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| Project/Programme title: | Ecosystem-based Adaptation to increase climate resilience in the Central American Dry Corridor and the Arid Zones of the Dominican Republic |
| Country(ies): | Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama and the Dominican Republic |
| Accredited Entity: | Central American Bank for Economic Integration (CABEI) |
| Date of first submission: | *2019/11/08* |
| Date of current submission | *2019/11/08* |
| Version number | *V.001* |
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| *Note to Accredited Entities on the use of the funding proposal template* |
| * Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc. * Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents. * The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time. * The recommended font is Arial, size 11. * Under the [GCF Information Disclosure Policy](https://www.greenclimate.fund/disclosure/policy), project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4. |

Please submit the completed proposal to:

[fundingproposal@gcfund.org](mailto:fundingproposal@gcfund.org)

Please use the following name convention for the file name:

“FP-CABEI-CENTRAL AMERICA-2019/11/08”

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| **PROJECT/PROGRAMME SUMMARY** | | | | | |
| **A.1. Project or programme** | Project | **A.2. Public or private sector** | | Public | |  |
| **A.3. Request for Proposals (RFP)** | Not applicable | | | | |  |
| **A.4. Result area(s)** | *Check the applicable* [*GCF result area(s)*](https://www.greenclimate.fund/how-we-work/funding-projects) *that the overall proposed project/programme targets. For each checked result area(s), indicate the estimated percentage of GCF budget devoted to it. The total of the percentages when summed should be 100%.* | | | | |
| Mitigation: Reduced emissions from:  Energy access and power generation:  Low-emission transport:  Buildings, cities, industries and appliances:  Forestry and land use:  Adaptation: Increased resilience of:  Most vulnerable people, communities and regions:  Health and well-being, and food and water security:  Infrastructure and built environment:  Ecosystem and ecosystem services: | | | | GCF contribution:  Enter number%  Enter number%  Enter number%  Enter number%  Enter number%  Enter number%  Enter number%  100% |
| **A.5. Expected mitigation impact** | *Indicate t CO2eq over lifespan* | **A.6. Expected adaptation impact** | | *620,000 (direct);*  *1.75 million (indirect)* | |
| *N/A* | |
| **A.7. Total financing (GCF + co-finance)** | 242,166,151 USD | **A.9. Project size** | | Medium (Upto USD 250 million) | |
| **A.8. Total GCF funding requested** | 192,166,151 USD  *For multi-country proposals, please fill out annex 17.* |
| **A.10. Financial instrument(s) requested for the GCF funding** | Grant 72,166,151  Loan 120,000,000  Guarantee Enter number | | Equity Enter number  Results-based  payment Enter number | | |
| **A.11. Implementation period** | 7 years | **A.12. Total lifespan** | | 12 years | |
| **A.13. Expected date of AE internal approval** | *Click or tap to enter a date.* | **A.14. ESS category** | | B | |
| **A.15. Has this FP been submitted as a CN before?** | Yes  No | **A.16. Has Readiness or PPF support been used to prepare this FP?** | | Yes  No | |
| **A.17. Is this FP included in the entity work programme?** | Yes  No | **A.18. Is this FP included in the country programme?** | | Yes  No | |
| **A.19. Complementarity and coherence** | *Does the project/programme complement other climate finance funding (e.g. GEF, AF, CIF, etc.)? If yes, please elaborate in section B.1.*  Yes  No | | | | |
| **A.20. Executing Entity information** | Central American Bank for Economic Integration. Additionally, one or more Executing Entities (EE) for the project will be determined during project implementation. The EE will act nationally or regionally to provide project management and technical oversight and manage institutions in the respective participating countries. The EE will be accountable to CABEI as the AE for the effective implementation of project interventions. All operating policies and procedures will follow CABEI’s standards of operation. | | | | |
| **A.21. Executive summary** | | | | | |
| The Central American Dry Corridor and the Arid Zones of the Dominican Republic are among the world’s most vulnerable tropical regions to the impacts of climate change, with Honduras, Nicaragua, Guatemala, the Dominican Republic and El Salvador recognised as being among the fifteen most vulnerable countries in the world to extreme climate events. The term “Dry Corridor” emerged in the last three decades to describe the increasing frequency and intensity of droughts in the region. These droughts are linked to El Niño events, which are occurring more frequently and intensely as a result of climate change and have had severe impacts on agriculture and food security in the region. The impacts of droughts during El Niño are contrasted by an increase in the frequency and severity of extreme rainfall events linked to concurrent changes in La Niña. The resulting extreme rainfall leads to reductions in aquifer recharge, as well as increased surface runoff and soil erosion. These impacts are exacerbated by poor land management practices — which result in extensive environmental degradation — and widespread poverty.  With more than one million families in the Dry Corridor and Arid Zones reliant on agriculture for their livelihoods, the impacts of increasingly severe droughts over the past five years have resulted in the need for considerable humanitarian assistance. In 2014 alone, intense drought resulted in an estimated USD465 million worth of agricultural losses across the region, with more than 2.5 million people experiencing food insecurity. From 2015 to 2018, food insecurity has increased annually in the region, with indigenous populations, women and rural communities the most likely to suffer from chronic hunger and malnutrition. By the last quarter of 2018, 2.2 million people had experienced crop losses that year, with 1.4 million urgently needing food assistance. These impacts are expected to continue to worsen under future climate scenarios.  Climate projections for the Dry Corridor and Arid Zones indicate that, by the end of the century, temperatures will have increased across the region by 3–3.5°C under RCP4.5 and by as much as 6–7°C under RCP8.5, while mean annual rainfall is projected to decrease by 11% on average. This will be compounded by further changes in the El Niño-La Niña cycle, which will result in prolonged droughts as well as more frequent and intense extreme rainfall events across the region. If average global temperatures reach 1.5°C above pre-industrial levels, extreme El Niño events are likely to happen twice as often — approximately every 10 years as opposed to every 20 years — with severe consequences for agriculture and food security. The impacts of future climate change will include further decreases in important crop harvests such as maize, beans and coffee, leading to increased poverty, food insecurity and migration from rural areas. The land area suitable for growing these crops is also expected to decrease across the region, which will be exacerbated by soil degradation linked to increased rainfall intensity. Furthermore, as a result of climate change-related increases in temperature and drought frequency, the extent of the Dry Corridor and Arid Zones is predicted to expand. Currently, the Dry Corridor encompasses ~64% of the municipalities in Central America and is expected to extend to ~85% by 2050. Although some currently unsuitable cooler highland areas may become more suitable for certain crops as temperature increases, desire to shift crops into these areas will likely catalyse forest clearing in critical water recharge zones of river catchments, thereby reducing aquifer recharge. This impact, coupled with an increase in extreme rainfall events, will increase the likelihood and severity of flooding. Climate change will also increase the frequency of wildfires, causing further forest degradation and threatening farming, forest-based livelihoods and fuelwood supply.  Without comprehensive adaptation interventions, agricultural losses will continue to increase, along with ecosystem loss, water shortages, poverty and food insecurity. This will ultimately increase the exposure and sensitivity of communities in the Dry Corridor and Arid Zones who are already extremely vulnerable to climate change. However, several barriers currently constrain the adoption of climate-adaptive practices by vulnerable communities. These barriers includelimited: i) access to credit for adaptation interventions among vulnerable populations;ii) access to financial resources for the implementation of ecosystem-based adaptation (EbA), water- and energy-efficient technologies among the private sector; iii) knowledge and understanding of climate change impacts as well as appropriate adaptation measures among decision-makers, communities and commercial farmers; iv) limited integration of EbA and other adaptation measures into sectoral policies; v) technical capacity within governments and local communities to implement EbA and other adaptation measures; and vi) development of economic incentives for investment in sustainable natural resource management and EbA.  In response to the above-described climate threats, GCF loan and grant finance is requested to initiate a paradigm shift in the regional approach to catchment and water demand management in the Dry Corridor and Arid Zones. This shift will see governments of the seven participating countries — Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama and the Dominican Republic — promoting large-scale EbA and will also see smallholder and commercial farmers, as well as entrepreneurs in rural communities, having access to the financial resources and technical skills required to implement impactful adaptation interventions. A combination of GCF loan and grant finance will be combined with co-finance to establish two financial facilities at the regional level, namely: i) a grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing; and ii) an EbA lending facility for small- and large-scale EbA investments at farm-, enterprise- and household-level. The two facilities will be hosted by a fund with a blended financing structure, where GCF funds in form of grants, and sub-ordinated and senior loans are channelled in the same structure to partner financial institutions. Together with co-financing, these mechanisms will make USD 210 million available for investment in EbA and water- and energy-efficient technologies in the region. Grant finance will be used by the project to: i) strengthen the technical capacity of accredited and non-regulated financial institutions to access and channel funds through the mechanisms established under the project’s financial mechanisms; ii) strengthen the technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures; iii) generate and share information on climate change adaptation and finance across the region, and mainstream it into local and national policies; and iv) implement large-scale adaptation interventions — including EbA, water- and energy-efficient technologies — in rural communities across the region. Based on these grant initiatives, debt finance will be used to scale and mainstream identified and proven EbA options and water- and energy-efficient technologies.  Together, these interventions will catalyse the autonomous upscaling of EbA and water- and energy-efficient technologies by combining technical capacity-building, policy instruments and accessible financial mechanisms. This approach will transform the financial landscape in the region to enable vulnerable groups to access climate finance and implement climate-resilient measures to strengthen their adaptive capacity. The proposed project will directly benefit ~620,000 people across the target catchments. Furthermore, the combined impact of these interventions will facilitate the uptake of adaptation measures beyond the target municipalities, ultimately indirectly benefitting 1.75 million people across the region during the project lifetime, and thousands more into the future. | | | | | |

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| **PROJECT/PROGRAMME INFORMATION** |
| **B.1. Climate context** |
| **Context**  The Dry Corridor of Central America consists of semi-arid and sub-humid ecosystems that cover most of the Pacific slope of Guatemala, Honduras, El Salvador and Nicaragua, as well as smaller areas of Costa Rica and Panama (Figure 1). Similar climatic conditions are found in the arid and semi-arid areas (hereafter ‘Arid Zones’) in the west of the Dominican Republic (Figure 1). The Dry Corridor is the most densely populated region of Central America[[1]](#footnote-2), and the Arid Zones are home to a significant proportion of the Dominican Republic’s population — 12% of the total[[2]](#footnote-3), amounting to ~1.2 million people. In addition, Guatemala, Honduras, El Salvador and Nicaragua have comparatively small Gross Domestic Product (GDP) per capita, while Costa Rica, Panama and the Dominican Republic are comparatively wealthy and have relatively low poverty levels[[3]](#footnote-4). However, all these countries have high income inequality, with instances of extreme poverty — particularly in rural areas.    **Figure 1.** Current (red) and projected extent in 2050 (red and dark grey) of the Central American Dry Corridor and the Dominican Republic’s Arid Zones[[4]](#footnote-5). Map based on calculations by the International Centre for Tropical Agriculture (CIAT), using the current climate distribution[[5]](#footnote-6), future scenarios[[6]](#footnote-7) and evapotranspiration estimations[[7]](#footnote-8),[[8]](#footnote-9).  Across the region, poverty in rural areas is significantly higher than in urban areas. Nearly 60% of people in the Dry Corridor live in poverty[[9]](#footnote-10), while the Arid Zones of the Dominican Republic have the highest poverty rate in the country[[10]](#footnote-11). A further example is that in Costa Rica double the number of people in rural areas are living in extreme poverty compared with in urban areas[[11]](#footnote-12). Similarly, in Panama, prevalence of extreme poverty is 27% in rural areas compared with only 4% in urban areas[[12]](#footnote-13). Most rural populations in the Dry Corridor and Arid Zones depend on agriculture for their livelihoods, practising both subsistence and commercial farming, and farming both crops and livestock. In addition to agriculture, plantation forestry supports the livelihoods of some local communities.  **Climate rationale**  The Dry Corridor and Arid Zones are among the world’s most vulnerable tropical regions to the impacts of climate change[[13]](#footnote-14), with Honduras, Nicaragua, Guatemala, the Dominican Republic and El Salvador recognised as being among the fifteen most vulnerable countries in the world to extreme climate events[[14]](#footnote-15). The term “Dry Corridor” emerged in the last three decades to describe the increasing frequency and intensity of droughts in the region. These droughts are linked to El Niño[[15]](#footnote-16) events, which are occurring more frequently and intensely as a result of climate change[[16]](#footnote-17), and have had severe impacts on agriculture and food security in the region. Since agriculture and forestry are greatly affected by climatic conditions, the livelihoods of rural people in the Dry Corridor and Arid Zones are extremely sensitive to the impacts of climate change. For example, during the 2015 drought, over three million people experienced acute food insecurity[[17]](#footnote-18). These impacts are exacerbated by poor land management practices — which result in extensive environmental degradation — and widespread poverty. Furthermore, these communities have limited access to financial resources for the implementation of adaptation interventions. Without urgent adaptation measures, the vulnerability of the region’s population to climate change impacts will increase. Further details of climate change risks and impacts for the Dry Corridor and Arid Zones are described below.  *Climate change risks*  Past climate trends and future projections show that the region’s climate is changing in several ways, including: i) temperatures increasing across the region; and ii) shifting rainfall patterns. In most parts of the Dry Corridor and Arid Zones, rain seasons are shortening and the intensity of midsummer droughts[[18]](#footnote-19) is increasing[[19]](#footnote-20). Droughts that extend over a year or more are also becoming increasingly frequent and severe, mainly because of the increasing frequency and intensity of El Niño events. Concurrently, extreme rainfall events are increasing in frequency and severity because of changes in La Niña. Country-specific observed and predicted changes in temperature and rainfall are presented in Section 3 of Annex 2: Feasibility Study.  Overall, temperatures across Central America are anticipated to continue to increase in future. By the end of the century, temperatures are projected to increase by 3–3.5°C under a medium emissions scenario (RCP4.5) and by as much as 6–7°C under a high emissions scenario (RCP8.5)[[20]](#footnote-21) relative to the baseline of 1961–1990. While the trend of increasing temperatures is consistent across Central America and the Caribbean, the magnitude of change is expected to vary among countries and between geographical areas within countries (Figure 2). Mean annual rainfall is projected to decrease across much of Central America by 2070 for both medium (RCP4.5) and high (RCP8.5) emissions scenarios (Figure 3). Specifically, rainfall in the Dry Corridor and Arid Zones is expected to decrease by 11% on average by the end of the century, but the frequency of extreme rainfall events is expected to increase.  Recent evidence[[21]](#footnote-22) and model simulations predict that the risk of drought will increase with climate change, as more intense and prolonged El Niño events occur across the region[[22]](#footnote-23). Indeed, if average global temperatures reach 1.5°C above pre-industrial levels, extreme El Niño events are likely to happen twice as often — approximately every 10 years as opposed to every 20 years. As a result of these climate change-related increases in temperature and drought frequency, the Dry Corridor and Arid Zones are predicted to expand. Currently, the Dry Corridor encompasses ~64% of the municipalities in Central America; it is expected to extend to ~85% by 2050 (Figure 1).    **Figure 2.** Difference between the baseline (1961–1990) and the future (2071–2100) annual mean temperature (°C) simulated by the Eta-HadGEM2 model for: a) RCP4.5 (medium emissions); and b) RCP8.5 (high emissions) scenarios[[23]](#footnote-24).    **Figure 3.** Difference between the baseline (1961–1990) and the future (2070–2100) mean annual rainfall (mm/day) simulated by the Eta-HadGEM2 model for a) RCP4.5 (medium emissions) and b) RCP8.5 (high emissions) scenarios[[24]](#footnote-25).  *Climate change impacts*  Climate change is already having severe impacts on communities in the Dry Corridor and Arid Zones. Indeed, its impact on agriculture is commonly cited as a major driver of migration out of the region to North America, especially from Honduras, Guatemala and El Salvador[[25]](#footnote-26). In 2014, for example, severe drought across the region resulted in an estimated USD 465 million worth of agricultural losses, including basic grains, coffee and livestock. In Honduras, Guatemala and El Salvador alone, a total ~2.5 million people experienced food insecurity as a result of approximately 75% loss of maize and bean crops[[26]](#footnote-27). In 2016, 50–90% of crop loss resulted in 3.5 million people requiring humanitarian assistance across the region[[27]](#footnote-28). This trend is continuing, with subsistence farmers in the Dry Corridor of Guatemala, El Salvador, Honduras and Nicaragua having lost more than half of their maize and bean crops in 2018, with 2.2 million people affected[[28]](#footnote-29). These recent droughts have been unprecedented in their severity and the magnitude of their impacts. Such intense droughts are expected to increase in frequency under future climate conditions and, in the absence of adaptation interventions, people living in the Dry Corridor and Arid Zones will continue to experience adverse impacts of climate change[[29]](#footnote-30).  Future predicted impacts of climate change include decreased harvests of maize, beans, coffee and other important crops, leading to increased poverty, food insecurity and migration from rural areas[[30]](#footnote-31). Reductions in coffee yields have been predicted to be between 7% in 2020 and 39% in 2100 across all Central American countries under climate change conditions[[31]](#footnote-32), while a similar study predicted reductions in maize yields of between 4% in 2020 and 18% in 2100[[32]](#footnote-33). These reductions will result from direct climate impacts (e.g. droughts and floods) as well as indirect impacts on crops (e.g. declines in crop pollinators)[[33]](#footnote-34). Climate change will also impact the land area suitable for growing specific crops, with declining areas expected for coffee and beans across the region[[34]](#footnote-35). For example, El Salvador and Costa Rica are expected to experience decreases in land suitability for growing coffee of 40% or more[[35]](#footnote-36). Similarly, modelling of maize indicates that land suitability is likely to decrease by up to 34% in El Salvador, Guatemala, Honduras and Nicaragua[[36]](#footnote-37). Although some cooler highland areas that are currently unsuitable for these crops may become more suitable as temperature increases, desire to shift crops into these areas will likely catalyse forest clearing in critical water recharge zones of river catchments thereby reducing aquifer recharge[[37]](#footnote-38). This impact, coupled with an increase in extreme rainfall events, will increase the likelihood and severity of flooding. Climate change will likely also increase the frequency of wildfires, causing further forest degradation and threatening farming, forest-based livelihoods and fuelwood supply[[38]](#footnote-39).  The climate change impacts described above are exacerbated by the baseline problems of forest loss and land degradation, which result in decreased water supply and food security[[39]](#footnote-40). Without comprehensive adaptation interventions, agricultural losses will continue to increase, along with ecosystem loss, water shortages, poverty and food insecurity. This will ultimately increase the exposure and sensitivity of communities in the Dry Corridor and Arid Zones who are already extremely vulnerable to climate change.  **Complementarity with related projects, programmes and initiatives**  Considerable investments have been and are being made through public expenditure and donor-funded initiatives to increase the resilience of vulnerable communities to climate change throughout the Dry Corridor and Arid Zones. Lessons learned and best practices from these investments have been incorporated into the design of the proposed project to replicate successful techniques and ensure that there is complementarity between the project and existing initiatives. The most relevant investments that will be complemented by the proposed project are presented below[[40]](#footnote-41).  The GCF-funded ‘Productive Investment Initiative for Adaptation to Climate Change’ (CAMBio II) project is being implemented by CABEI in the same seven countries the proposed project will work in, but in areas outside of the Dry Corridor and Arid Zones. CAMBio II is working to: i) provide loans to producers through CABEI’s accredited intermediary financial institutions (IFIs) for the implementation of adaptation measures; ii) build capacity of micro, small and medium-sized enterprises (MSMEs) and IFIs through grants to improve technical and business skills; and iii) establish an incentive scheme to promote adaptation measures implemented by MSMEs. Component 1 of the proposed project will replicate CABEI’s established model for providing loans through accredited IFIs, but will target financial institutions not included in CAMBio II, and those specifically operating in the Dry Corridor and Arid Zones. In addition, the proposed project will implement a broader range of activities — focusing on water security as a whole, rather than only agriculture — including on-the-ground ecosystem-based adaptation (EbA)[[41]](#footnote-42) and restoration. It will also target beneficiaries from more diverse socioeconomic backgrounds than those identified under CAMBio II. The proposed project will expand on outputs of CAMBio II, using experiences during its implementation to inform higher-level outcomes. For example, while CAMBio II offers incentives (Adapt-Award) for IFIs and MSMEs which use loans to implement adaptation measures, this does not scale past project implementation. The proposed project, however, will promote the mainstreaming of adaptation incentives into local and, ultimately, national policy. Overall complementarity and sharing of best practices will be ensured as both projects will be executed by CABEI. In addition to CAMBio, the proposed project will align with the Microfinance for EbA (MEbA) project that is being implemented in eight countries across Latin America and Africa, including three of the targeted Central American countries, namely Costa Rica, Dominican Republic and El Salvador. MEbA is promoting private sector engagement in adaptation finance by facilitating microfinance products aimed at small-scale farmers to invest in EbA options to improve their resilience to climate change. The proposed project will draw on lessons learned and best practices established through MEbA to guide the establishment of financial mechanisms for the Dry Corridor and Arid Zones.  Several national projects are being implemented in Central America with a focus on water-efficient technologies, EbA and land restoration to improve ecosystem services and livelihoods, increase food security, and build climate resilience of vulnerable communities. Examples of these include ‘Upscaling climate resilience measures in the Dry Corridor agro-ecosystems of El Salvador (RECLIMA)’ and ‘Building livelihood resilience to climate change in the upper basins of Guatemala’s highlands’, both funded by GCF. These projects are implementing several adaptation measures that will be replicated and scaled up regionally by the proposed project. These include: i) riparian forest restoration; ii) establishing agroforestry and silvopastoral systems; iii) rainwater collection; and iv) water-efficient agricultural technologies such as drip irrigation. The proposed project will use best practices from these projects to scale up interventions across the region. In addition, increased access to financial products and services under Component 1 of the proposed project will ensure that a larger number of individuals and enterprises are able to implement these kinds of interventions. The proposed project will also contribute directly to restoration commitments made by several countries under Initiative 20x20. This initiative is a country-led effort[[42]](#footnote-43) whose primary objective is to restore 20 million hectares of degraded land across Central America and the Caribbean by 2020. The proposed project will contribute directly to these goals by restoring 18,000 hectares of forested area across the seven catchments targeted by the project.  Finally, a project funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) has been implemented from 2012–2019 by the International Union for Conservation of Nature (IUCN) in several countries in Central America, including Costa Rica, El Salvador, Guatemala, Honduras, Mexico and Panama. This project — ‘Transforming evidence into change: a holistic approach to governance for EbA’ (Go4EbA) — focused on improving existing governance frameworks for implementing EbA through developing an evidence base for its implementation. One catchment per country was selected to demonstrate EbA measures and ~400 people received capacity-building. Go4EbA also established a database including information about over 100 EbA-related cases in the region, and a virtual platform known as ‘EbA Solutions’[[43]](#footnote-44) to share knowledge and provide technical assistance. The platform includes information on: i) adaptation projects by type of activity; ii) availability and management of water resources; and iii) ecosystem protection and recovery. The proposed project will draw lessons learned from Go4EbA with regards to best practices when implementing a bottom-up approach focused on promoting water and food security in the region. It will also upscale measures implemented under Go4EbA in several additional catchments within the Dry Corridor and Arid Zones. |
| **B.2. Theory of change (max. 1000 words, approximately 2 pages plus diagram)** |
| **Description of the problem**  Climate change is causing increasingly frequent and intense droughts, as well as a higher occurrence of extreme rainfall events, in the Dry Corridor region of Central America and the Arid Zones of the Dominican Republic. These areas are densely populated and have high levels of poverty — concentrated in rural areas — when compared with the rest of the region. In addition, most rural communities in the Dry Corridor and Arid Zones are dependent on agriculture and plantation forestry for their livelihoods, both of which are extremely sensitive to climate impacts — specifically those impacts that result in changes in water availability. These communities also have limited knowledge of climate change adaptation measures, coupled with an inability to access funds to finance adaptation. As a result, rural communities in this region are extremely vulnerable to the impacts of climate change. This vulnerability is exacerbated by widespread environmental degradation and an associated loss of ecosystem services such as water production. Future climate projections indicate that the Dry Corridor and Arid Zones will continue to become warmer and drier, with increasingly variable rainfall and an associated increased risk of severe drought[[44]](#footnote-45). Past and ongoing adaptation efforts in the region have not been implemented at a sufficient scale to prevent rural communities experiencing severe negative impacts of climate change, which will likely only increase in the future.  **Preferred adaptation solution**  The preferred adaptation solution to the above-described problem is to improve the climate resilience of rural communities in the Dry Corridor and Arid Zones by: i) implementing integrated catchment management and restoring catchments; ii) improving hydrological flow and infiltration of rainwater into groundwater reserves through forest and ecosystem restoration; and iii) reducing demand for scarce water resources by implementing water-efficient technologies at farm- and household-level. Specifically, under the preferred adaptation solution, commercial farmers and entrepreneurs in rural communities would have access to the financial resources and technical skills required for the widespread implementation of adaptation measures — including EbA, and water- and energy-efficient techniques. This access to financial and technical resources would strengthen the adaptive capacity of rural communities to withstand increasingly frequent and intense droughts, which result in water shortages, and subsequent reductions in economic activity, productivity and food security. In addition, the mainstreaming of adaptation considerations into policy and planning by government, and the generation of knowledge and awareness of adaptation options should take place across the region. Mainstreaming in this way would enable the uptake of large-scale EbA and other adaptation measures. The overall approach under the preferred adaptation solution would ensure access to adaptation measures for all impacted communities in the Dry Corridor and Arid Zones, building their climate resilience in the long-term.  **Barriers to the preferred adaptation solution**  The proposed project will address the following eight barriers to the preferred adaptation solution in the Dry Corridor and Arid Zones. These barriers are described in further detail in Section 11 of Annex 2: Feasibility Study.   * *Barrier 1: Limited knowledge and understanding of climate change impacts among decision-makers.* Decision-makers in Central America and the Dominican Republic often have knowledge gaps with regards to climate change impacts, and how these impacts affect farmers. These gaps include knowledge on: i) water availability; ii) areas susceptible to extreme weather events; iii) locations of smallholder farmers; iv) projected changes in temperature and rainfall; v) expected impacts on crop yields; and vi) adaptation strategies. These knowledge gaps impede the mainstreaming of climate change adaptation into the policies and plans of the different sectors. * *Barrier 2:* *Limited knowledge and understanding of EbA and other adaptation measures among decision-makers and communities.* Decision-makers and communities in the Dry Corridor and Arid Zones frequently have limited knowledge and understanding of EbA, and of adaptation measures such as water- and energy-efficient technologies. They have limited access to information and limited understanding of the value of ecosystem services and the costs and benefits of ecosystem restoration, in particular because of the large scales at which many ecosystem services are generated. As a result, they have limited capacity to implement these interventions and reap their benefits. * *Barrier 3: Insufficient implementation of existing policies on climate change adaptation and limited integration of EbA and other adaptation measures into sectoral policies.* Climate change adaptation is a priority in the NDCs of all seven participating countries. National policies also indirectly support EbA; for example, conservation policies, and the need to restore, conserve and sustainably manage the Dry Corridor and Arid Zone forests, wetlands and agroforestry systems is widely recognised. However, institutions at both national and local level have insufficient knowledge and technical capacity to implement existing policies, preventing policies from achieving the necessary impacts. * *Barrier 4: Limited technical capacity within governments and local communities to implement EbA and other adaptation measures.* Governments have gradually reduced public budgets for the provision of extension services that could promote EbA. As a result, communities receive limited support, training and technical assistance to implement climate-resilient practices at landscape-, community- and household-level. * *Barrier 5: Limited knowledge and technical capacity to adopt technologies and approaches for efficient water use.* Technologies that support efficient water use have been implemented successfully in the region, but these cases have not been well documented. As a result, there is limited information on water management and improved technologies, both for policy-makers at the local-level, and for water users. In the agricultural sector, specifically, successful water-efficient technologies are known for large commercial farming (e.g. drip irrigation of sugarcane and oil palms), but knowledge of water-efficient technologies is less widespread among smallholder farmers. * *Barrier 6: Limited access for financial institutions to specific refinancing options for the implementation of EbA, water- and energy-efficient technologies in the private sector.* Private sector investors, credit agencies and financial institutions have limited evidence of the benefits of EbA and other adaptation measures and limited access to specific EbA refinancing options. In addition, valuations by these institutions do not take into account important long-term benefits of EbA. As a result, these institutions have limited opportunity to assess the commercial viability of EbA approaches and natural resource-based businesses, and to develop related financial services and products. * *Barrier 7: Limited access to credit for adaptation interventions among vulnerable populations.* Smallholder farmers and rural households require credit to cover the initial costs of implementing EbA and water- and energy-efficient technologies. However, the high risk of such credit to financing institutions limits the availability of credit to vulnerable communities. This is because banks often lack guarantees from central banks/multi-national development banks to reduce their risk in providing credit to individuals and small businesses with little collateral and small farm sizes. * *Barrier 8: Absence or limited development of economic incentives for investment in sustainable natural resource management and EbA.* Although some water funds and schemes for payment for environmental services (PES) exist in the participating countries, the majority of these funds and schemes operate at limited and local scales. Barriers to the implementation of such economic incentives include lack of enabling strategic, legal and institutional frameworks and lack of transparent monitoring arrangements.   **Project design to overcome barriers**  The proposed project’s interventions have been designed to overcome the above-mentioned barriers to increase water supply and effect a paradigm shift in water-demand management in the Dry Corridor and Arid Zones. This will be achieved through four interconnected Outputs, described in detail in Section B.3.  **Barriers 1** and **2** will be overcome through the dissemination of knowledge products on climate change impacts, EbA and other adaptation measures through a regional knowledge hub linked to the existing Environmental Observatory. In addition, policy- and decision-makers will be trained on relevant aspects of climate change — including the disproportionate impact of climate change on women and other vulnerable groups — and the role of EbA and other adaptation measures in mitigating these impacts. To ensure the sustainability of project interventions in overcoming these barriers, local community organisations — including women’s groups — will be trained to continue the development and dissemination of climate information and knowledge products. Policy- and decision-makers will also be trained on how to integrate climate change adaptation into local policies; and their experiences in doing so will be disseminated throughout the Dry Corridor and Arid Zones to promote this process across different sectors throughout the region. This training will overcome **Barrier 3**.  The technical capacity of local government, farmers and rural communities will be strengthened under the proposed project, enabling them to implement EbA and other adaptation measures, and overcoming **Barriers 4** and **5**. To achieve this, country-specific protocols will be developed for the: i) implementation of sustainable EbA practices; ii) adoption of water-efficient technologies by households; and iii) adoption of energy-efficient technologies that reduce fuelwood demand. Training in the use of these protocols will be provided to local government representatives using a training-of-trainers approach. In addition, local communities will be trained on EbA and other adaptation interventions, including visits to demonstration sites to facilitate farmer-to-farmer knowledge transfer. On-the-ground EbA interventions and water- and energy-efficient technologies will be introduced across seven catchments, the implementation of which will result in lessons learned and best practices to contribute to the knowledge base regarding the adoption of these interventions.  **Barriers 6** and **7** will be overcome by the establishment of financial products and services to finance EbA investments, including via a blended EbA finance fund with two main divisions, namely a: i) grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing; and iii) a blended EbA lending facility for small- and large-scale EbA investments at farm-, enterprise- and household-level. The technical capacity of financial institutions will be increased to enable the operationalisation and delivery of these new financial products and services, whilst awareness will be raised among the private sector and vulnerable communities on how to access these mechanisms for the implementation of adaptation measures. To increase economic incentives for investing in EbA and other sustainable land management practices, an evidence base will be constructed based on the introduction of adequate and where possible digital monitoring, reporting and verification systems for all activities financed. This will help to demonstrate the value and effectiveness of proposed adaptation activities to policy-makers and financial institutions so that these considerations will be integrated into development plans. A methodology will also be developed to value ecosystem services. It will be used to guide local governments in making policy changes and implementing economic incentives — such as water funds — for sustainable land management practices. This will overcome **Barrier 8**.  Together, the above-described interventions will overcome the barriers to improving climate resilience of rural communities in the Dry Corridor and Arid Zones. They will contribute to a paradigm shift in landscape and water management in the region, ultimately reducing the impacts of increasingly severe droughts and variable rainfall. The sustainability of these interventions will be ensured through a detailed exit strategy centred around the principles of: i) long-term community ownership; ii) mainstreaming initiatives into catchment management and planning frameworks; iii) incentivising private sector investments into EbA; and iv) sustainable financial instruments.    **Figure 4.** Theory of Change diagram. |
| **B.3. Project/programme description** |
| **Project objective**  The proposed project will contribute to GCF’s paradigm shift objective of increased climate-resilient sustainable development by building the adaptive capacity of vulnerable communities across the Dry Corridor of Central America and the Arid Zones of the Dominican Republic. This paradigm shift will be achieved by unlocking finance for the adoption of sustainable practices that will build resilience against extreme climate events such as severe drought and extreme rainfall.  Project interventions will be implemented in all six countries of the Dry Corridor — Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama — as well as the Arid Zones of the Dominican Republic. A single catchment has been selected for each country based on a detailed climate change vulnerability assessment, with five to six municipalities targeted within each catchment (see Section 12 of Annex 2: Feasibility Study). The project’s regional approach will create an enabling environment for scalable and sustainable catchment and water demand management, facilitating large-scale investment in, and implementation of, EbA and water-efficient technologies.  **Component 1. Financing mechanisms for EbA as well as water- and energy-efficient technologies**  The first component under the proposed project will establish and operationalise financial mechanisms to facilitate investment in EbA practices, as well as the adoption of water- and energy-efficient technologies. This component will build on the experience of CABEI’s regional CAMBio II project as well as the regional MEbA project to increase access to climate financing for local organisations and communities — including non-regulated financial institutions, commercial and subsistence farmers, as well as vulnerable households — through an existing network of intermediary financial institutions (IFIs). Using the increasing body of knowledge on EbA financing generated through CAMBio II and other similar initiatives, this component will focus on providing grants and blended finance for EbA investments as well as water- and energy-efficient technologies. This will promote an approach of bottom-up identification of adaptation interventions and de-risked top-down financing for adaptation.  *Output 1. Financial products and services to finance sustainable investments are offered by Partner Financial Institutions (PFI), including PFI access to on-lending funds and support mechanisms.*  Activities under Output 1 will contribute to GCF Outcome A7.0 — Strengthened adaptive capacity and reduced exposure to climate risks — by establishing financial mechanisms to support the adoption of EbA practices as well as water- and energy-efficient technologies. To that end a fund structure will be established to serve two facilities.  Firstly, a USD 40 million grant facility will be established to support site-specific EbA and water-/energy-efficient technologies for the most vulnerable communities, who are unable to access loan finance. A bottom-up approach will be used to identify eligible projects, with the Project Steering Committee establishing the selection criteria at project inception and local project execution units guiding communities on how to develop proposals to access the funds (see Output 2). On-the-ground EbA-oriented grant support will benefit community-based institutions including *mancomunidades*[[45]](#footnote-46), municipal associations, farmers cooperatives, solution providers or civil society organisations (CSOs). Eligible projects will include community-level investments, the establishment of water funds, seed funding for payment for ecosystem services (PES) and support for the adoption of selected EbA practices and/or water- and energy-efficient technologies. The grant facility will channel investment to selected projects via PFIs in each target municipality. The selection of eligible projects will be managed within the proposed governance structure in two competitive selection rounds per year during year 2, 3, 4 and 5 of the project by i) identifying suitable project at Project Execution Unit level, ii) apply first screening at National Coordination Unit level, iii) pre-selecting proposed projects from the countries at Project Coordination Unit level and iii) finally deciding upon EbA projects in the Regional Steering Committee. Further details on the selection process are described in the Operational Guidelines (Annex 23). Successful implementation will catalyse the uptake of EbA practices as well as water- and energy-efficient technologies to be financed through a credit facility (see below). Training and support activities will also be provided to communities in the target municipalities to enhance access to the trust fund.  The EbA lending facility (EbA credit line) will be established and operationalised at below-market conditions for small- and large-scale EbA investments at farm-, enterprise- and household-level. By providing a blended financing mechanism composed of senior and subordinated debt, incentives are created for financial institutions to engage in EbA finance, for which there exist no or only limited offerings as of today. Financial institutions in CABEI’s established network will be able to access the EbA credit line for direct on-lending[[46]](#footnote-47) to final customers or for financial intermediation to local non-regulated financial institutions such as cooperatives or producers’ associations. Investment will be targeted towards community-level investment, rural MSMEs or other institutions that can foster EbA, as well as water- and energy-efficient technologies, for end beneficiaries across different sectors.  The EbA fund will be accompanied by a TA facility (see below) that will develop capacity within municipalities and PFIs to monitor and assess the implementation of EbA and water/energy-efficient investment projects as well as to monitor and document the respective economic and ecosystem benefits. Where possible, Information and Communication Technologies will be introduced to provide data analytics and satellite data insights into the EbA lending portfolio and climate impacts on the portfolio.  To facilitate access to and operation of the fund, Output 1 will provide technical assistance (TA) to CABEI-accredited PFIs and non-regulated financial institutions, such as cooperatives and producers’ associations. The TA facility is geared to focus primarily on direct technical assistance and a comprehensive Training-of-Trainers or online course mechanism to strengthen: i) the awareness of climate change, ecosystem degradation and water scarcity; ii) the identification and promotion of solutions to overcome these threats; iii) the application of methodologies, technologies and tools to foster EbA finance and manage climate and ecosystem risks via modern information management solutions, iv) the provision of specific EbA oriented tailor-made financial products and services to end beneficiaries, as well as of non-financial services such as information services or training; and v) the monitoring, reporting and verification systems in place via technology transfer to support learning on successful EbA and water/energy-efficient technologies. This will comprise capacity-building for financial intermediaries on the concepts, financial methodology, and tools to provide products and services oriented to EbA and water-efficient technologies. Expert pools will be established in each country to provide country-specific technical assistance to PFIs based on a standardised methodology.  A detailed description of the technologies that can be financed through these mechanisms is provided in Annex 22. Project activities that will be implemented under this output are listed below, with technical details provided in Annex 2: Feasibility Study.   * Activity 1.1. Establish a fund structure that will host the 2 facilities (grant and blended EbA finance) Activity 1.2. Establish and operationalise a guarantee fund to support EbA financing. * Activity 1.2. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations (operational expenses to be borne by the fund's overall activities) * Activity 1.3. Establish the blended EbA lending facility to enable EbA finance via CABEI's network of financial institutions directly to end beneficiaries or indirectly via non-regulated financial institutions and initiate operations (operational expenses to be borne by the fund's activities) * Activity 1.4. Provide technical assistance (TA) to strengthen technical capacity of CABEI network and non-regulated financial institutions to access and channel funds for small- and large-scale EbA investments.   **Component 2. Implementation and mainstreaming of EbA, water- and energy-efficient technologies and natural resource-based businesses**  Under Component 2, three interrelated outputs will facilitate the widespread implementation of adaptation measures across the region. This will include: i) providing technical assistance to local government, farmers and rural communities to implement adaptation measures; ii) mainstreaming adaptation measures and incentives into policy and planning as well as disseminating information on climate change and adaptation across the Dry Corridor and Arid Zones; and iii) implementing on-the-ground EbA and water/energy-efficient technologies. These outputs will complement Output 1 by providing the technical assistance needed by local government, farmers and rural communities to implement EbA activities and water/energy-efficient technologies financed by the mechanisms established under Output 1. In addition, increased knowledge disseminated under Component 2 regarding EbA and water-efficient technologies and newly-available financial mechanisms will facilitate access for those previously unable to fund these adaptation measures, as well as creating an enabling environment for the establishment of economic incentives for investment in EbA.  *Output 2.*  *Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.*  Activities under Output 2 will contribute to GCF Outcome A7.0 — Strengthened adaptive capacity and reduced exposure to climate risks — by facilitating the adoption of improved land use practices, as well as natural resource-based businesses (NRBs) and alternative climate-resilient livelihoods. A community-based approach will be adopted to identify site-specific interventions in each of the 36 municipalities targeted by the project, which will be implemented under Output 4. This will be supported by the establishment of community-level monitoring and evaluation committees, which will promote country ownership and sustainability of project interventions. The technical capacity of these committees will be strengthened to enable the monitoring of biophysical, social and economic conditions in their local catchment areas, as well as to assess the level of climate vulnerability, risks and opportunities. Using the findings of these committees to ensure stakeholder buy-in, site-specific intervention plans will be developed which will account for current and future climate change risks and will integrate EbA measures. Technical assistance will be provided to local governments to adopt and implement these intervention plans.  Technical assistance will also be provided to farmers and rural communities in 36 municipalities, on the implementation of on-the-ground EbA practices, including silvopasture, agroforestry and sustainable land management. Country-specific implementation protocols will be developed for: i) the implementation of sustainable EbA practices; ii) the adoption of water-efficient technologies; and iii) the adoption of energy-efficient technologies that reduce fuelwood demand. To operationalise these protocols, a training-of-trainers programme will be introduced for representatives of local departments of environment/water, community-based organisations, water committees, local cooperatives and women’s organisations within each country. Particular attention will be paid to the inclusion of women in this training, especially considering their active role in water and fuelwood use. Site visits will be arranged to demonstration sites that will be established in each of the target municipalities (Output 4), as well as showcasing mature plots where EbA interventions are already providing demonstrable benefits regarding water security. Commercial farmers, smallholder subsistence farmers, local communities and individual households will also be provided with technical assistance to adopt water-efficient technologies, including drip irrigation and rainwater harvesting, as well as for energy-efficient practices, including fuelwood drying and efficient charcoal production which will reduce the pressure of fuelwood collection on remnant forests.  In addition to the technical assistance provided for on-the-ground implementation of EbA practices and water/energy-efficient technologies, training will be provided to communities on the development of small, locally appropriate livelihoods. This will include training for natural resource-based businesses (NRBs) that: i) will support the implementation and maintenance of EbA interventions — such as tree nurseries and the manufacturing, distribution or repair of water-efficient technologies; and ii) rely on non-destructive use of ecosystem goods and services provided through EbA — such as businesses developed around the ecotourism industry, or non-timber forest products (NTFPs). The establishment of NRBs not only contributes to the upscaling of EbA interventions, but also enhances the resilience of vulnerable communities by providing climate-resilient income-generating opportunities. The promotion of NRBs — in conjunction with increased access to financing under Output 1 and increased knowledge and understanding of adaptation options under Output 3 ­— will strengthen the adaptive capacity of smallholder farming communities under future climate conditions. Project activities that will be implemented under Output 2 are listed below.   * Activity 2.1. Develop site-specific intervention plans for the seven target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities and other stakeholders. * Activity 2.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and energy-efficient technologies. * Activity 2.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods.   *Output 3.* *Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.