see [The Huaran Declaration: Indigenous Peoples are the real solutions to the climate and biodiversity crises | IIED Publications Library](#)).

The project transferred knowledge to policy makers and practitioners through annual workshops in Rabai and international events and communications (see sections 3.1 and 4.1), including:

- Side events at CBD and FAO Treaty meetings
- 2 blogs published on the main IIED website and biocultural heritage website and sent to subscribers
- A podcast and project webpage
- Presentations at the IUFRO forestry conference, and ISE Congress in 2024

An article for a Satoyama initiative book will also transfer knowledge about the BCHT to policy makers and practitioners. A film on the BCHT has been produced with co-funding from IIED to raise awareness about the BCHT and culture amongst Rabai community especially youth. It will be finalised by mid May 2025 and shown at village and community meetings, and shared on IIED's website and social media. IIED will prepare a case study on establishing a BCHT in Kenya based on the project and learning exchange (24-25 March), including guidance for establishing BCHTs in Kenya for wider scaling out in the country and region. It will be published in 2025 and shared with policy makers and practitioners in Kenya, East Africa and globally.

4.5 Capacity building

Both staff from KEFRI (Leila Ndalilo and Chemuku Wekesa) (50% women) were promoted in 2023/2024 to senior level due to their work on Kaya forest conservation (ie. this project). IIED provided co-funding to Leila Ndalilo, a female project staff from KEFRI, to participate in the IUFRO global forestry conference in Sweden in July 2024 and give a presentation on the project. This increased her status and recognition nationally as well as internationally, as many high level forest officials from Kenya attended the conference.

5 Monitoring and evaluation

The project was extended to December 2024. Main changes to the log frame are as follows:

Output 2: changed from Rabai Cultural Village scaled out to 3 other Kayas, to RCV scaled out to 1 other Kaya (change request submitted December 2022). This is because the Rabai community asked to scale out Rabai Cultural Village to only 1 other Kaya forest (Kaya Fimboni) rather than to 3 other Kayas, and instead to establish microenterprises in villages adjacent to all 4 Kayas in Rabai (this change did not affect the expected outcomes).

Indicator 0.3 & 2.3: The baseline figure for average household income and target increases were changed following the baseline survey which found an average monthly income of \$109 rather than \$30-40. The target increases were changed to represent a doubling in year 2 (\$200 per month) and tripling in year 3 (\$300/m) in line with the Output 2 target of tripling incomes

The other changes were mainly to target dates in Indicators:

Indicator 1.2: Changed from 'By end of 2022' proposed BCHT presented to government agencies, option for registration identified and documents submitted – to 'By September 2024' – because the participatory process to design the BCHT institution took longer than expected.

Indicator 1.3: Changed from 'By 2024 BCHT institution has been legally registered', to 'By 2024 the process for legal registration' is completed or underway – for the same reasons as 1.2

Indicator 3.1 By 2022, 800 fuel efficient stoves are produced, changed to 'by December 2024' – it took time to try to find suitable soil for making jikos in Rabai, and since it was not found, the soil had to be sourced externally and was transported from Taita Hills in early September 2024.

Indicator 3.2 'By mid-2023 fuel efficient stoves installed' to 'By December 2024' – for the same reason as 3.1

The M&E logical framework had too many indicators which meant the M&E system was cumbersome. The baseline study took several months, from March to December 2022, and this delayed the start of project activities. Some of the findings were useful to inform the project and its direction – eg. the mid-term survey found that only 15% of youth recognise the value of traditional knowledge and culture. This led to increased investment in cultural revival – including contracting SALT to facilitate a community dialogue, a learning exchange to Tharaka community and co-funding for producing a film to raise awareness of the importance of culture especially amongst youth. The main findings of the baseline and mid-term surveys were shared by KEFRI through presentations at annual project workshops with key stakeholders.

Since the project aimed to establish a community-governed biocultural territory as a self-sustaining process, in year 2 we initiated participatory M&E using the Most Significant Change approach, where communities decide the main themes for M&E and record stories of change. This means that M&E focuses on indicators that are useful and meaningful for communities and is more likely to be sustained by communities beyond projects. The community researchers recorded and presented change stories at the mid-term project workshop which was an empowering process. At the final project workshop, they again shared stories of change and on the final day (in an outdoor village meeting setting) the community researchers provided updates on progress with micro-enterprises directly. This enabled communities to provide evidence and insights on impacts, achievements and challenges directly and helped ensure the challenges were identified and addressed. See workshop reports, section 3.1, Output 1.

The British High Commission in Kenya, and 4 FCDO staff visited the project on 15th June 2023 to undertake an evaluation of the project with a special focus on biocultural enterprises. The mission highly ranked the performance of the project particularly on-farm tree planting, brooms and coconut oil. They recommended the development of a carbon project for the Kayas to enhance income and sustainability. However, carbon markets use western valuation methods centred on monetary values which could conflict with cultural and spiritual values for sacred Kaya forest conservation.

6 Lessons learnt

The project aimed to support Rabai community to establish a collectively governed biocultural heritage territory to protect Kaya forests and restore agrobiodiversity, inspired by the successful Potato Park biocultural territory in Peru. Collective self-governance and revival of cultural identity appear to resonate with Rabai community as important motivators for engagement in forest conservation. The context in coastal Kenya has some similarities to the Peruvian Andes (eg. climate change impacts, youth outmigration) – but is also different and more challenging. Cultural erosion is more severe in Rabai especially amongst youth but also middle aged people (eg. due to proximity to Mombasa, migration and external religions), and the policy and legal context is less supportive of community self-governance and rights. In Peru collective land rights are recognised and there is a strong decolonial movement, but in Rabai most land is privately owned and traditional governance systems have been weakened by colonial and post-colonial governments. This means that more investment and time is needed to revive traditional culture and governance, and build government support. It remains to be seen whether a functioning autonomous governance system can be established and sustained in a context where village elders and chiefs are appointed by the government, and whether it can enforce

customary laws despite private land ownership and external pressures to sell land. Population density is considerably higher in Rabai, and this combined with poverty, food insecurity and loss of culture, has put significant pressure on Kaya forests. Rabai is also twice the size of the Potato Park – 20,000 ha in total which can make it hard to cover travel costs for meetings, and has a culture of dependency – ie. a mindset of having to be paid to attend meetings.

A key lesson is that culture is an important incentive for conservation of sacred Kaya forests – in the past forests were well conserved because cultural values and traditional governance systems were strong (final workshop report, 3.1). Another key lesson is that a BCHT, to be self-sustaining, should build on traditional governance systems and revitalise them, as external structures are less likely to be sustained. The BCHT village and landscape committees established in 2023 have not met, whereas there seems to be real energy behind the planned monthly clan meetings. A traditional representative governance structure – eg. Kaya and clan elders – may also require fewer people, lowering transport costs.