*  Activities under Output 3 will contribute to GCF Outcome A8.0 — Strengthened awareness of climate threats and risk-reduction processes — by building an evidence base for the effectiveness of EbA and other adaptation measures in reducing the impacts of climate change and by disseminating this information to local decision-makers, the private sector (including commercial farmers) and local communities. The dissemination of information will be managed through the establishment of a regional knowledge hub linked to the Environmental Observatory. The knowledge hub will serve two primary functions. First, it will act as a repository for climate change adaptation information, including all protocols developed by the project as well as the best practices and lessons learned collected through the project’s monitoring and evaluation processes. This will include guidance on how to access opportunities for accessing finance provided through the project, with specific focus on women’s economic empowerment. Second, the hub will provide users with specific knowledge products that will guide policy- and decision-makers to effectively implement sustainable landscape management practices. The knowledge products will also include technical assistance for creating business opportunities as well as technical guidelines for the assessment of ecosystem services. This will support decision-making for climate change adaptation, as well as drought and flood risk management. Training will also be provided to policy- and decision-makers at the municipal level on how to use the knowledge hub and associated tools. Furthermore, community organisations – including women’s groups – and traditional leaders will be trained to act as champions in developing, revising and disseminating information products to support the adoption of EbA and other resilient practices. This approach will facilitate the sharing of ideas and sustainable practices between communities from the grass roots level, using existing structures and traditional methods which will not only extend the reach of the dissemination campaign, but also the uptake by local communities. Awareness will also be raised regarding the financial mechanisms established under Output 1, thereby facilitating access to climate financing for local governments, farmers and local communities. The information products made available through the knowledge hub will be demand-driven and will draw on best practices and lessons learned from governments, municipalities, community-based organisations, water managers and private sector stakeholders. By centralising the knowledge hub, information will be effectively disseminated across the region and decision-makers will be able to learn from the experiences of other countries within the region.  Output 3 will also contribute to GCF Outcome A5.0 — Strengthened institutional and regulatory systems for climate-responsive planning and development — by building the technical capacity of national- and local-level decision-makers to promote climate change adaptation in the Dry Corridor and Arid Zones. This will be supported by the development or adjustment of a methodology for the valuation of ecosystem services to develop accounts profiles of natural capital for integration into development plans in the Dry Corridor and Arid Zones. The methodology will draw on best practices and lessons learned from ongoing initiatives, including the: i) “incentivo forestal” in Guatemala; ii) payment for environmental services in Panama and Costa Rica; iii) Water Fund of the city of Quito in Ecuador[[47]](#footnote-48); and iv) water funds established in cities in Guatemala, Costa Rica and the Dominican Republic[[48]](#footnote-49). Ultimately, the valuation of ecosystem services will be used to promote the establishment of economic incentives for EbA investments – for example, water funds and payments for environmental services. The capacity of local governments to make policy changes that include these kinds of incentives will also be strengthened, including the use of protocols and criteria for the adoption of EbA and implementation of economic incentives for sustainable land management. Project activities that will be implemented under Output 3 are listed below.   * Activity 3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones. * Activity 3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions. * Activity 3.3. Enhance capacity of local-level policy-makers to integrate climate change adaptation and the valuation of natural capital into local policies.   *Output 4. Large-scale adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.*  Activities under Output 4 will contribute to GCF Outcome A7.0 — Strengthened adaptive capacity and reduced exposure to climate risks — by providing the necessary resources for the on-the-ground implementation of EbA interventions as well as water- and energy-efficient technologies in rural communities across the seven target catchments. Support will be targeted at the most vulnerable communities, in 36 municipalities[[49]](#footnote-50), that lack the capacity to access financing and equipment to implement adaptation interventions without external assistance. These grant-supported interventions all also serve as demonstration sites that will provide practical examples to surrounding communities on how to implement sustainable practices.  The project will work with local organisations in each municipality to implement on-the-ground EbA interventions that provide multiple ecosystem goods and services to vulnerable communities. The relevant organisations will be identified during the development of site-specific intervention plans (Activity 2.1). Relevant interventions have been identified for each municipality based on community consultations and sectoral expert opinion obtained for the Feasibility Study. These interventions include: i) establishing one tree nursery per municipality focusing on native species and fuelwood trees; ii) establishing 4,101 ha of forest protection zones across the seven catchment areas; iii) protecting 1,728 ha of natural forest in major recharge areas and riparian zones, including assisted regeneration; iv) restoring 4,334 ha of natural forest areas across seven catchments; v) restoring 746 ha of native pine forests in Guatemala, Honduras and Nicaragua; vi) establishing 1,127 km of agroforestry systems using diversified living fence arrangements in basic grains crops; vii) establishing 582 ha of agroforestry systems for natural shade in coffee plantations; viii) establishing 1,163 ha of silvopasture systems across the 36 target municipalities; ix) establishing 4,569 ha of sustainable fuelwood and timber plantations across the 36 target municipalities; x) establishing 108 km of firebreaks for forests and plantations; xi) constructing 108 km of living barriers for soil conservation around agricultural plots; and xii) constructing 108 km of superficial drainage for soil conservation. In addition to these EbA practices, activities under Output 4 will also address the projected increase in water scarcity under future climate conditions by introducing water-efficient technologies to reduce demand for scarce water resources in rural communities. This will include installing: i) 109 rainwater harvesting systems at the community level targeting clinics and schools; and ii) 139 community-level rainwater reservoirs (500 m3 each). Finally, energy-efficient technologies will be introduced in each of the target municipalities, focussing on efficient charcoal production methods using half-orange kilns. This will maximise the energy output per unit of biomass, thereby reducing the pressure of fuelwood collection on natural ecosystems  In addition to directly strengthening the adaptive capacity of vulnerable communities, on-the-ground implementation of EbA and water-efficient technologies will contribute to the existing evidence base of successful adaptation interventions in the region. Specific project activities that will be implemented under Output 4 are listed below.   * Activity 4.1. Implement EbA interventions within rural communities across the seven target catchments. * Activity 4.2. Implement water- and energy-efficient technologies within rural communities across the seven target catchments. |
| **B.4. Implementation arrangements** |
| The proposed project will be implemented over a period of seven years, from 2020–2027. The Central American Bank for Economic Integration (CABEI) will be the Accredited Entity (AE) for the project, and will be responsible for overseeing the implementation, financial management, evaluation, reporting and closure of the project.  *Accredited Entity*  As the AE, CABEI will oversee project implementation, using its experience having successfully implemented similar project activities involving financial intermediation across the region. Over the past 56 years, CABEI’s support to the region has resulted in project approvals amounting to more than USD 30.9 billion and disbursements of more than USD 26.2 billion. CABEI will be responsible for financial management and will be accountable for the use of GCF resources under the project. It will maintain project accounts, facilitate staff recruitment and procurement processes and will monitor resource mobilisation of baseline as well as co-finance. Financial transactions will be subject to annual audits undertaken by internationally-certified auditors. In addition, as the AE, CABEI will: i) ensure that the project is executed in accordance with GCF standards; ii) supervise, oversee and manage the implementation of project interventions; iii) report on project progress; and iv) ensure that project activities are well coordinated and aligned with countries’ national priorities. To ensure adequate oversight of the project, CABEI will use its robust fiduciary, technical oversight and quality assurance systems such as its Evaluation Office, its Project Formulation Department (FOPROY) and its Financing for the Majorities Unit (FINAM) to closely support the Regional Project Management Unit (RPMU). Project implementation by CABEI will also take place in close coordination with a Regional Project Steering Committee (RPSC).  *Executing Entity*  The specific Executing Entities (EE) for the project will be determined during project implementation. The EE will act nationally or regionally to provide project management and technical oversight and manage institutions in the respective participating countries. The EE will be accountable to CABEI as the AE for the effective implementation of project interventions. All operating policies and procedures will follow CABEI’s standards of operation. The EE will also work in close coordination with the RPSC and RPMU (described below).  *Regional Project Steering Committee*  The RPSC will comprise representatives from *inter alia*: i) Central American Commission for Environment and Development (CCAD); ii) CABEI; iii) United Nations Environment Programme (UNEP) — in a Technical Advisory Role; and iv) national-level CCAD liaisons. The RPSC will primarily be responsible for providing technical oversight and advisory support at the regional level. This will include: i) overseeing project implementation; ii) reviewing annual workplans and project reports; iii) reviewing the project’s fulfilment of environmental and financial objectives; iv) approving any changes to the project’s targets, activities or timelines; and v) supporting communities to access the grant facility established under Output 1. The RPSC will be centrally placed to ensure consistent project progress across all seven countries. Biannual RPSC meetings will be held[[50]](#footnote-51) to take management-related and technical decisions, discuss the project's main performance indicators and provide strategic guidance. The RPSC will also be responsible for overseeing the RPMU.  *Regional Project Management Unit*  The RPMU will be responsible for day-to-day project administration and execution, and the regional technical coordination of project activities. It will ensure that project implementation proceeds through clear work plans, terms of reference and carefully designed administrative arrangements that meet CABEI and GCF requirements. A full-time staff member will be recruited to fulfil the role of Project Manager (PM), who will head the RPMU and will be responsible for the daily on-the-ground implementation and management of the project. The PM will be responsible for ensuring the project achieves the targets set out in the Results Framework (Section E) to the required standards of CABEI and the GCF and within the specified time and budget allocations. To achieve these targets, the PM will: i) report directly to the RPSC on project management-related matters; ii) manage the project in accordance with the specified workplans and allocated budget; iii) ensure that all project interventions are implemented according to CABEI and GCF guidelines; iii) work closely with regional and national institutions to ensure that the project is managed effectively and that the needs of all beneficiary groups are considered; and iv) oversee the efficient and effective information and knowledge-transfer to relevant project partners. The PM will be required to fulfil these roles for the duration of the project.  In addition to the PM, the RPMU will be comprised of: i) a Project Coordinator (PC); ii) a Financial and Procurement Officer (FPO); iii) an Environmental and Social Safeguards Officer (ESO); iv) a Communications Officer (CO); v) a Gender Officer (GO); vi) a Monitoring and Evaluation (M&E) Specialist; and vii) an Administrative Officer (AO). The PC will be contracted full-time to support the PM in the implementation of project activities by ensuring that there is effective coordination between relevant project stakeholders during the implementation phase and serving as a focal point for facilitating the various stakeholder engagements that will be undertaken.  An international Chief Technical Advisor (CTA) will be employed on a part-time basis and will be hosted within the RPMU. The CTA will primarily be responsible for providing technical oversight and guidance for all activities to be implemented under the proposed project. In addition, the CTA will *inter alia*: i)support the annual planning process and budgets; ii) provide monitoring and operational support to the project; iii) coordinate and supervise the work of specialist technical advisors in National Coordination Units (NCUs); and iv) provide biannual reports to the RPMU and RPSC on project performance and progress towards objectives.  *CABEI Investment Committee*  To support the implementation of activities under Component 1 of the project, an Investment Committee (IC) will be established at CABEI’s headquarters in Tegucigalpa, Honduras. The IC will report to the RPSC and will be comprised of technical and financial experts. Its responsibility will be to manage the operation of the guarantee facility and the EbA credit line established under the project. The experts of the IC will carry out analyses of relevance, sustainability, and cost-effectiveness of all applications, thereby ensuring they are framed within the specific objectives of the project. The IC will undertake these functions in close collaboration with the RPMU and the National Advisory Committees (described below).  *National Advisory Committees*  A National Advisory Committee (NAC) will be established in each of the seven participating countries. Each NAC will be comprised of a: i) National Project Director (Chair); ii) CABEI national representative; iv) national climate change office/department representative; v) Ministry of Environment representative; vi) Ministry of Agriculture representative; and vii) Ministry of Planning representative. The responsibilities of the NACs will include national project guidance, planning and oversight, as well as supervision of national financial execution. The NACs will also recommend Partner Financial Institutions (PFIs) — in collaboration with the Project Execution Units (PEUs) — for participation in project activities and will work closely with CABEI’s IC and the RPMU to coordinate activities under Component 1 of the project. They will also participate in coordinating national access to the EbA credit line and the trust fund established by the project and will provide relevant inputs to the IC to assist with decision-making.  *Project Execution Units*  Project Execution Units (PEUs) will be established in the target catchments of each of the participating countries. Each unit will be comprised of: i) a Coordinator (technical leader); ii) an EbA, water and energy technical advisor; iii) a financial advisor to give guidance on the EbA credit line and trust fund; iv) an administrative officer; v) a social communication and engagement officer (with gender knowledge); and vi) a monitoring and evaluation officer (part time). These PEUs will be responsible for daily execution of the project in the respective target catchments, as well as communication and capacity-building activities with participating local governments, farmers and communities. They will provide monitoring, reporting and evaluation services, as well as technical assistance project execution services. The EbA, water and energy expert will provide technical assistance to local governments, farmers and communities on implementing EbA, water- and energy-efficient interventions under the project. The financial advisor will provide technical assistance to local financial institutions to support EbA, to learn how to use the financial mechanisms established under the project, and for the valuation of natural assets. The PEUs will also be responsible for the identification of, and project formulation for finance applications — EbA credit line or trust fund — to be submitted to the NCUs for approval, after which the IC and RPSC will sign off and funds will be released by the EbA fund and disbursed through the relevant PFI. The social communication and engagement officer will be involved in engagement of stakeholders in capacity-building activities and will ensure that gender matters are considered. The administrative officer will support all project activities, including logistics. The monitoring and evaluation officer will define and implement the monitoring plan for the project and will ensure that targets are being met, including the tracking of risks. CABEI national offices will manage all national budget allocations.  *Partner Financial Institutions*  PFIs (as part of CABEI’s network) will be selected in each country to manage financial flows in the target municipalities according to decisions made by the NACs. In the case where there is no accredited institution within the target catchment area — for example, in Nicaragua — accredited institutions will be provided with technical assistance to offer an institutional loan to another non-accredited financial institution that can then directly lend to the end beneficiary. The PFIs will work closely with the PEUs to ensure interventions financed directly by the project, and using the mechanisms established by the project, are well-aligned with project objectives. The figures below show the institutional arrangements for project implementation (Figure 5) and the flow of funds (Figure 6).    **Figure 5**. Project management structure for the proposed project.    **Figure 6.** Flow of funds for the proposed project |
| **B.5. Justification for GCF funding request** |
| The seven participating countries are extremely vulnerable to climate change impacts and have experienced severe agricultural and economic losses because of progressively more frequent and intense droughts and floods in recent years (Table 1). In 2014, 2.5 million people were affected by food insecurity across Honduras, Guatemala and El Salvador as result of the loss of 75% of maize and bean crops[[51]](#footnote-52), the impact of which was exacerbated by further droughts in 2015. In 2016, 1.6 million people across the Dry Corridor region were food insecure and 3.5 million required humanitarian assistance as a result of the loss of 50–90% of crops[[52]](#footnote-53). In 2018, a heatwave across Central America caused crop losses across 282,000 hectares, affecting a total of 2.2 million people[[53]](#footnote-54). A summary of the extreme climate events and associated impacts experienced by the seven participating countries over the last two decades is provided in Table 1 below. Droughts and other extreme climate events linked with these decreasing agricultural yields over the last decade have been more intense and have occurred more frequently than in previous decades. They are also likely to increase in frequency and intensity under future climate conditions.  **Table 1.** Total number of people affected and damages in USD millions for natural disasters occurring between 2000 and 2019[[54]](#footnote-55).   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Country** | **Disaster** | **Number** | **Total people affected** | **Total damage (USD million)** | | **Costa Rica** | Drought | 2 |  |  | | Flood | 19 | 478,209 | 106 | | Storm | 4 | 117,574 | 205 | | **El Salvador** | Drought | 4 | 1,486,610 | 186 | | Flood | 11 | 314,431 | 1,000 | | Storm | 11 | 198,145 | 1,315 | | **Guatemala** | Drought | 5 | 5,680,081 | 158 | | Extreme temperature | 4 | 12,634 |  | | Flood | 22 | 1,034,660 | 61.9 | | Storm | 12 | 987,775 | 1,639 | | **Honduras** | Drought | 8 | 1,517,335 |  | | Flood | 21 | 940,227 | 129 | | Storm | 11 | 234,636 | 217 | | **Nicaragua** | Drought | 4 | 948,000 |  | | Flood | 16 | 417,456 | 0.05 | | Storm | 14 | 324,912 | 3 | | **Panama** | Drought | 3 |  | 272 | | Flood | 25 | 143,672 | 20.8 | | Storm | 2 | 24,000 |  | | **Dominican Republic** | Flood | 17 | 2,984,330 | 97 | | Storm | 23 | 336,429 | 58 |   To overcome observed and predicted climate threats in the Dry Corridor and Arid Zones it is necessary to strengthen the technical and institutional capacity for EbA and to introduce novel financial mechanisms to fund adaptation. Currently, governments of the seven participating countries have insufficient resources, knowledge and technical capacity to promote innovative natural resource-based adaptation interventions. The resources required to effect a paradigm shift in the region’s approach to natural resource management exceed those that can be supplied through public sector financing. The economic situations of the participating countries in the Latin America and the Caribbean (LAC) region are outlined in Table 2 below.  **Table 2.** Economic indicators for Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama and the Dominican Republic. Respective values are shaded green–red to indicate best–poorest economic performance among these countries.   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **Country** | **GDP per capita**[[55]](#footnote-56) **in USD** (global rank)[[56]](#footnote-57) | **GDP growth rate mean** (%) (2013–2017)[[57]](#footnote-58) | **Public debt to GDP** (ratio)[[58]](#footnote-59) | **Poverty** (% population living under USD 3.20 per day)[[59]](#footnote-60) | **Human Development Index** (global rank)[[60]](#footnote-61),[[61]](#footnote-62) | **Inequality index (Gini)**[[62]](#footnote-63),[[63]](#footnote-64) | | **Guatemala** | 8,173 (119) | 3.6 | 30.1 | 24.2 | 0.65 (127) | 53.0 | | **Honduras** | 5,499 (134) | 3.6 | 51.9 | 30.0 | 0.62 (133) | 50.0 | | **El Salvador** | 8,934 (112) | 2.3 | 68.1 | 10.3 | 0.67 (121) | 40.0 | | **Nicaragua** | 5,823 (130) | 4.8 | 46.0 | 12.8 | 0.66 (124) | 47.1 | | **Costa Rica** | 17,149 (76) | 3.4 | 66.2 | 3.8 | 0.79 (63) | 48.7 | | **Panama** | 24,262 (58) | 5.6 | 38.8 | 7.0 | 0.79 (66) | 50.4 | | **Dominican Republic** | 16,956 (78) | 6.1 | 47.1 | 6.2 | 0.74 (94) | 45.3 |   Although countries in the region are classified from lower-middle to high income based on GDP per capita, their national budgets are constrained, with poverty eradication and sustainable development having been prioritised for funding over CCA. For example, less than 3% of the national budget has been committed for mitigation, adaptation and risk management related to climate change in Guatemala, El Salvador, Nicaragua and Honduras in recent years.  Across the LAC region, there is a high dependency on non-reimbursable international support to meet CCA goals. Where the availability of international finance has been limited, countries have had to increase international debt or claim loans in order to respond to climate change impacts. There is a considerable challenge to be met in that the finance available for CCA is far below what is required to meet adaptation needs. For example, a UNDP IFF study[[64]](#footnote-65) in 2011 estimated an increase in the annual cost of adaptation in Costa Rica for the biodiversity sector alone from USD 60.0 million in 2015 to USD76.0 million by 2030[[65]](#footnote-66). Similarly, in the Dominican Republic, annual adaptation costs for the tourism sector are predicted to increase from USD16.0 million in 2015 to USD57.0 million by 2030. Aggregate estimates for the LAC region place the cost of adaptation to a 2.5°C rise in temperature at 1.5–5.0% of the region’s GDP. The total annual cost for adaptation across all sectors in the LAC region is predicted to increase under both wet and dry climate scenarios up to 2050 (Figure 7). Safeguarding water supplies, implementing flood protection measures and effective management of coastal zones will comprise the bulk of this cost[[66]](#footnote-67).    **Figure 7.** Total annual cost of adaptation [[67]](#footnote-68)across all sectors in the Latin America and the Caribbean (LAC) region under a wet (NCAR)[[68]](#footnote-69) and dry (CSIRO)[[69]](#footnote-70) scenario. Points indicate total annual costs in USD billion based on 2005 values. Bars indicate total annual costs as a percentage of LAC regional GDP.    Given this constrained fiscal space, there are limited opportunities to implement climate change adaptation interventions in the region without additional assistance. The seven target countries have already extended their largest possible contributions to finance adaptation and further support is needed to fully address the climate problem. While scope has been identified for partial loan financing at the regional level, the extent of public debt in the individual countries, as well as their sovereign credit ratings (most graded as speculative with significant risk), constrain their borrowing capacities with regards to global recommended borrowing limits. As a result, the countries are unable to take on more sovereign debt to finance adaptation directly, instead relying on alternative financial mechanisms. In addition, and at a local scale, the most vulnerable farmers are often considered to be too high a risk for loans because of their small farm sizes and limited collateral which is unfavourably viewed by banks using conservative practices. This limits these individuals’ access to financial resources needed for climate change adaptation.  To overcome these constraints, the proposed project is requesting loan finance to establish a credit line for EbA in the region, with additional guarantees to de-risk investments and support uptake of EbA financing by small holder and commercial farmers. In addition to the loan components, GCF grant financing is requested to establish and administer the credit line and to provide technical assistance for the implementation of EbA. Grant finance is also required to establish a trust fund that will support bottom-up implementation of EbA in the most vulnerable communities as well as to support direct implementation of climate change adaptation interventions in the most vulnerable communities that are not in a position to access loan finance. |
| **B.6. Exit strategy and sustainability** |
| The sustainability and replicability of the proposed project interventions will be ensured through six elements in the project design, namely: i) operations and maintenance; ii) building long-term community ownership; iii) integrating EbA into catchment management and planning; iv) incentivising private sector investments into EbA; v) developing financial instruments for EbA; and vi) monitoring and evaluation. The details of each of these elements are described below.  **Post-project operations and maintenance**.Relevant project stakeholders are committed to undertaking Operations and Maintenance (O&M) not only during the project, but also after project completion. Aspects of the project requiring O&M include financial products and services, a regional knowledge hub, EbA interventions, and water- and energy-efficient technologies. Public sector investment into O&M will build ownership by these agencies, maximising the likelihood of effective, sustained operation beyond the project implementation period.  **Building long-term community ownership**. By engaging closely with target communities — particularly women’s organisations — throughout the project design and implementation process, the project will instil a sense of ownership in these communities, which will contribute to gender equality and the long-term sustainability of project interventions after project closure. Sub-activities 2.2.6 and 3.1.4 specifically target local cooperatives and women’s organisations, respectively, by: i) establishing a training of trainers’ programme for the implementation of EbA and water-efficient technologies; and ii) strengthening the technical capacity of community organisations, including women's groups, in revising and disseminating information products to support the adoption of EbA and other climate-resilient practices. Community involvement in project interventions is also particularly important in Sub-activity 2.1.1 — establishing a community-level monitoring and evaluation committee in each municipality — as well as in Sub-activity 2.3.3 — establishing livelihood training programmes in each municipality for farmers and rural communities on locally-appropriate natural resource-based businesses and climate-resilient livelihoods. Communities will further be closely involved in the co-development of all site-specific intervention plans to integrate EbA measures into the seven target catchments (Activity 2.1).  **Integrating EbA into catchment management and planning**. Training, monitoring, evaluation and the curation of lessons learned and best practices from project activities will provide national- and local-level decision-makers with relevant knowledge and information to adopt climate-resilient policies and incentives in the long-term. Output 3 is specifically designed to ensure the information generated through project activities is disseminated across the region to increase the capacity of institutions to implement EbA interventions, building a strong knowledge-sharing platform. Activity 3.3 will particularly enhance capacity of local-level policy makers to integrate climate change adaptation and the valuation of natural capital into local policies, which will enhance the sustainability of proposed interventions beyond the project’s lifespan.  **Incentivising private sector investments into EbA.** The project will leverage private sector investments into EbA through capacity-building and awareness-raising interventions targeting the private sector. Activities under Output 3 will build the private sector’s awareness of the potential benefits of EbA, while Output 1 and 2 will provide financial products and technical assistance for businesses to implement EbA. For example, training commercial farmers on sustainable EbA practices (Activity 2.2.2) will demonstrate the benefits of EbA for ecosystem-based businesses and facilitate private sector investments in these practices as well as in restoration/conservation of ecosystems on which these businesses rely in the long-term. The financial instruments established under Output 1 will further support these farmers to access finance for such investments. By creating a framework for the valuation of ecosystem services, the project will further facilitate the quantification of long-term economic benefits of large-scale EbA interventions and contribute to the long-term incentive of investing into EbA in the region.  **Developing financial instruments for EbA**. The provision of financial mechanisms to implement EbA and water-efficient technologies will increase rural communities’ access to funds that they have previously been unable to use to adapt to climate change. Developing these financial instruments will ensure that potential beneficiaries are able to sustain and scale-up project interventions independently and continue replicating EbA and water-efficient practices after the project’s lifespan.  **Monitoring and evaluation**. Lessons learned from project activities will be collated by an M&E Specialist in the Project Management Unit and made available to development planners through a regional knowledge hub. In addition, the project will establish a community-level monitoring and evaluation committee in each municipality and build the capacity of these committees to monitor the biophysical, social and economic conditions in their local catchment. This capacity building will be complemented by assessments of the level of climate vulnerability, risks and opportunities (Sub-activity 2.1.1). Lessons learned from the M&E will be made available to community-level monitoring and evaluation committees to improve the sustainability of the interventions while the committees’ local knowledge will, in turn, inform the M&E. Further information on M&E for the project is presented in Section E.7. |

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| **FINANCING INFORMATION** | | | | | | | | | | |
| **C.1. Total financing** | | | | | | | | | | |
| **(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)** | | **Total amount** | | | | | **Currency** | | | |
| 192,166,151 | | | | | million USD ($) | | | |
| **GCF financial instrument** | | **Amount** | | **Tenor** | | | **Grace period** | | **Pricing** | |
| (i) | Senior loans | 90,000,000 | | 10 | | | 3 | | 1.0 % | |
| (ii) | Subordinated loans | 30,000,000 | |  | | |  | | Enter % | |
| (iii) | Equity | Enter amount | |  | | |  | | Enter % equity return | |
| (iv) | Guarantees | Enter amount | | Enter years | | |  | |  | |
| (v) | Reimbursable grants | Enter amount | |  | | |  | |  | |
| (vi) | Grants | 72,166,151 | |  | | |  | |  | |
| (vii) | Results-based payments | Enter amount | |  | | |  | |  | |
| **(b) Co-financing information** | | **Total amount** | | | | | **Currency** | | | |
| 50 | | | | | million USD ($) | | | |
| **Name of institution** | | **Financial instrument** | **Amount** | | **Currency** | | **Tenor & grace** | **Pricing** | | **Seniority** |
| CABEI or network PFIs | | Senior Loans | 50 | | million USD ($) | | Enter 10  Enter 3 | 5.6% | | senior |
| Click here to enter text. | | Options | Enter amount | | Options | | Enter years  Enter years | Enter% | | Options |
| Click here to enter text. | | Options | Enter amount | | Options | | Enter years Enter years | Enter% | | Options |
| Click here to enter text. | | Options | Enter amount | | Options | | Enter years  Enter years | Enter% | | Options |
| 1. **Total financing**   **(c) = (a)+(b)** | | **Amount** | | | | | **Currency** | | | |
| 242,166,151 | | | | | million USD ($) | | | |
| **(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)** | | *The programme will also leverage in kind and cash local contribution to match with GCF grant contribution. The specific amount will be calculated once the criteria set on grant facility are defined.* | | | | | | | | |
| **C.2. Financing by component** | | | | | | | | | | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Component** | **Output** | **Indicative cost**  million USD ($) | **GCF financing** | | **Co-financing** | | | | **Amount**  million USD ($) | **Financial Instrument** | **Amount**  million USD ($) | **Financial Instrument** | **Name of Institutions** | | Component 1. Financing mechanisms for EbA and water-efficient technologies | Output 1. Financial products and services to finance EbA investments are offered by Partner Financial Institutions (PFI), including PFI access to EbA on-lending funds and support mechanisms. | 140,000,000 | 90,000,000 | Senior loans | 50,000,000 | Senior Loans | CABEI and/or Network PFIs | | 30,000,000 | 30,000,000 | Subordinated loans | Enter amount | Choose an item. | Click here to enter text. | | 44,255,230 | 44,255,230 | Grants | Enter amount | Choose an item. | Click here to enter text. | | Component 2. Implementation and mainstreaming of EbA, water-efficient technologies and natural resource-based businesses | Output 2. Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures. | 2,903,229 | 2,903,229 | Grants | Enter amount | Choose an item. | Click here to enter text. | | Output 3. Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies. | 5,436,100 | 5,436,100 | Grants | Enter amount | Choose an item. | Click here to enter text. | | Output 4. Large-scale adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones. | 17,366,592 | 17,366,592 | Grants | Enter amount | Choose an item. | Click here to enter text. | | **Project Management Costs (USD)** | | 2,205,000 | 2,205,000 | Grants |  |  |  | | **Indicative total GCF grant cost** **(USD)** | | 72,166,151 | 72,166,151 | |  | | | | **Indicative total cost** **(USD)** | | 242,166,151 | 192,166,151 | | 50,000,000 | | | | | | | | | | | | | |
| **C.3 Capacity building and technology development/transfer** | | | | | | | | | | |
| C.3.1 Does GCF funding finance capacity building activities? | | | | | | Yes  No | | | | |
| C.3.2. Does GCF funding finance technology development/transfer? | | | | | | Yes  No | | | | |