The Potato Park experience offers useful approaches and principles, such as employing community researchers, which worked well on the whole, and taking a community-led, decolonial approach which enhanced sustainability. But it is also important to look to approaches that have worked in the Kenyan context in the face of similar challenges (eg. elders accused of witchcraft). It was useful to engage the CBO SALT (Society for Alternative Learning and Transformation) from Tharaka (Kenya) to learn from its experience and dialogue tool which has successfully revived Tharaka culture for conserving sacred natural sites. At the recent learning exchange, 50 members of Rabai community agreed to hold similar dialogues in clans to revive traditional culture and governance systems and strengthen Kaya elder succession (there are only 9 Kaya elders left and most are old).

A key lesson from both the Potato Park and Tharaka is that reviving culture takes time and for the process to be self-sustaining it must be community-led – this means that the specific objectives, activities, agendas for meetings, timeframes etc should be defined by the community rather than predetermined in project proposals and log frames. In other words, flexible funding is needed.

KEFRI, being a parastatal forestry research institute, has been very effective in engaging government agencies, which is also vital for success and sustainability of the BCHT. The county government director for culture, county officers for forests, agriculture and environment, Kenya Forest Services, and an MP and county planning office, as well as NMK have attended annual workshops and key government agencies have participated in the Project Advisory Committee. Acting as the main partner in a project designed to support a community-led process to establish a biocultural territory, likely enhanced KEFRI capacity to deliver strong social impacts and revive culture, and may help to promote these approaches more widely amongst mainstream organisations.

For livelihood activities, a key limiting factor was shortage of raw materials eg. for making brooms and coconut oil, since many palms died due to the prolonged drought. Rabai has good potential for ecotourism being close to Mombasa and coastal hotels, and Rabai's Kaya forests are registered as UNESCO World Heritage Sites. Ecotourism could enhance income without putting pressure on natural resources. Since coconut trees are traditionally sacred, and a beautiful feature of Rabai landscape, the BCHT could be branded as a 'Coconut Park'.

Supporting a range of microenterprises also reduces pressure on natural resources and was a useful strategy since not all enterprises could be supported or were adopted in all villages. Honey was adopted by all villages but in some villages income generated was low, suggesting low production and colonisation of beehives. This may be related to drought and shortage of water, and could also be due to low attraction of bees to the type of wood used to produce beehives. The income generation strategy centred on linking producers to bulk buyers in Rabai, Mombasa and Nairobi and cutting out the middle men. For brooms, local collection centres were established but it was not always possible to achieve bulking and the collections from Rabai are made by middle men who pay low prices. To by-pass the middle men, it is necessary to travel to Mombasa or Nairobi to supply bulk buyers but it is not yet possible for the brooms group to cover transport costs. Installing fuel efficient stoves can lower fuelwood use, but their production is not a sustainable enterprise as Rabai does not have the right soil type – this is a

key factor for projects to consider. Briquette presses can also lower fuelwood use provided they can be produced using fallen twigs and farm organic waste, but they do require electricity which can be a cost and constraint and is not 100% sustainable. The coconut oil enterprise generated the most income but was only established in one village. Reviving traditional knowledge and culture is likely to yield new livelihood opportunities that are truly biocultural and sustainable (eg. from traditional crafts, clothing, foods, ecotourism), as in the Potato Park and Tharaka.

The survival rate of trees planted in Kayas (59%) and on farms (65%) is attributed to drought and livestock grazing – this underlines the importance of using 100% drought-tolerant locally adapted species, and of robust measures to prevent livestock grazing on seedlings. Overall tree species diversity in Kayas slightly increased, and pressure on Kaya Bomu reduced following participatory tree planting. However, based on feedback from community members at the final project workshop and the learning exchange on 24-25 March, and given the destruction of Kaya forests to create a football pitch and a school, it appears that overall degradation of Kaya forests has not been reduced. The project has sensitised many community members and Chiefs, strengthened alternative income sources and reduced fuelwood use, particularly for households near Kaya forests, but degradation is also driven by households further away from forests, and pressure has grown due to in-migration, prolonged drought and increased unemployment post-Covid. The project has created a stronger network between villages, Kaya elders and Chiefs to protect Kaya forests and established a cultural revival process which is expected to gradually expand to engage more and more people in learning about the importance of sacred Kaya forests.

A key lesson is that log frames should be kept as simple as possible with few indicators (see above) and that costs of monitoring and verification should be fully factored into budgets. Furthermore, budgets should also include funds to address challenges that may arise with microenterprises and conflicts which may arise between stakeholders (which may not be possible to predict in advance).

The project highlighted the importance of actively engaging community leaders and members, including traditional knowledge holders, women and youth, in project decisions and workshops, to maximise impact and empowerment. Working with community researchers facilitated community participation in decision-making and effective implementation of activities – a key lesson is that community researchers should be carefully selected to ensure they are fully committed. Having workshops outside in a community setting also fostered active community participation (final workshop report, 3.1). Addressing community concerns that arise in a timely manner is important to maintain good relations and trust and to deliver outputs and outcomes, but also requires funding. On hindsight the project was overambitious, largely due to the competitive bidding process (and Darwin Initiative reviewers requested some additional activities for which there was no budget). Taking a community led approach means engaging communities in decision-making and supporting those decisions in practice/delivery as far as possible. Establishing a Project Steering Committee composed of community members helped to ensure this and enhanced trust but required support for travel and food. A decolonial approach also means advising communities if they propose approaches which come from outside eg. establishing a committee rather than reviving traditional governance. Implementing partners with strong understanding of biocultural territories and decolonial approaches should be consulted on key decisions. IIED provided critical co-funding to ensure project success and sustainability.

Establishing a self-sustaining BCHT means requires ability to facilitate a truly community-led process and a deep understanding of how to revive culture; facilitation as an equal and friend to break down rather than reinforce hierarchies; strong commitment to community empowerment and self-determination; acknowledging strengths and weaknesses and being open to feedback and continuous learning as facilitators that aim to serve communities. CBOs or local NGOs that have experience with reviving culture may be well placed to act as facilitators.

All issues raised in relation to annual reports were addressed and discussed with KEFRI.

7 Sustainability and Legacy

The project actively involved key local and county government actors in 3 annual project (see 3.1). At the final project workshop the county department of planning stated that they could provide funding for the activities for Kaya forest and landscape conservation after the project ends. The county Director for Culture and Rabai Chief attended each workshop and expressed strong support for the work, as did National Museums of Kenya. Key government agencies were also engaged in a Project Advisory Committee which met every 6 months (Annex 2). The project workshop in Year 1 was reported on national TV news in Kenya.

IIED provided co-funding for Leila Ndalilo (KEFRI) to travel to the IUFRO Forestry Conference in Sweden in July 2024, where she presented the biocultural territory model to national policy makers. This elicited a lot of interest from both Kenyan and International policy makers. Kenyan policy makers promised to support the BCHT in Rabai and its upscaling in various ecosystems across Kenya. KEFRI and IIED also participated in two workshops organised by the Darwin Initiative in Kenya to share project insights with Darwin Initiative partners.

The BCHT institution will endure beyond the project as a legally registered association that should enable the community to enhance its voice and ability to influence external investments, projects and actors. Registration of the BCHT institution will also enable the community to register Kaya forests, eg. under the Community Lands Act. Legal registration of the BCHT association should strengthen the capacity of Kaya elders to enforce customary laws included in the registration document as by-laws. The document also provides a formal basis for establishing a benefit-sharing system and community fund to support future conservation activities (based on a percentage of profits from microenterprises) (Annex 6). Community enterprises are likely to be sustained since they are generating income, and are expected to expand to benefit more households. BCHT activities have also been mainstreamed in Kilifi county development plans, policies and budgets and in KEFRI's strategic plan.

A two-day learning exchange and community dialogue was held in Rabai on 24-25 March 2025 to explore how to make the BCHT governance institution self-sustaining and strengthen cultural revival (see Annex 5). The event identified changes to the BCHT institution to make it more sustainable, and community members decided to hold monthly dialogue meetings in clans to revive Rabai's traditional culture and governance system. There seems to be real energy behind this clan dialogue process, which means it is likely to be self-sustaining. This process could support the emergence of a collective governance system for the BCHT that is rooted in traditional governance and hence sustained by the community. The BCHT committee includes Kaya elders from 4 villages which can represent all 10 Rabai villages since the clan system cuts across the territory, if the clan system can be revived (clans were previously not meeting).

KEFRI and IIED project staff will continue working to support Kaya forest conservation. IIED will try to secure additional support for Rabai in 2025 to further support microenterprises for maximum impact and sustainability (as requested by the community). Equipment such as briquette presses and coconut graters are now owned by community enterprises. All project publications and reports are freely accessible from IIED's website, and the Satoyama Initiative article will be open access. See also sections 4.1. on policy impact and 6 on lessons learned.

8 Darwin Initiative identity

Darwin Initiative funding is acknowledged on the project web-page, which provides a link to the DI website. The DI logo was included on the back cover of the three project workshop reports published on the IIED website (see 3.1). DI funding was acknowledged in the main text of these reports and a blog published in July 2023: Achieving 30x30: supporting Indigenous and traditional territories and cultures | International Institute for Environment and Development (iied.org). DI funding has been acknowledged at all project related side events and workshops. The DI logo has not been included on all equipment installed in Rabai purchased with DI funds, partly because we have tried to foster a sense of community ownership by emphasising the BCHT as community-led process rather than an external project.

IIED tweeted to announce the launch of the project page and publication of the launch workshop report and to share the above 30x30 blog – IIED had a very large following on X

(70.5K). We mentioned or tagged the Darwin Initiative within the context of those messages so you would be alerted by those posts. IIED has also promoted project events and outputs on Linked In where it has 88,277 followers: we posted about the DI side event and presentation on the project at COP16, with a link to the project website, see:

https://www.linkedin.com/posts/iied_cop16-kmgf-cop16colombia-activity-7254435022714163201-Oa55?utm_source=share&utm_medium=member_desktop&rcm=ACoAAAt19tIBrFna-BIBwaaTfMIYljL6ZFPs7Uc . We also promoted the final workshop report on LinkedIn.

Ahead of COP16 and COP29, IIED published a blog on 'Indigenous peoples are the real solutions to the nature and climate crises' – which focused on biocultural territories and included the BCHT in Rabai as an example stating that it is funded by the Darwin Initiative and with a link to the project website (which includes a link to the DI website). This blog, although published in October 2024, was the most downloaded of all IIED blogs in 2024. It was promoted on LinkedIn by the Agroecology Fund which has 13,827 followers.

https://www.linkedin.com/posts/agroecologyfund_indigenous-peoples-are-the-real-solutions-activity-7252121653621501952-4kq-?utm_source=share&utm_medium=member_desktop&rcm=ACoAAAt19tIBrFna-BIBwaaTfMIYljL6ZFPs7Uc

9 Risk Management

The community raised some concerns in August 2024 that some of the challenges identified at the final project workshop in March 2024 had not been addressed. To ensure the issues were swiftly and effectively addressed, a Project Steering Committee was established in early September 2024 with community researchers, Kaya elders and village elders and BCHT chairmen, women and youth from 10 villages (45 people). This ensured active community participation in project decision-making as the committee was primarily composed of community representatives. The committee met three times from September to November 2024 (Annex 5). (See also section 2 on Partnerships).

10 Safeguarding

11 Finance and administration

11.1 Project expenditure

Project spend (indicative) since last Annual Report	2024/25 Grant (£)	2024/25 Total actual Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				

Audit costs				
TOTAL				

Staff employed (Name and position)	Cost (£)
IIED: Krystyna Swiderska, Principal Researcher & Project Leader	
IIED: Beth Downe, Programme Manager	
KEFRI: Chemuku Wekesa, Project Co-Leader & Landscape Ecologist	
KEFRI: Leila Ndalilo, Assistant Coordinator & Social Scientist	
KEFRI: Aggrey Mndwakisha, Financial Accountant	
RCV: Parmenas Tsui, Community Coordinator	
RCV: Said Kombo, Community Coordinator	
RCV: Community Researchers x3 (Asha Juma, Esther Rehema, Salma Chirindo)	
KEFRI: Dr. Jane Njunguna, KEFRI Director	
TOTAL	

Capital items – description	Capital items – cost (£)
KEFRI: Smokers and uniforms for honey harvesting (bee harvesting suits, rubber gloves and galvanised smokers.	
TOTAL	
Other items – description	Other items – cost (£)
IIED: Bank charges	
IIED: Stationery for project workshop (pens)	
KEFRI: Video shooting on BCHT for Kaya forest conservation, food security and climate resilience	
KEFRI: Design of BCHT logo	
KEFRI: Transport fuel during stakeholders meeting in Mombasa/Rabai	
KEFRI: Snack/refreshments for meetings and workshops with the Community	
KEFRI: Jiko livelihoods activities – labour, transport of soil, and supplies for jiko making and training activities	
KEFRI: Livelihoods activities – facilitation of nature-based enterprise group meetings	
TOTAL	

11.2 Additional funds or in-kind contributions secured

Matched funding leveraged by the partners to deliver the project	Total (£)
IIED frame funding: Kenya project workshop report production costs	
IIED frame funding: Contributions towards time, travel & expenses for Project Lead and Kenyan partners to attend ISE Congress in Morocco	
IIED frame funding: Support for community dialogue facilitation by SALT during final project workshop in 2024	
KEFRI in-kind funding: Including support staff, driver, rent, utilities, project vehicle, and overspend on Darwin funds	
TOTAL	

Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project	Total (£)
IIED frame funding: Project lead's and SALT time, travel and subsistence, participant travel & food for organising additional learning exchange in Rabai on 24-25 March 2025	
SwedBio and Asociacion ANDES funding of 2 KEFRI staff and 6 community members to visit Potato Park biocultural territory in Peru	
IIED frame funding: Contributions towards time, travel and expenses for Project Lead, KEFRI and community members to attend Potato Park exchange in Peru	
TOTAL	

11.3 Value for Money

The project provided very good value for money because both IIED and KEFRI provided significant co-funding, as presented in 11.2 above and previous reports.