| Capacity building will be provided through several project activities. Activity 1.4 will provide technical assistance (TA) to strengthen technical capacity of CABEI network as well as non-regulated financial institutions (partner financial institutions) to access and channel funds for small- and large-scale EbA investments (USD1,165,314). Under this activity, selected partner financial institutions will receive capacity building services for the adequate promotion and managing of EbA finance to end beneficiaries, such as data management for the measurement, monitoring, reporting and verification (MRV) of climate risks and adaptation strategy impacts or effects, the implementation of EbA-oriented awareness raising and marketing campaigns with end beneficiaries and the development of financial and non-financial products and services geared towards EbA investments. Where applicable, the project will support the integration of external data management solutions to enhance EbA-oriented MRV systems with existing IT infrastructure such as core banking systems. Activity 2.2 will train commercial farmers on sustainable EbA practices, including silvopasture, agroforestry and sustainable land management (SLM) (USD135,000) as well as local communities on EbA and water-efficient technologies, including visits to demonstration sites to facilitate farmer to farmer knowledge exchange (USD836,250). Local communities will also be trained on locally appropriate natural resource-based businesses and climate-resilient livelihoods (Activity 2.3; USD405,000).  Policy- and decision-makers at the municipal level will be trained on climate change impacts, including the impacts of gender inequality, and the role of EbA in mitigating climate change impacts to support political and technical decision-making for climate resilience in the Dry Corridor and Arid Zones (Activity 3.1; USD945,000). This will be supported by building the capacity of these institutions to use the protocols and criteria for the adoption of EbA and implementation of economic incentives for SLM (Activity 3.3; USD315,000). Finally, the technical capacity of community organisations, including women's groups, and local champions will be strengthened for developing, revising and disseminating information products to support the adoption of EbA and other resilient practices (USD135,000).  Technology transfer will be conducted through Activity 3.1, where a regional knowledge management hub will be established (USD131,250). Output 4 will also include on-the-ground implementation of EbA activities as well as water- and energy efficient technologies (USD17,366,592). | | | | | | | | | | |

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| **EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA** |
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| **D.1. Impact potential** |
| The proposed project will contribute to the achievement of GCF’s fund-level adaptation objective of increased climate-resilient sustainable development by facilitating wide-scale investment in EbA and water-efficient technologies across the Dry Corridor of Central America and Arid Zones of the Dominican Republic. In achieving this objective, the project will contribute to several indicative assessment factors in the GCF Performance Measurement Framework to ensure that GCF funds achieve the desired impact in the region. This will include contributions to fund-level impact A4.0 — increased resilience of ecosystems and ecosystem services.  In addition to the fund-level impact, the project will contribute to three fund-level outcomes. The specific contribution to each outcome is presented below. Additional details of how the project interventions interconnect to achieve these fund-level impacts and outcomes are presented in Section B.2. — Theory of Change.  *A5.0 — Strengthened institutional and regulatory systems for climate-responsive planning and development*. The project will build the institutional capacity of local governments in the seven countries to mainstream EbA and other climate-resilient practices into local development plans and policies. This will include facilitating the establishment and operationalisation of financial incentives to promote investment in climate change adaptation.  *A7.0 — Strengthened adaptive capacity and reduced exposure to climate risks*. The adoption of EbA and water-efficient technologies across the target sites will reduce the impacts of climate change on vulnerable communities, particularly regarding water scarcity. For example, the combination of improved land-use practices and the adoption of natural resource-based businesses and alternative climate-resilient livelihoods — with technical and financial support provided through the project — will improve the adaptive capacity of smallholder farming communities under future climate conditions, reducing the impacts of shifting rainfall patterns and more regular droughts.  *A8.0 — Strengthened awareness of climate threats and risk-reduction processes*. The proposed project includes a strong focus on knowledge and awareness as key concepts for building the resilience of vulnerable communities. In particular, the project will build an evidence base for the effectiveness of EbA and disseminate this information to local decision-makers, private sector investors (including commercial farmers) and local communities.  **Adaptation Impact**  The proposed project’s contribution to climate-resilient sustainable development will directly benefit ~620,000 people (50% women) across seven catchment areas — one in each of the participating countries. These direct beneficiaries represent ~5% of the total population of the Dry Corridor and the Dominican Republic’s Arid Zones. The project will also indirectly benefit 1.75 million people across the region by facilitating increased access to finance for natural resource-based businesses, mainstreaming EbA and other adaptation practices into national policies and building the capacity of governments to implement EbA. The three financial mechanisms established under this project will make ~USD227 million available for investment in EbA and water-efficient technologies in the region. In addition to the technical support and establishment of financial mechanisms, the project will: i) restore ~6,800 hectares of forested areas; ii) protect ~4,100 hectares of forest; iii) establish 36 tree nurseries; iv) establish ~4000 hectares of agroforestry systems; v) establish ~100 km of firebreaks, living barriers and superficial drainage solutions, respectively; and vi) develop ~4,500 hectares of sustainable fuelwood sources. Finally, at least 100 community buildings will be equipped with rainwater harvesting systems and 139 community-level rainwater reservoirs will be installed, with a further 43 half-orange kilns made communally available. |
| **D.2. Paradigm shift potential** |
| The proposed project will affect a paradigm shift in the regional approach to catchment and water demand management in the Dry Corridor of Central America and the Arid Zones of the Dominican Republic. This shift will see governments promoting large-scale EbA, and the private sector (including commercial farmers and entrepreneurs in rural communities) having access to the financial resources and technical skills required to implement impactful adaptation interventions. The transformative effects of the project will be achieved through several innovative approaches.  The proposed EbA approach is inherently scalable, not only within the targeted catchments, but also across the entire Dry Corridor and Arid Zones. The project has been specifically designed to create an enabling environment that capitalises on the scalability of EbA, focusing on three core areas of support: financial; policy; and technical. The details of these three areas of support are provided below.  *Creation of an enabling environment for investment in EbA and water-efficient technologies*  The proposed project will diversify financial systems in the region to create an enabling environment for investment in EbA and water-efficient technologies. This will be based on the establishment of several financial instruments with varying entry-points to make climate finance more accessible to vulnerable communities. In particular, the project will establish: i) a trust fund to support bottom-up promotion of local EbA activities through non-reimbursable financing; ii) a guarantee fund to de-risk EbA-focused credit lines within Partner Financial Institutions (PFIs); and iii) an EbA lending facility to channel funds for small- and large-scale EbA investments at farm-, enterprise- and household-level. The enabling environment for investment will be further enhanced by building the technical and institutional capacity of PFIs and nonregulated financial institutions to finance and re-finance EbA and water-efficient technologies through all three of the proposed financial instruments.  *Contribution to the regulatory framework and policies*  The enhanced local evidence-base for EbA that will be created through the knowledge hub and the monitoring and evaluation of project activities will support national and local-level decision-makers to implement policies and incentives for EbA, in particular through improved valuation of natural capital. Decision-makers within local government institutions will be trained to assess and update existing regulatory frameworks and policies to facilitate the mainstreaming of EbA — including making provision for incentives programmes targeting the adoption of EbA practices. Furthermore, training and technical capacity-building activities are included in all project components. By providing technical support to local governments for the adoption and implementation of climate-resilient land management practices, the project will help mainstream climate adaptation into local-level development planning. This will include the development of catchment-level land use plans, which will guide the adoption of EbA and sustainable land management practices beyond the scope of the project’s on-the-ground interventions.  *Technical support for the enhancement of regional knowledge and learning*  The proposed project includes several strategies for knowledge-sharing and learning. This support will include the establishment of a regional knowledge hub through which tailored knowledge products will be created and disseminated. This, combined with the strengthened policy frameworks described above, will catalyse a shift in how decision-makers approach land-use and development planning. In addition, the social, economic and environmental impacts of project interventions, including the cost-effectiveness of EbA, will be measured through ongoing monitoring and evaluation. These findings will be disseminated to policymakers and decision-makers to catalyse further uptake of EbA and water- and energy-efficient technologies, as well as the enabling financing mechanisms and economic incentives. The project will also build awareness of the benefits of EbA and the associated financing mechanisms with private investors, as well as local and national governments.  *Upscaling of adaptation*  The project will catalyse the autonomous upscaling of EbA interventions and water-efficient technologies by combining policy instruments (e.g. economic incentives such as payments for environmental services) with accessible financial mechanisms (e.g. commercial loans, trust funds, microfinance and guarantee funds). These mechanisms will transform the financial landscape in the region to enable vulnerable groups to access climate finance. Furthermore, the project will promote the development of climate-resilient, natural resource-based businesses and alternative livelihoods at the community level. These businesses and alternative livelihoods will be directly linked to EbA activities and the water-efficient technologies promoted by the project ensuring long-term sustainability. The combined impact of these interventions will be to catalyse EbA beyond the project’s target catchments — incorporating elements of sustainability, scalability, replicability, knowledge-sharing, the creation of an enabling environment for private sector investors, and policy improvements in the project design. |
| **D.3. Sustainable development** |
| The proposed project will contribute to the achievement of nine of the 17 UN Sustainable Development Goals (SDGs). The main contributions of the project will be to: SDG 6 – Clean water and sanitation; SDG 11 – Sustainable cities and communities; SDG 13 – Climate action; and SDG 15 – Life on land. In addition, the project will contribute to: SDG 1 – Poverty reduction; SDG 7 – Affordable and clean energy; SDG 8 – Decent work and economic growth; SDG 9 – Industry, innovation and infrastructure; and SDG 10 – Reduced inequalities. The expected positive environmental, economic, social and gender impacts of the project are outlined below.  **Environmental co-­benefits** The conservation and restoration of ~19,500 hectares of degraded and climate-vulnerable ecosystems — through reforestation, forest management, agroforestry systems and sustainable fuelwood practices — as well as the use of water- and energy-efficient technologies will result in several environmental co-benefits. These co-benefits are listed below.   * EbA interventions, including the conservation and/or restoration of forests and agroforestry systems, will act as natural buffers, controlling and mitigating the impact of floods, droughts, extreme temperatures and wildfires on ecosystems in selected sites. * Conserved and restored ecosystems will provide habitats for a range of terrestrial species, thereby improving biodiversity on project sites. * EbA interventions under the project will enhance soil fertility through accumulation of organic matter in revegetated areas, as well as enhancing carbon storage capacity and reducing soil erosion at project sites. Conserved and revegetated areas will further enhance water infiltration and soil moisture retention, improving water quality and flow regimes in selected sites. The use of water-efficient technologies under the project will also contribute to improved water quality and availability by decreasing consumption.   **Social co-benefits**  The proposed project is expected to yield substantial social co-benefits, mostly contributing to social development by improving water and food security of vulnerable communities in the region. These co-benefits are listed below.   * Through the adoption of water-efficient technologies such as rainwater harvesting systems, households will have increased access to clean water for domestic use as well as for food production. This will also improve the targeted communities’ health by reducing the risk of water-borne diseases. * Increased productivity of agricultural systems as a result of improved water supply will lead to enhanced food security and nutritional health. The targeted communities’ food security will also be improved in terms of quantity, quality and diversity of food products through the adoption of agroforestry methods. * The use of agroforestry species according to their suitability under future climate conditions and the promotion of sustainable fuelwood practices will enhance the sustainability of local livelihoods, contributing to cultural preservation in the region. * The project will reduce inequality and poverty through increased financial inclusion and improved economic opportunities — especially for women. This will be achieved through interventions such as loans and risk transfer facilities for EbA and water-efficient technologies, as well as with the promotion of natural resource-based businesses and climate-resilient alternative livelihoods. Through its participatory and gender-sensitive approach, the project will specifically empower women and contribute to social cohesion.   **Economic co-benefits**  Improved access to water and the promotion of EbA will have several economic co-benefits for vulnerable communities in the Central American Dry Corridor and the Dominican Republic’s Arid Zones. These are listed below.   * The implementation of water-efficient technologies — such as drip irrigation and rainwater harvesting — in rural communities will improve agricultural practices, increasing agricultural productivity and associated income. * Short-term work opportunities will be created for the implementation of ecosystem restoration and protection activities under Output 4. Long-term employment opportunities will also be generated by the need for ongoing operations and maintenance of ecological infrastructure established by the project. * The project will provide opportunities to develop sustainable natural resource-based businesses and alternative livelihoods in ecotourism and in the collection of non-timber forest products, taking climate change scenarios and market demand for these products and services into account. * Increased access to credit will further reduce financial barriers to implementing adaptation measures for the targeted rural communities.   **Gender-sensitive development impact**  Women in Central America tend to hold traditional, unpaid gender roles associated with domestic responsibilities like motherhood, child- and elder-care as well as household management. These roles generally also include water management and collection. During times of water scarcity or following natural disasters, the burden of finding, collecting and storing water increases, with women bearing most of this additional responsibility. The project has been designed to ensure that interventions are implemented in a gender-sensitive manner. The in-depth understanding of water-related challenges for women in the region (described further in Section G.2) makes inclusion of gender considerations in project design and implementation critical for the long-term sustainability of project interventions. By building on this understanding of water-related challenges among women using gender-sensitive learning methods for adaptation, the proposed project will not only empower women within their communities and promote gender equality, but will also ensure the effectiveness of project interventions. |
| **D.4. Needs of recipient** |