12 Other comments on progress not covered elsewhere

It is not possible to submit all the Annexes already submitted in previous reports due to the time it would take – preparing this report and reviewing the M&E report has already taken 9 days. Grantees are asked to repeat the achievements in Annex 1, but their time to do these tasks is unfunded as the project has ended.

13 OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes.

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

An outstanding achievement has been the establishment of a self-sustaining process to revitalise traditional knowledge and culture relating to sacred Kaya forest conservation in Rabai, despite significant cultural erosion and challenges. Rabai is a landscape of 20,000 hectares with 4 Kaya forests, part of a global biodiversity hotspot. At a recent event in Rabai, 50 participants from 10 Rabai villages decided to revive clan meetings and hold monthly

dialogues to revive traditional culture and knowledge relating to Kaya forests, agrobiodiversity, traditional food, clothing and crafts, and traditional governance, which have largely been lost in Rabai. About 85% of youth and many middle aged people no longer recognise the value of traditional knowledge and culture and hence do not respect Kaya elders’ conservation rules. External religions, proximity to Mombasa, modernisation, colonisation and weakening of traditional institutions have eroded Rabai culture. Only 9 Kaya elders remain, most of whom are elderly.

The 3 year project supported a series of meetings and workshops in Rabai to discuss the importance of reviving culture and explore challenges, bringing together 10 villages and strengthening cohesion. This process culminated in a two-day learning exchange and community dialogue held just after the project ended (24-25 March 2025) to enhance sustainability (with IIED co-funding). A local NGO (SALT) from Tharaka central Kenya helped to design the exchange in order to create conditions for a self-sustaining process to revive culture to emerge. During the exchange, the Tharaka community shared their experience with reviving culture through clan dialogues. After hearing the story of Tharaka, participants came together in clan groups and made a plan to hold similar dialogues to revive their culture. They decided that Rabai’s two main clans – the duck and the moon clans – will meet every month. The meeting host will rotate and provide food and participants will make a small contribution to cover costs (eg. travel). There was real energy and enthusiasm for this process to continue and to engage more people by sharing the learning at village level. The first dialogue was held on 10th April.

This impact is very significant. It means that the biocultural territory committee established by the project at landscape can be linked to the traditional governance system and be self-sustaining. Rabai has developed a culture of dependency and activities are rarely sustained after projects end. Reviving culture and the clan governance system is key to engage the whole community in conserving Rabai’s sacred Kaya forests and surrounding landscapes.

File Type (Image / Video / Graphic)	File Name or File Location	Caption, country and credit	Online accounts to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
Photo				No

Annex 1 Report of progress and achievements against logframe for the life of the project

Project summary	Progress and achievements
Impact Self-sustaining Biocultural Heritage Territory is established in Rabai, conserving biodiversity in 4 Kaya forests (580 ha) and farmland (14,000 ha) and reducing poverty, and scaled-out across Kilifi and Kwale counties.	BCHT village level and landscape level committees established, document for registration of BCHT association agreed, and monthly clan meetings to strengthen traditional culture and governance initiated (after project ended); biodiversity slightly improved in Kayas and significantly enhanced on-farm; poverty reduced; Kilifi and national government support for scaling out.
Outcome Biodiversity and endangered species are protected and restored in Rabai's Kaya forests and surrounding farming landscapes, poverty is reduced, culture and TK revitalised, and indigenous peoples and women empowered.	
Outcome indicator 0.1 By 2024, forest degradation is significantly reduced or halted in Kaya Bomu, Kaya Fimboni, Kaya Mudzi Muvya and Kaya Mudzi Mwiru, as indicated by little or no reduction in the density and diversity of endangered or threatened trees (excluding restored trees), and an increase in elephant shrew and butterfly populations, compared to baselines established in 2022.	Forest degradation reduced in Kaya Bomu; tree species diversity remained high across 4 Kayas and slightly increased (from 114 to 116); shrub diversity remained high; endangered endemic tree occurrence remained low due to overharvesting for wild fruits; butterfly species richness increased from 51 to 55 species in 4 Kaya forests; elephant shrew could not be monitored (Annex 6).
Outcome indicator 0.2 By 2024, 4 endangered endemic and 2 threatened native tree species, c.15 associated species, and small native palm (elephant-shrew habitat), are restored in a total area of 50 ha of degraded forest in 4 Kayas; and 10 native fuelwood/multi-purpose tree species are restored on 400 surrounding farms (100 farms/ Kaya), covering 80 ha in total (0.2 ha per farm) – with at least 75% survival rate.	All listed trees except 1 threatened native palm were restored in 4 Kayas covering 50 ha in total with 59% survival rate; and 10 native trees restored on 400 farms covering 80 ha with 65% survival rate (Annex 6)
0.3 Sustainable products increase incomes of 3200 forest-dependent women and youth (1600 households) from 2022 baseline of \$109/month to: c.\$200/month by 2023, and c.\$300/month by 2024 .	Sustainable products increased incomes of c.1650 households by an average of \$303 per month. (Annex 6)
0.4 By 2024, 800 forest-dependent farmers (at least 50% women) have restored 4 traditional crops and domesticated 4 indigenous vegetables on-farm compared to a baseline in 2022.	By 2024, at least 690 forest-dependent farmers (about 60% women) had restored 4 traditional crops and 4 indigenous vegetables on-farm (Annex 6)
0.5 By 2024, Kaya elders are better respected by youth and relations between them improve; the number of conservation resolutions passed by the Kaya Elders' Council being successfully implemented increases; attendance of traditional cultural ceremonies and rituals increases by 50%; and 50 women have taken on leadership roles (in Kaya Elders' Council, BCHT institution, Cultural Villages and	Relations between Kaya elders and youth have significantly improved; recognition of Kaya elders' conservation rulings has marginally increased; youth attendance of traditional ceremonies has increased from less than 30 to c.52%; and 56 women have taken on leadership roles. (Annex 6)

micro-enterprises, and as community researchers), compared to baselines in 2022.	
Output 1 Collective gender-balanced culturally-rooted Rabai Biocultural Heritage institution (or ‘Association’) established for Kaya forest conservation and sustainable development, legally registered, and internationally recognised.	
Output indicator 1.1 By mid-2022, Kaya elders and 10 village leaders have agreed to establish a collective BCHT institution comprising 30-50% women; and by mid-2023 have agreed culturally-rooted objectives, guiding principles and rules for conservation and equity.	Fully achieved. See Annex 6.
1.2 By September 2024, proposed BCHT institution has been presented to local government agencies; suitable option for registration identified; and documents for registration submitted.	Largely achieved – document for registration nearly finalised, will be submitted by end of April 2025. See Annex 6
1.3 By 2024, process for legal registration of BCHT institution is completed or underway.	Not yet achieved – see 1.2 above.
1.4 By June 2023, blog on the project is downloaded 100 times. By 2024, briefing paper, case study and news-story on the BCHT are downloaded 100 times each; Rabai BCHT is presented at CBD and FAO side events; and journal article on the BCHT is submitted to open access journal.	Largely achieved. Two blogs published, podcast produced, and Rabai BCHT included in a box in an IIED briefing paper. Case study on the BCHT will be produced in 2025. Rabai BCHT presented at 3 CBD side events and 1 FAO side event; and journal article submitted to Satoyama Initiative for publication. See 3.1.
Output 2. Rabai Cultural Village is strengthened and scaled-out to 1 other Kaya and capacity of 3200 forest-dependent women and youth is built, tripling incomes from sustainable products with high demand.	
2.1 By March 2023, 1 new Cultural Village with enterprise groups comprising c.80% women established in Kaya Bomu including 3-4 traditional houses with basic facilities (toilet, water); and new micro-enterprises established in villages adjacent to 4 Kayas (Bomu, Fimboni, Mudzi Mwiru and Mudzi Mwiru).	Fully achieved. Bofu Cultural Village established adjacent to Kaya Fimboni with 4 traditional houses. See evidence section 3.1
2.2 By March 2023, in each of 4 Kayas, 25 beehives are installed and 50 forest-degrading households (200 in total), particularly women and youth, are trained in beekeeping and honey value addition and linked to bulk buyers. By 2023, Kenya Bureau of Standards (KEBS) quality mark obtained; and each Kaya honey group (50 households) is selling 500 litres of honey per year, generating \$5,000/year or \$100/year per household (ie. \$8/month).	Largely achieved. 100 beehives installed in total, in 50 households near Kaya forests. KEBS not obtained yet due to low quantities produced in some villages. Households generating \$52 per month on average. See Annex 6.
2.3 By March 2023, 3200 forest-dependent women and youth (1600 households, c.400 per Kaya, c.80% women) are trained in sustainable broom making, basketry, natural coconut oil production, and value addition (branding) and business skills and are linked to bulk buyers in Rabai, Mombasa and Nairobi. Each person sells	Largely achieved. 431 people were trained by the project and each trained 10 other people, totalling 4310 people trained (Annex 6). Average income of \$303 per month generated in 2024 by about 1650 households. Links to bulk buyers not possible due to transport costs.

sufficient products to make \$200 per month by 2023; and \$300 per month by end of 2024.	
Output 3. 800 fuel-efficient stoves and 4 briquette presses are installed, halving fuelwood consumption, reducing pressure on endangered fuelwood trees and enhancing income.	
3.1 By December 2024, micro-enterprise groups in 4 Kaya Cultural Villages (at least 50% women) are trained to produce fuel-efficient stoves (jikos); and produce 800 fuel efficient stoves for project purchase (which they can continue to make and sell to generate income).	Largely achieved. 211 living adjacent to 4 Kayas were trained in producing jikos. 699 jikos installed, but suitable soil not found in Rabai to continue production. (Annex 6 & 9)
3.2 By December 2024, fuel efficient stoves are installed and used in 800 forest-dependent households (c.200 per Kaya), leading to c.30% reduction in fuelwood consumption.	Fuel efficient stoves installed and used in 699 households but estimated 5% reduction in fuelwood use (Annex 6).
3.3 By 2022, briquette presses are installed in 4 Cultural Villages (for shared use), and by March 2023 800 forest-dependent households (c. 200 per Kaya, particularly women and youth) are trained in their use and maintenance. By 2023 briquette presses are being used, reducing fuelwood consumption by c.30%.	4 briquette presses installed; 163 people trained and each shared training with about 10 others; briquette use by forest dependent households has led to estimated 35% reduction in fuelwood use and enhanced income (Annex 6).
Output 4. Endangered endemic fuelwood species, threatened native trees and elephant-shrew food/habitat are restored in degraded Kayas (50 ha), and on-farm (80 ha) providing alternative fuelwood, medicine and fruit and enhancing ecological connectivity.	
4.1. By 2022, 4 endangered fuelwood/ medicinal/fruit species, 2 native palms, and small native palm (elephant-shrew food/ habitat) and c.15 associated species, are planted in 4 Kaya forests, covering 50 ha of degraded forest in total; and 10 native fuelwood/ multi-purpose tree species are planted on 400 farms surrounding Kayas (amounting to 80 ha). Tree conservation and management plans are agreed for Kayas and farmland, with elders and farmers.	Almost fully achieved. All listed trees planted in 4 Kayas except 1 native palm covering 50 ha; and 10 native multi-purpose trees planted on 400 farmers surrounding Kayas covering 80 ha. Tree conservation and management plans agreed with Kaya elders and farmers.
4.2 By 2023, 75% of seedlings survive and double in size. By 2024, trees are well established on 50 ha of Kayas and 80 ha of farmland; and are protected and sustainably used once matured.	Tree survival rate was 59% in Kaya forests on average (76% of small native palm); and 65 % on-farm - largely due to drought and grazing.
Output 5 Traditional crops and agroecological practices are restored and indigenous vegetables domesticated on 800 farms, enhancing resilience, nutrition, ecological connectivity and butterflies, and reducing pressure on Kayas	
5.1 By 2022, awareness of the importance of traditional crops and indigenous vegetables for nutrition, health and resilience has been raised through 5 large village meetings involving 10 villages, and Rabai's annual Biocultural Festival; and by mid 2023 400 farmers (c.100 per Kaya, 50% women) have been trained to restore traditional crops and agroecological practices and domesticate indigenous vegetables through 8 Farmer Field Schools.	Almost fully achieved. Awareness raised through at least 10 village meetings and community level meetings; and 382 farmers trained through 15 Farmer Field Schools. (Annex 6 & 11)

5.2. By 2023, FFS participants have each shared knowledge and seeds obtained with 2 neighbouring farmers; and regular farmer-scientist meetings have been established to provide follow-up support.	Fully achieved.
5.3 By 2024, 800 farmers have restored 4 open-pollinated traditional crop varieties, domesticated 4 indigenous vegetables and restored agroecological practices, enhancing resilience and nutrition; and 10 landraces/ indigenous varieties have been added to Rabai's community seed bank and TK register.	At least 60.2% of farmers trained in FFS (230 farmers) restored 4 traditional crops and 4 indigenous vegetables and shared seeds with at least 2 neighbours, hence about 690 farmers have restored traditional crops and agroecological practices; and at least 10 traditional varieties are stored in community seed bank inn Bofu cultural village (Annex 6)
5.4. By 2024, endemic butterfly numbers and species diversity have increased on 400 farms compared to a baseline established in 2022.	Butterfly abundance increased on 200 farms surveyed and species diversity stayed the same. Butterfly species richness increased in 4 Kaya forests from 51 to 55 (Annex 6).