| **Vulnerability**  The Dry Corridor region of Central America and the Arid Zones of the Dominican Republic are extremely vulnerable to the impacts of climate change (see Sections B.1 and B.5)[[70]](#footnote-71). A large proportion of people in these densely populated regions live in poverty, relying on subsistence agriculture and plantation forestry for their livelihoods. Rising temperatures, shifting rainfall patterns and the increased intensity of droughts are predicted to have several impacts on these vulnerable rural populations (see Section B.1), including: i) decreased harvests of important crops; ii) shifting suitability of land area for important crops; iii) increased frequency of wildfires; iv) increased frequency of pest outbreaks; and v) increased flooding after extreme rainfall events. These impacts will result in, *inter alia*, increased poverty, food insecurity and migration from rural areas[[71]](#footnote-72). Women in rural communities will be disproportionately affected as they are responsible for, *inter alia*, water collection, food security and unpaid family care. Through the proposed project, the vulnerability of rural communities in the Dry Corridor will be reduced. This will be achieved through improved catchment and water management, as well as increasing rural communities’ access to financial resources to fund adaptation interventions. The project will engage women’s organisations to ensure that women have access to training, financial mechanisms and knowledge projects that will increase their resilience to climate change.    **Figure 8.** Map showing relative climate change vulnerability of the seven countries.  **Economic and social development**  In the last decade, the Latin America and Caribbean (LAC) region — under which the seven beneficiary countries fall — has achieved an average annual economic growth rate of 3.2%. This growth rate contributed to an overall reduction in poverty and expansion of the middle class[[72]](#footnote-73). Currently, the seven beneficiary countries are classified as low middle to high income, with medium to high Human Development Index (HDI) scores (Table 2, Section B.5). Nonetheless, ~40% of households in the LAC region remain vulnerable and economically insecure, with a notable wealth gap existing between urban and rural populations. This economic insecurity is compounded by climate change impacts, including extreme rainfall and droughts. Economically insecure households — including vulnerable rural communities — are often slow to recover effectively from climate impacts[[73]](#footnote-74). Rural communities have little or no access to adaptation finance, which limits their adaptive capacity. By improving access to financial resources for adaptation interventions, the adaptive capacity of rural communities in the Dry Corridor will be increased. With increased financial and technical capacity, communities will be able to withstand the negative impacts of severe droughts.  **Absence of alternative sources of financing**  The national budgets of Dry Corridor countries are limited, and poverty eradication and sustainable development have been prioritised for funding over CCA. There is a high dependency on non-reimbursable international support to meet CCA goals across the LAC region where the finance available for CCA is far below what is required to meet adaptation needs. In the absence of donor support, the countries have limited financial resources to: i) implement large-scale EbA interventions at the landscape level; ii) implement small-scale water- and energy-efficient technologies at community- or household-level; iii) establish effective financial mechanisms that develop climate-resilient, natural resource-based livelihoods; and iv) strengthen policies, institutions and knowledge-sharing for the implementation of EbA and economic incentives for EbA. The proposed project will improve access to financial resources for private sector and community-level adaptation interventions, as well as mainstream climate change adaption into government planning and policy-making. This mainstreaming will enable the uptake of large-scale EbA and other adaptation measures across Dry Corridor countries.  **Need for strengthening institutions and implementation capacity**  At the local level, vulnerable rural communities do not have the financial resources, knowledge base, or technical capacity to: i) develop, implement, and maintain EbA and other adaptation measures; ii) co-ordinate the frequent, cross-sectoral, multi-stakeholder engagement that is necessary for EbA and other adaptation interventions; and iii) capitalise on EbA interventions by generating new private income streams from the ecosystem goods and services produced by restored climate-resilient ecosystems. The proposed project will provide access to technical and financial resources, knowledge products and government support structures that will enable rural communities to adapt effectively to climate change in the Dry Corridor. |
| **D.5. Country ownership** **(max. 500 words, approximately 1 page)** |
| **Alignment with regional and national policies and strategies**  Climate change adaptation is recognised as a priority in the Central American region and has been integrated into several regional and national policies and strategies. Specifically, the project is closely aligned with several policies and strategies of the Central American Integration System (SICA)[[74]](#footnote-75), including those listed below.   * The Regional Environmental Strategy Framework (2015–2020)[[75]](#footnote-76) provides a framework and objectives for the regional integration of actions on, *inter alia*: i) climate change and risk management; ii) biodiversity; iii) water resource management; and iv) finance for environmental management. * The Regional Climate Change Strategy (2010)[[76]](#footnote-77) sets out projections for the impacts of climate change and variability on the region and provides a framework for regional responses to climate change. * The Regional Strategy for the Conservation and Sustainable Use of Biodiversity in Mesoamerica (2003)[[77]](#footnote-78) articulates priorities for the regional integration of conservation and biodiversity management efforts. * The Regional Strategic Program for Forest Ecosystems Management (2014)[[78]](#footnote-79) aims to support the sustainable management and protection of forest ecosystems by promoting regional cooperation, through decentralised governance and through recognising the multifunctional nature of these forests. * The Regional Agro-environmental and Health Strategy of Central America (2009–2024)[[79]](#footnote-80) aims to promote sustainable, intersectoral management of agricultural ecosystems, with a focus on sustainable land management, climate change, biodiversity, agro-environmental businesses and healthy lifestyles. * The Food and Nutrition Security Policy for Central America and the Dominican Republic (2012–2032) promotes regional action to develop sustainable, healthy and culturally-appropriate food and nutrition systems. * The Regional Strategy for Sustainable and Climate-adapted Agriculture for the SICA region (2017)[[80]](#footnote-81) sets out priorities for the agricultural sector in terms of climate change adaptation, sustainable livelihoods and the development of sustainable, low-carbon agricultural landscapes. * The Central American Strategy for Rural Development (2010–2030)[[81]](#footnote-82) seeks to build the capacity of rural communities, government institutions and CSOs to promote innovative and inclusive rural development mechanisms. * The Strategy and Plan for Integrated Water Resource Management (IWRM) in Central America (2010)[[82]](#footnote-83) promotes regional cooperation for IWRM to improve water security and access to water and promote the efficient and sustainable management of water resources.   In addition to this regional alignment, the project contributes to achieving national priorities and aligns with numerous policies in each of the seven target countries (summarised in Table 3). Further details of the project’s alignment with the legal and policy framework of each country are given in Section 8 of Annex 2: Feasibility Study.  **Table 3.** Summary of national policies and strategies relating to climate change adaptation in each of the seven target countries.   |  |  | | --- | --- | | **Country** | **Policy, strategy or plan** | | Guatemala | National Climate Change Policy (2009) | | Law on Climate Change (2013) | | Framework Law to Regulate Vulnerability Reduction, Compulsory Adaptation to the Effects of Climate Change and Mitigation of Greenhouse Gases (2013) | | Nationally Determined Contribution (2017) | | National Action Plan for Climate Change Adaptation and Mitigation (nd) | | Honduras | Climate Change Act (2013) | | Intended Nationally Determined Contribution (2015) | | National Climate Change Strategy (nd) | | Law and Action Plan for Adaptation to Climate Change (nd) | | El Salvador | National Climate Change Strategy (2013) | | Intended Nationally Determined Contribution (2015) | | National Climate Change Plan (2015) | | National Plan for Climate Change Adaptation (nd) | | Nicaragua | Nationally Determined Contribution (2018) | | National Environmental Climate Change Strategy (nd) | | National Policy for Mitigation and Adaptation to Climate Change and Creation of the National Climate Change Response System (nd) | | Plan for Adaptation to Climate Variability and Change in the Agricultural, Forestry and Fishing Sectors (nd) | | Costa Rica | National Strategy on Climate Change and Plan of Action (2009) | | Framework Law on Climate Change (2013) | | Intended Nationally Determined Contribution (2015) | | Panama | National Climate Change Policy (2007) | | National Climate Change Strategy (nd) | | Nationally Determined Contribution (2016) | | Dominican Republic | National Strategy to Strengthen Human Resources and Skills for Advancing Green Development with Low Emissions and Climate Resilience (2012) | | National Strategy for Adaptation to Climate Change in the Agricultural Sector (2014–2020) | | Intended Nationally Determined Contribution (2015) | | Climate Change Policy (2016) | | National Adaptation Plan (nd) |   Capacity of the Accredited and Executing Entities to deliver  The Central American Bank for Economic Integration (CABEI) will be the Accredited Entity (AE) for this project. CABEI has supported economic and social development in the region since its establishment in 1960, including channelling more than USD600 million to support MSMEs in the agricultural sector. They have worked extensively in all the target countries and have experience as the AE on the GCF project ‘Productive Investment Initiative for Adaptation to Climate Change’ (CAMBio II)[[83]](#footnote-84) which was approved in 2018. CABEI also served as the Executing Agency on the original CAMBio[[84]](#footnote-85) project funded by GEF, which aimed to assist MSMEs in contributing to sustainable development and the protection of biodiversity through their products and services.  Through a network of intermediate financial and microfinance institutions, CABEI has achieved a comprehensive regional footprint, including having a significant presence in rural areas that will be targeted by this project. In addition, through their large portfolio of projects and programmes, CABEI has developed strong relationships with local and national decision-makers. The extensive experience and proven track record of the AE will enable them to support and equip the Executing Entity to effectively execute the project and contribute to its successful implementation.  Stakeholder Engagement  The development of this project was initiated by the Council of Ministers of the Central American Commission on Environment and Development (CCAD), which includes members from each of the seven target countries. In addition to engaging with CCAD, regional and national stakeholder consultations have been conducted throughout project development. Initial consultations took place in June–July 2016 in six countries[[85]](#footnote-86). Through these national workshops, priorities and focus areas for the project were identified. The draft Concept Note was circulated, and further consultations were conducted in October–November 2017 with representatives from each country. A regional workshop was also held in October 2017 to obtain input on the draft Concept Note from representatives of governments and NGOs in the region. These inputs contributed to refining the project concept and incorporating lessons learned from previous initiatives in the region.  Further consultations took place at the International Central American Dry Corridor Symposium in October 2018 and in each of the target countries from December 2018 to March 2019. These consultations contributed to the finalisation of the Concept Note and the development of this Funding Proposal. Final national consultations were conducted in October 2019 during the concluding phase of project development. These consultations were conducted in communities in each of the seven target catchments to get community inputs on their needs and locally-appropriate interventions. The outputs of these consultations are presented in Annex 7. |
| **D.6. Efficiency and effectiveness** |
| **Cost-effectiveness and efficiency of project interventions**  The project targets interventions on multi-stakeholder levels in order to prepare for EbA mainstreaming and upscaling by combining forces between public and private actors in selected areas. While USD72.0 million in grants are geared towards concrete and tangible benefits for an estimated total of 620,000 beneficiaries via the creation of capacities on different levels of stakeholders to understand, develop and implement EbA solutions, further USD 170.0 million in debt finance will build upon such created capacities and directly benefits an estimated [150,000] smallholder farming units, rural community projects and rural MSMEs to promote EbA in their regions – expected to benefit directly or indirectly [750,000] end beneficiaries[[86]](#footnote-87). While the grant solutions provide the basis for the establishment and expansion of a body of knowledge in target regions, the debt solutions will be managed fully self-sustained on a commercial basis, targeting potential further investment into the mechanisms created. Hence, for each 1 USD provided as grant, an additional USD 2.36 will be leveraged as debt. With the overall project approach, a total of 620,000 end beneficiaries will receive benefits, leading to a ratio of USD104 per end beneficiaries in terms of grant investment and USD227 per end beneficiary in terms of debt finance.  **Application of best practices**  This project draws on best practices from ground-breaking projects in the region and further afield. One of these is the Microfinance for Ecosystem-Based Adaptation (MEbA) project which informed the selection of appropriate EbA solutions for the proposed project. Phase one of the project (MEbA I) was implemented in Colombia and Peru, while activities were expanded to Ecuador, Costa Rica, El Salvador, Dominican Republic, Senegal and Benin during phase two (MEbA II). EbA solutions drawn from MEbA will be supported by implementing locally appropriate water- and energy-efficient technologies, such as rainwater harvesting systems and half-orange kilns, for adapting to the increasing impacts of climate change, which were selected through consultations with local communities. Furthermore, effective methods for increasing commercial and smallholder farmers’ access to financial resources for adaptation were drawn from the MEbA project as well as the Productive Investment Initiative for Adaptation to Climate Change (CAMBio II) and projects. These methods were applied to the design of activities under Component 1, in particular, to ensure the sustainable use of financial resources for adaptation over the long term. Lessons learned from numerous baseline investments into climate change adaptation in the seven participating countries in the Central American Dry Corridor and Arid Zones of the Dominican Republic were also used to guide the design of all project interventions. Such lessons include appropriate mechanisms for ensuring that all project activities are implemented in a participatory, gender-sensitive and sustainable way. Details on all best practices and lessons learned relevant to the project are presented in Section 10 of Annex 2: Feasibility Study.  The primary international best practices and lessons learned identified for the project include:   * increasing commercial and smallholder farmers’ capacity and access to finance for implementing EbA solutions and promoting the uptake of water- and energy-efficient technologies to respond to the impacts of climate change; * effectively managing the available financial and human resources to ensure the efficient and cost-effective implementation of project interventions; * building an effective evidence base drawing on relevant past and ongoing initiatives to inform the implementation of a suite of complementary EbA strategies, promote the uptake of new financial mechanisms and resources for adaptation and support capacity-building interventions; * undertaking regular monitoring and evaluation of adaptation interventions during the implementation phase to ensure that the most effective solutions are being implemented and that an adaptive management approach is being applied that considers changing climatic conditions; and * engaging and collaborating extensively with all relevant project stakeholders within each of the seven participating countries will encourage buy-in from national- and local-level decision-makers therefore contributing to the sustainability of proposed adaptation interventions over the long term. |

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| **LOGICAL FRAMEWORK** |
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| **E.1. Paradigm shift objectives** |

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| Shift to low-emission sustainable development pathways  Increased climate resilient sustainable development |

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| --- | --- | --- |
| **E.2. Core indicator targets** | | |
| E.2.1. Expected tonnes of carbon dioxide equivalent (t CO2 eq) to be reduced or avoided (mitigation and cross-cutting only) | Annual | Click here to enter text. t CO2 eq |
| Lifetime | Click here to enter text. t CO2 eq |
| E.2.2. Estimated cost per t CO2 eq, defined as total investment cost / expected lifetime emission reductions (mitigation and cross-cutting only) | |  |  |  | | --- | --- | --- | | (a) Total project financing | \_\_\_\_\_ Choose an item. | | | (b) Requested GCF amount | \_\_\_\_\_ Choose an item. | | (c) Expected lifetime emission reductions | \_\_\_\_\_ t CO2eq | | **(d) Estimated cost per t CO2eq (d = a / c)** | \_\_\_\_\_ Choose an item. **/ t CO2eq** | | **(e) Estimated GCF cost per t CO2eqremoved (e = b / c)** | \_\_\_\_\_Choose an item. **/ t CO2eq** | | |
| E.2.3. Expected volume of finance to be leveraged by the proposed project/programme as a result of the Fund’s financing, disaggregated by public and private sources (mitigation and cross-cutting only) | |  |  | | --- | --- | | (f) Total finance leveraged | \_\_\_\_\_ Choose an item. | | (g) Public source co-financed | \_\_\_\_\_ Choose an item. | | | (h) Private source finance leveraged | \_\_\_\_\_ Choose an item. | | | **(i) Total Leverage ratio (i = f / b)** | \_\_\_\_\_ | | | (j) Public source co-financing ratio (j = g / b) | \_\_\_\_\_ | | | (k) Private source leverage ratio (k = h / b) | \_\_\_\_\_ | | | |