Annex 2: Project’s full current logframe as presented in the application form (with changes agreed)

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
Impact: Self-sustaining Biocultural Heritage Territory is established in Rabai, conserving biodiversity in 4 Kaya forests (580 ha) and farmland (14,000 ha) and reducing poverty, and scaled-out across Kilifi and Kwale counties.			
Outcome: Biodiversity and endangered species are protected and restored in Rabai's Kaya forests and surrounding farming landscapes, poverty is reduced, culture and TK revitalised, and indigenous peoples and women empowered.	<p>0.1 By 2024, forest degradation is significantly reduced or halted in Kaya Bomu, Kaya Fimboni, Kaya Mudzi Muvya and Kaya Mudzi Mwiru, as indicated by little or no reduction in the density and diversity of endangered or threatened trees (excluding restored trees), and an increase in elephant shrew and butterfly populations, compared to baselines established in 2022.</p> <p>0.2 By 2024, 4 endangered endemic and 2 threatened native tree species, c.15 associated species, and small native palm (elephant-shrew habitat), are restored in a total area of 50 ha of degraded forest in 4 Kayas; and 10 native fuelwood/multi-purpose tree species are restored on 400 surrounding farms (100 farms/ Kaya), covering 80 ha in total (0.2 ha per farm) – with at least 75% survival rate.</p> <p>0.3 Sustainable products increase incomes of 3200 forest-dependent women and youth (1600 households) from 2022 baseline of \$109/month to: c.\$200/month by 2023, and c.\$300/month by 2024 .</p> <p>0.4 By 2024, 800 forest-dependent farmers (at least 50% women) have restored 4 traditional crops and</p>	<p>0.1 Surveys of tree density (stems/ha) and diversity, butterfly populations and diversity, and elephant shrew populations (using camera traps from Kenya Wildlife Service), in 4 Kaya forests in 2022 and 2024 (not including trees restored by the project).</p> <p>0.2 Records of trees planted by the project (GPS location, number, species type, area size) in 2022; and surveys of tree survival rate, growth (height and diameter) and area restored in 2023 and 2024. High resolution satellite imagery of Kaya forests in 2021 and 2024 from the Department of Resource Surveys and Remote Sensing in Kenya.</p> <p>0.3 Surveys of women and youth incomes in forest-dependent households in 2022, 2023 and 2024.</p> <p>0.4 Surveys of numbers of farmers growing traditional crops and their gender, and number of traditional crops</p>	<p>Bulk buyers regularly purchase honey, broom, basket and coconut oil produced by Cultural Village enterprise groups associated with each Kaya, and market demand remains high.</p> <p>Enough tree planting materials (seedlings/saplings) of each species can be raised in nurseries; and planted sites are protected from grazing animals.</p> <p>Rainfall patterns remain largely unchanged, and seedlings planted at the start of the rainy season get enough water to establish – if not water will be obtained from a perennial stream close to RCV or seedlings kept in KEFRI field stations.</p> <p>Farmers are motivated to restore traditional crops and indigenous vegetables for resilience and nutritional value, as well as for market.</p>

	<p>domesticated 4 indigenous vegetables on-farm compared to a baseline in 2022.</p> <p>0.5 By 2024, Kaya elders are better respected by youth and relations between them improve; the number of conservation resolutions passed by the Kaya Elders' Council being successfully implemented increases; attendance of traditional cultural ceremonies and rituals increases by 50%; and 50 women have taken on leadership roles (in Kaya Elders' Council, BCHAT institution, Cultural Villages and micro-enterprises, and as community researchers), compared to baselines in 2022.</p>	<p>and indigenous vegetables grown, in 2022, 2023 and 2024.</p> <p>0.5 Interviews/FGDs with Kaya elders, youth and women, and household surveys, in 2021 and 2024. Annual project workshop reports. Observation during field visits. Governing documents of BCHAT.</p>	<p>Kaya Council of Elders' resolutions/decisions are adopted as Rabai community by-laws, and enforcement is supported by government agencies.</p> <p>The BCHAT process gets buy-in from 80,000 people in Rabai, including youth and Christian.</p>
<p>Outputs:</p> <p>1. Collective gender-balanced culturally-rooted Rabai Biocultural Heritage institution (or 'Association') established for Kaya forest conservation and sustainable development, legally registered, and internationally recognised.</p>	<p>1.1 By mid-2022, Kaya elders and 10 village leaders have agreed to establish a collective BCHAT institution comprising 30-50% women; and by mid-2023 have agreed culturally-rooted objectives, guiding principles and rules for conservation and equity (eg. prohibitions on felling trees, grazing in Kayas, selling land).</p> <p>1.2 By September 2024, proposed BCHAT institution has been presented to local government agencies; suitable option for registration identified; and documents for registration submitted.</p> <p>1.3 By 2024, process for legal registration of BCHAT institution is completed or underway.</p> <p>1.4 By June 2023, blog on the project is downloaded 100 times. By 2024, briefing paper, case study (English, Swahili) and news-story on the BCHAT</p>	<p>1.1 Minutes of village and intervillage meetings to design BCHAT institution; and governing documents for BCHAT institution, including quotas requiring 30-50% of elected representatives and meeting participants to be women, and constitution or rules and regulations governing the management of the BCHAT.</p> <p>1.2 Minutes of project advisory group meetings and project workshop in 2022 and 2023; registration documents and submission confirmation email.</p> <p>1.3 Legal registration documents; email from registration authority; final project report.</p> <p>1.4 IIED and biocultural heritage website publications and download statistics; photos and reports of side events; journal email confirmation.</p>	<p>Different village authorities are committed to working together, empowering Kaya elders and safeguarding biocultural heritage.</p> <p>Village authorities and Kaya elders recognise the critical role of women in sustaining resilient, nutritious traditional crops and farming systems, and the need to enhance gender equity.</p> <p>Local government agencies continue to be supportive and engaged through 6-monthly project advisory group meetings.</p> <p>Appropriate legal framework can be found to register Rabai BCHAT as a community association.</p>

	are downloaded 100 times each; Rabai BCHT is presented at CBD and FAO side events; and journal article on the BCHT and biodiversity-culture-livelihoods links is submitted to open access journal.		Side event applications are accepted by CBD and FAO.
2. Rabai Cultural Village is strengthened and scaled-out to 1 other Kaya and capacity of 3200 forest-dependent women and youth is built, tripling incomes from sustainable products with high demand.	<p>2.1 By March 2023, 1 new Cultural Village with enterprise groups comprising c.80% women established in Kaya Bomu including 3-4 traditional houses with basic facilities (toilet, water); and new micro-enterprises established in villages adjacent to 4 Kayas (Bomu, Fimboni, Mudzi Mwiru and Mudzi Mwiru).</p> <p>2.2 By March 2023, in each of 4 Kayas, 25 beehives are installed and 50 forest-degrading households (200 in total), particularly women and youth, are trained in beekeeping and honey value addition and linked to bulk buyers. By 2023, Kenya Bureau of Standards (KEBS) quality mark obtained; and each Kaya honey group (50 households) is selling 500 litres of honey per year, generating \$5,000/year or \$100/year per household (ie. \$8/month).</p> <p>2.3 By March 2023, 3200 forest-dependent women and youth (1600 households, c.400 per Kaya, c.80% women) are trained in sustainable broom making, basketry, natural coconut oil production, and value addition (branding) and business skills and are linked to bulk buyers in Rabai, Mombasa and Nairobi. Each person sells sufficient products to make \$200 per month by 2023; and \$300 per month by end of 2024.</p>	<p>2.1 Registration certificate of the new Cultural Village, and membership lists, and constitutions of the CV and micro-enterprises. Year 2 narrative report and photos of Cultural Village.</p> <p>2.2 Beehive purchase receipts and photos of beehives in Kayas; training participants lists and evaluation surveys. Photos of products with KEBS quality mark; book-keeping records of Cultural Villages and surveys of income generated from honey products in 2023 and 2024.</p> <p>2.3 Training participants lists and participant evaluation forms; household surveys in 2023 and 2024; photos of branded products. Signed agreements with buyers.</p>	<p>Market demand for honey, brooms, baskets and coconut oil remains high, bulk buyers can regularly purchase products (or KEFRI can help to link the community to Mombasa and Nairobi markets), and women and youth can produce sufficient quantities.</p> <p>Beehives thrive on-farm and are managed safely by villagers.</p> <p>Trained community groups are able to apply practical skills and have access to sufficient sustainable sources of raw materials from trees on-farm (this is currently the case but will be monitored).</p> <p>Alternative income, combined with increased enforcement of conservation rules and enhanced awareness, leads farmers to shift to sustainable livelihoods.</p>

<p>3. 800 fuel-efficient stoves and 4 briquette presses are installed, halving fuelwood consumption, reducing pressure on endangered fuelwood trees and enhancing income.</p>	<p>3.1 By December 2024, micro-enterprise groups in 4 Kaya Cultural Villages (at least 50% women) are trained to produce fuel-efficient stoves; and produce 800 fuel efficient stoves for project purchase (which they can continue to make and sell to generate income).</p> <p>3.2 By December 2024, fuel efficient stoves are installed and used in 800 forest-dependent households (c.200 per Kaya), leading to c.30% reduction in fuelwood consumption.</p> <p>3.3 By 2022, briquette presses are installed in 4 Cultural Villages (for shared use), and by March 2023 800 forest-dependent households (c. 200 per Kaya, particularly women and youth) are trained in their use and maintenance. By 2023 briquette presses are being used, reducing fuelwood consumption by c.30%.</p>	<p>3.1 Training attendance lists (number of people trained) and participant feedback /evaluation forms; records of CV enterprise groups on number of stoves produced in 2023.</p> <p>3.2 Year 2 report, meetings with women's groups in 4 Cultural Villages; household survey on number of households using fuel-efficient stoves and level of fuelwood use in 2022 and 2023.</p> <p>3.3 Training records (number of people trained) and participant evaluation forms. Cultural Village records of the quantity of briquettes produced per Kaya each month/year. Surveys of household fuel consumption in 2022, 2023 and 2024</p>	<p>800 fuel efficient stoves can be made by women and men in Rabai.</p> <p>Women and men like fuel efficient stoves, agree to install them in their houses, and have access to sustainable fuel and are willing to use it (twigs, crop residues, briquettes).</p> <p>Level of cooking and stove use does not significantly increase.</p>
<p>4. Endangered endemic fuelwood species, threatened native trees and elephant-shrew food/habitat are restored in degraded Kayas (50 ha), and on-farm (80 ha) providing alternative fuelwood, medicine and fruit and enhancing ecological connectivity.</p>	<p>4.1. By 2022, 4 endangered fuelwood/ medicinal/fruit species, 2 native palms, and small native palm (elephant-shrew food/ habitat) and c.15 associated species, are planted in 4 Kaya forests, covering 50 ha of degraded forest in total; and 10 native fuelwood/ multi-purpose tree species are planted on 400 farms surrounding Kayas (amounting to 80 ha). Tree conservation and management plans are agreed for Kayas and farmland, with elders and farmers.</p> <p>4.2 By 2023, 75% of seedlings survive and double in size. By 2024, trees are well established on 50 ha of Kayas and</p>	<p>4.1 Reports of trees planted in each Kaya and on 400 surrounding farms (species, location, number, area planted) and Year 1 narrative reports. Tree conservation and management plans.</p> <p>4.2 Surveys to monitor tree survival rate and growth rate in Kayas and on-farm in 2023 and 2024. Interviews with Kaya elders and household survey in 2024.</p>	<p>Farmers are willing to plant trees on-farm, nurture them to maturity, and sustainably use trees.</p> <p>Trees are planted at the start of the rainy season and rainfall patterns remain largely unchanged, providing enabling conditions for the trees to establish and grow.</p>

	80 ha of farmland; and are protected and sustainably used once matured.		
<p>5. Traditional crops and agroecological practices are restored and indigenous vegetables domesticated on 800 farms, enhancing resilience, nutrition, ecological connectivity and butterflies, and reducing pressure on Kayas</p>	<p>5.1 By 2022, awareness of the importance of traditional crops and indigenous vegetables for nutrition, health and resilience has been raised through 5 large village meetings involving 10 villages, and Rabai's annual Biocultural Festival; and by mid 2023 400 farmers (c.100 per Kaya, 50% women) have been trained to restore traditional crops and agroecological practices and domesticate indigenous vegetables through 8 Farmer Field Schools.</p> <p>5.2. By 2023, FFS participants have each shared knowledge and seeds obtained with 2 neighbouring farmers; and regular farmer-scientist meetings have been established to provide follow-up support.</p> <p>5.3 By 2024, 800 farmers have restored 4 open-pollinated traditional crop varieties, domesticated 4 indigenous vegetables and restored agroecological practices, enhancing resilience and nutrition; and 10 landraces/ indigenous varieties have been added to Rabai's community seed bank and TK register.</p> <p>5.4. By 2024, endemic butterfly numbers and species diversity have increased on 400 farms compared to a baseline established in 2022.</p>	<p>5.1. Reports and photographs of village meetings, biocultural festival and FFS; signed participants lists indicating number and gender of participants, and participant feedback / evaluation forms.</p> <p>5.2. Surveys of FFS participants in 2023; minutes of FFS follow-up meetings; narrative report for year 3.</p> <p>5.3. Household surveys of traditional crop varieties grown and consumed in 2021 and 2024. Rabai community seed bank register in 2021 and 2024.</p> <p>5.4 Butterfly population and diversity survey reports at the start and end of the project.</p>	<p>Awareness of nutrition, health and resilience value of traditional crops/foods, leads to greater demand amongst Rabai villages; and costs to consumers are kept down due to reduced input costs.</p> <p>Farmers are motivated to restore traditional crops and agroecological practices for health, resilience, food security and cultural benefits (not just economic benefits).</p> <p>Restoration of native trees and open-pollinated crops restores butterflies</p>

Activities

- 1.1 Project launch/inception workshop to discuss and plan the project with local stakeholders and establish the Project Advisory Group (involving NMK and local environment/forest, culture, agriculture and development officials).
 - 1.2 Training and co-design workshop involving IIED, KEFRI, RCV, Kaya elders and community researchers on Participatory Action Research methods and tools for establishing collectively managed culturally-rooted BCHTs.
 - 1.3 FPIC meetings are held in 10 villages in Rabai. Gender analysis conducted (and baseline surveys).
 - 1.4 Village and inter-village meetings are held to discuss and agree BCHT objectives and rules; and the results are documented and presented to local government agencies through project advisory group.
 - 1.5 Options for legal registration of BCHT (eg. as a community association or group ranch) are explored, and information and documents for registration are prepared and submitted.
 - 1.6 IIED prepares blog, briefing paper, case study, news-story and journal article with input from KEFRI and RCV (co-authorship); case study is translated to Swahili; all outputs are published online, and 100 copies of briefing and case study are printed (50 in each language) and distributed locally and at international events.
 - 1.7 Side events are organised at CBD COP and FAO Commission on Genetic Resources meetings to present the results; and journal article is submitted.
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- 2.1 Meetings are held with at least 400 households around each Kaya to identify and design new Cultural Village enterprise groups (including identifying existing capacity and training needs, management and ways of working), elect CV coordinators, and agree on the location and design of the Cultural Village traditional houses.
 - 2.2 Youth are employed to construct 3-4 traditional houses in each Kaya with guidance from elders.
 - 2.3 Meetings are held with Kaya elders and adjacent households to identify the best location for each beehive and beehive custodians; training on beekeeping, managing the apiary, processing, packaging and marketing of honey products given by KEFRI, Tekida Nyuki Group and Kipepeo project personnel.
 - 2.3 Honey bulk buyers/traders are identified and introduced to honey producer groups. KEFRI submits application to obtain Kenya Bureau of Standards quality mark for honey.
 - 2.4 Training provided by RCV, KEFRI, Jua Kali artisans, Ministry of Agriculture and Imarisha Vijana Association to new Cultural Village enterprises to sustainably produce brooms, baskets, and natural coconut oil, add value through packaging and labelling, and develop business skills.
 - 2.5 BCHT institution and Cultural Villages meeting to design Rabai BCHT logo and identify a local artist. Bulk buyers in Rabai and Mombasa are introduced to CV enterprise groups.
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- 3.1 Meetings are held with c.200 forest dependent households around each Kaya to explain the importance of fuel-efficient stoves. Training is provided by KEFRI and Natural Char Energy to each Cultural Village to produce fuel-efficient stoves; and materials for building stoves are sustainably sourced.
 - 3.2 Household visits are arranged to install fuel-efficient stoves and demonstrate their use and maintenance (including guidance health and safety, sustainable fuel sources and energy efficient use).
 - 3.3 Four briquette presses are purchased and installed in each Cultural Village, and training workshops are held in each Cultural Village to demonstrate their use and maintenance, health and safety, and sustainable fuel sources, and agree rules for their collective use and maintenance.
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- 4.1 Seedlings of endangered and threatened trees and associated species (seeds from Kaya forests) are raised in tree nurseries in Rabai (or KEFRI field stations in Malindi or Taita Hills).
 - 4.2 Seedlings are planted in Kayas by community researchers and youth (paid by the project), with guidance from Kaya elders, KEFRI technical experts and RCV coordinators; and on farmland by farmers with guidance from KEFRI and Farmer Field Schools (will include agroforestry component to integrate trees on-farm).
 - 4.3 Meetings are held with Kaya elders, forest dependent households (including women and youth) and farmers to develop conservation and management plans for trees planted in Kaya forests and on farmland.
 - 4.4 Surveys of planted seedlings conducted by KEFRI and community researchers to monitor establishment in years 2 and 3.
 - 4.5 Kenya Wildlife Service establishes baseline and conducts annual monitoring of elephant-shrew (using camera traps) in 4 Kayas.

5.1 Large village meetings are organised in 10 Rabai villages to raise awareness of the importance traditional crops and indigenous vegetables for nutrition and health (in a context of rising obesity/diabetes/cancer), and for resilience and stable productivity (given increased drought), and importance of Kaya forests and Kaya elders.

5.2 8 Farmer Field Schools are held (2 per Kaya, each with c.50 participants) involving farm visits and demonstrations on agroforestry; domesticating indigenous crops; restoring traditional crops; inter-cropping and soil fertility; natural pest management (led by traditional farmers, KEFRI and KARLO - Kenya Agricultural Livestock Research Organisation).

5.3 FFS participants are encouraged to share knowledge and seeds with at least 2 neighbouring farmers, and to participate in monthly farmer-scientist meetings to provide follow-up support.

5.4 Annual biocultural festivals are organised by RCV to raise awareness of the importance of traditional Mijikenda crops, foods, culture, Kaya forests and Kaya elders; and promote intergenerational transmission of culture and TK and sharing/exchange of traditional seeds.

5.5 Farmers are encouraged to share and exchange traditional seeds with RCV community seed bank, and 10-12 traditional varieties are botanically identified and added to Rabai community seed bank and TK register.

5.6 Youth from each project village are trained to conduct a simple survey of butterfly populations and diversity on 400 project farms and Kayas at the start and end of the project (by Kipepeo Project)

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	Yes
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line. All supporting material should be submitted in a way that can be accessed and downloaded as one complete package.	
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 14)?	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	