| E.2.4. Expected total number of direct and indirect beneficiaries, (disaggregated by sex) | Direct | 620,000  50% of female |
| Indirect | 1.75 million  50% of female |
| *For a multi-country proposal, indicate the aggregate amount here and provide the data per country in annex 17.* | |
| E.2.5. Number of beneficiaries relative to total population (disaggregated by sex) | Direct | Click here to enter text. (Expressed as %) of country(ies) |
| Indirect | Click here to enter text. (Expressed as %) of country(ies) |
| *For a multi-country proposal, leave blank and provide the data per country in annex 17.* | |

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| **E.3. Fund-level impacts** | | | | | | |
| **Expected Results** | **Indicator** | **Means of Verification (MoV)** | **Baseline** | **Target** | | **Assumptions** |
| Mid-term | Final |
| *A4.0 Improved resilience of ecosystems and ecosystem services* | *A4.1 Coverage/scale of ecosystems protected and stregnthened in response to climate variability and change* |  | No new ecosystem restoration or protection efforts | 8,000 ha of land under sustainable lane use practices[[87]](#footnote-88) | 19,750 ha of land under sustainable lane use practices | Sustainable land management practices will improve the provision of ecosystem services, including provision of water and agricultural productivity |

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| --- | --- | --- | --- | --- | --- | --- |
| **E.4. Fund-level outcomes** | | | | | | |
| **Expected Outcomes** | **Indicator** | **Means of Verification (MoV)** | **Baseline** | **Target** | | **Assumptions** |
| Mid-term) | Final |
| A5.0 Strengthened institutional and regulatory systems for climate-responsive planning and development | *A5.1 Institutional and regulatory systems that improve incentives for climate resilience and their effective implementation* | Key informant interviews  Policy uptake scorecard[[88]](#footnote-89)  Interviews with PMU | No new incentives developed for investment in EbA | 15 municipalities with at least Level 1 policy uptake | 36 municipalities with at least Level 2 policy uptake | Developing accounts profiles of natural capital, developing guidelines for economic incentives and training local governments will lead to incentive programmes being integrated into policies. |
| A7.0 Strengthened adaptive capacity and reduced exposure to climate risks | *A7.1 Use by vulnerable households, communities, businesses and public-sector services of Fund-supported tools instruments, strategies and activities to respond to climate change and variability* | Household surveys  Digital management reports on EbA capacity index verified by PFIs | Financial mechanisms for EbA are not yet developed and communities have limited access to financial services or incentives for EbA and water/energy-efficient technologies | 50,000 households with access to financial services for EbA and water/energy-efficient technologies | 100,000 households with access to financial services for EbA and water/energy-efficient technologies | Financial mechanisms developed by the project are suitable for vulnerable communities to access finance for EbA and water/energy-efficient technologies. |
| A8.0 Strengthened awareness of climate threats and risk-reduction processes | *A8.1 Number of males and females made aware of climate threats and related appropriate responses* | Household surveys  Training reports  Participant Surveys | Limited awareness among vulnerable communities of locally appropriate adaptation interventions | 80,000 males  80,000 females | 175,000 males  175,000 females | Training of trainers programmes are effective in disseminating information on adaptation options to local community members |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E.5. Project/programme performance indicators** | | | | | | | | | |
| **Expected Results** | **Indicator** | | **Means of Verification (MoV)** | | **Baseline** | **Target** | | | **Assumptions** |
| Mid-term | | Final |
| **Component 1:**  **Financing mechanisms for EbA as well as water- and energy-efficient technologies** | | | | | | | | | |
| *Output 1.*  *Financial products and services to finance sustainable investments are offered by Partner Financial Institutions (PFI), including PFI access to on-lending funds and support mechanisms.* | # of financial or support mechanisms in place to provide EbA on-lending funds to PFIs  # of specific financial or non-financial products and services offered by PFIs geared towards EbA investments  # of rural MSMEs in the catchment areas receiving specific EbA focused financing  Institutional capacity of financial institutions to channel funds for small- and large-scale EbA investments strengthened | | Statutes of created financial or support mechanisms  Management reports of financial or support mechanisms  Internal product information  PFI communication material & press releases  Digital management reports  Audit reports (general + programme-specific)  Institutional capacity scorecard[[89]](#footnote-90) | | 0  (Financial Mechanisms not yet operational)  Baseline to be determined at inception phase  0  Baseline to be determined at inception phase | 2  (Financial Mechanisms operational)  20  20,000  12 institutions with at least Level 3 (out of 5) capacity | | 2  (Financial Mechanisms operational)  28  150,000  28 institutions with at least Level 4 (out of 5) capacity | PFIs need specific EbA financing and support (e.g. risk transfer) mechanisms to fully take advantage of last-mile solutions  End beneficiaries will adhere to specific EbA finance products and non-financial services to invest into EbA capacity once available |
| **Component 2:****Implementation and mainstreaming of EbA, water- and energy-efficient technologies and natural resource-based businesses** | | | | | | | | | |
| *Output 2. Strengthened technical capacity of local government, farmers and rural communities to implement EbA and other adaptation measures.* | Technical capacity of local government institutions to plan for and implement EbA and other adaptation measures, as measured by the capacity scorecard.  Number of males and females with knowledge of how to implement EbA, water/energy-efficient technologies, and/or climate-resilient livelihood options. | | Capacity scorecard[[90]](#footnote-91)  Household surveys  Local level monitoring reports (as established through Activity 2.1.1) | | Baseline to be determined at inception phase | 15 local institutions with at least Level 3 Capacity  80,000 males  80,000 females | | 36 local institutions with at least Level 7 Capacity  175,000 males  175,000 females | Local monitoring systems provide sufficient detail to guide effective planning.  The training of trainers programme, supported by training workshops and farmer-to-farmer knowledge exchanges are sufficient to enable community members to adopt climate-resilient practices. |
| *Output 3. Information on climate change adaptation and its financing disseminated across the region and mainstreamed into local and national policies.* | Level of integration of climate change adaptation in municipal-level political and technical decision-making for climate resilience. | | Policy uptake scorecard[[91]](#footnote-92) | | Limited integration of CCA in municipal-level political and technical decision-making for climate resilience | 36 municipalities with at least Level 1 policy uptake | | 36 municipalities with at least Level 2 policy uptake | Lessons learned from project activities are sufficient to support the mainstreaming of CCA into local and national policies. |
| *Output 4. Large-scale adaptation interventions implemented in rural communities across seven target catchments in the Dry Corridor and Arid Zones.* | Area (ha) of natural forest protected and/or restored to increase the provision of ecosystem services  Area (ha) of agricultural land under sustainable land management practices – including agroforestry and silvopastoral systems, as well as firebreaks and soil conservation measures.  Area (ha) of land developed as fuelwood plantations to reduce impacts of fuelwood collection on natural forests  Number of communities fitted with water- and energy- efficient technologies | | Site surveys  Implementation reports | | No new area under sustainable land management. | 5,000 ha forest protected and/or restored  2,000 ha of agricultural land under SLM practices  2,500 ha of fuelwood plantations  18 communities | | 10,909 ha forest protected and/or restored  4,279 ha of agricultural land under SLM practices  5,469 ha of fuelwood plantations  36 communities | Restoring forest ecosystems and introducing SLM practices will enhance the provision of ecosystem services. |
| **E.6. Activities** | | | | | | | | | |
| **Activity** | | **Description** | | **Sub-activities** | | | **Deliverables** | | |
| Activity 1.1. Establish an EbA fund which manages two facilities: i) a grant facility for on-the-ground local EbA implementation; and ii) a blended EbA lending facility geared to eligible partner institutions serving end beneficiaries | | Both facilities are united in a single fund as they target the same investment projects to be financed and efficiency gains can be obtained. | | 1. Execute relevant fiscal, legal and regulatory studies for 7 target countries 2. Create legal entity in hosting country (Honduras), including regulatory, legal and fiscal approvals. 3. Develop Steering Committee statutes and operational guidelines for the fund management including eligibility criteria and processes for the grant facility and the blended EbA lending facility. | | | * 1 EbA fund established and operational with two facilities * 21 technical studies carried out in 7 countries | | |
| Activity 1.2. Establish the grant facility to support bottom-up selection and promotion of local EbA activities through non-reimbursable financing and start operations | | The grant facility is intended to identify and promote site-specific and relevant EbA and water-efficient technologies. A bottom-up approach to identification of eligible projects will be established. Eligible projects can be community-level investments, the establishment of water funds, or the support of selected solution providers (to be defined), among others. The grant facility will channel investment to selected projects via PFIs in each of the 7 catchment areas. Operational expenses will be borne by the fund’s overall activities. | | 1. Define eligibility criteria from Steering Committee guidelines and align to national and municipal adaptation policies and initiatives, define final operatibility of the grant facility, including the definition of a competitive selection model 2. Raise awareness on grant availability for EbA investment in conjunction with community engagement workshops under 2.1.1. 3. Monitor success of selected projects, including definition and documentation of underlying economics (knowledge gained to be disseminated to inform scale-up finance) 4. Communicate results via specific events and media initiatives | | | * 1 Grant facility operational manual developed and approved * 28 awareness raising and promotion events executed * Marketing and communication materials * Audit reports | | |
| Activity 1.3. Establish the blended EbA lending facility to enable EbA finance via CABEI's network of financial institutions directly to end beneficiaries or indirectly via non-regulated financial institutions and initiate operations (operational expenses to be borne by the fund's activities) | | The EbA lending facility will provide an EbA credit line to PFIs that have been selected based on outreach and financial performance, to on-lend to end beneficiaries for investment into EbA or water-efficient technologies. Such investment can be targeted towards community-level investment, rural MSMEs including smallholder farmers or other institutions that can foster EbA for end beneficiaries across different sectors. | | 1. Define investment criteria from Steering Committee guidelines and align with national laws and regulations, responsible banking principles, national and municipal adaptation policies and initiatives, define final operatibility of the blended EbA lending facility 2. Promote the blended EbA lending facility with potential network institutions and non-network institutions in each of the 7 countries | | | * 1 EbA lending operational manual developed and approved, including all contractual framework * 28 partner financial institutions onboarded including initial capacity evaluation * A minimum of 150,000 EbA loans disbursed * Audit reports | | |
| Activity 1.4. Technical assistance (TA) facility to strengthen technical capacity of CABEI network and non-regulated financial institutions to access and channel funds for small- and large-scale EbA investments. | | The EbA fund is accompanied by training and technical assistance activities to communities in the areas of the programme. Successful implementation will catalyse the uptake of EbA and EWT solutions to be financed by specific financial mechanisms The EbA credit line will be accompanied by a TA facility that will develop capacity within PFIs to monitor and assess the implementation of EbA and EWT investment projects as well as to monitor and document the respective economic and ecosystem benefits. Where possible Information and Communication Technologies will be introduced to provide data analytics and satellite data insights into the EbA lending portfolio and climate impacts on the portfolio. | | 1. Develop or adjust training curriculums and technical assistance methodology targeted to fill gaps identified during initial due dilligence based on ToT or online course methodologies and targeting certification financial institution personnel 2. Initiate and execute tailormade technical assistance programme for PFIs based on gaps identified during initial due diligence 3. Periodic monitoring of TA and training success via reassessment based on scorecard used during initial due diligence 4. Adjust TA methodology and training curriculum according to periodic reassessment | | | * Standardized technical assistance and training package, including ToT or online course and certification * At least 28 partner financial institutions received technical assistance and increased their EbA capacity | | |
| Activity 2.1. Develop site-specific intervention plans for the 7 target catchments to integrate EbA measures through a participatory process with municipal authorities, local communities and other stakeholders. | | A community-based approach will be adopted to identify site-specific interventions in each of the seven municipalities. A community-level monitoring and evaluation committee will be established and capacitated in each municipality to monitor biophysical, social and economic conditions in their local catchment areas as well as to assess the level of climate vulnerability, risks and opportunities. Baseline assessments conducted by these committees will underpin the refinement of site-specific intervention plans, focussing on the selection of appropriate land for the implementation of interventions identified through stakeholder consultations during the project preparation phase. The suite of identified EbA interventions includes the conservation and restoration of natural forest, as well as the introduction of agroforestry, silvopastoral and agrosilvopastoral systems, along with sustainable fuelwood plantations. Specific consideration will be given for connectivity of targeted ecosystems to maximise ecosystem services, as well as for land-tenure and the needs of local communities for the land to ensure long-term sustainability. Finally, sites will be identified for the implementation of water- and energy-efficient technologies within rural communities across the seven target catchments. Details of proposed interventions for each site are presented in Section 14 of Annex 2: Feasibility Study. | | * + 1. Establish a community-level monitoring and evaluation committee in each municipality and build the capacity of these committees to monitor the biophysical, social and economic conditions in their local catchment areas as well as to assess the level of climate vulnerability, risks and opportunities.     2. Hold community engagement workshops in each municipality to develop a framework for site-specific intervention plans in each of the seven targeted catchments.     3. Draft site-specific intervention plans for each of the seven targeted catchments.     4. Hold a stakeholder workshop to validate and get stakeholder buy-in for site-specific intervention plans in each of the seven targeted catchments. | | | * 36 monitoring and evaluation committees established * 7 site-specific intervention plans | | |
| Activity 2.2. Provide technical assistance to municipal authorities, farmers and rural communities for the implementation of EbA practices as well as water- and energy-efficient technologies | | Effective implementation of EbA practices and water-/energy-efficient technologies requires training for both the recipients and the local-level authorities that provide support services to the recipients. Under the proposed project, protocols will be developed for a range of sustainable practices, including : i) conservation and restoration of forested areas; ii) establishment existing agroforestry systems; iii) development of sustainable fuelwood source; iv) water-efficient technologies; and v) energy-efficient technologies that reduce fuelwood demand. To facilitate/promote the adoption of these protocols, cooperation agreements will be developed with commercial farmers and training will also be provided to build their technical capacity to implement sustainable practices. In addition to the direct training provided to commercial farmers, a training of trainers programme will be established in each country to facilitate long-term knowledge transfer to vulnerable communities. To increase the reach of the training programmes, trainers will be selected from a range of organisations, including local departments of environment, CBOs, water committees, women's organisations and local cooperatives within each target country. Formal training workshops will also be arranged within each municipality, which will include site visits to demonstration sites established under Output 4. | | * + 1. Develop cooperation agreements with commercial farmers for forest restoration and sustainable land management.     2. Train commercial farmers on sustainable EbA practices, including silvopasture, agroforestry and SLM.     3. Develop protocols for the implementation of sustainable EbA practices, including the: i) conservation and restoration of forested areas; ii) establishment existing agroforestry systems; and iii) development of sustainable fuelwood source.     4. Develop protocols for the adoption of water-efficient technologies by households (e.g. rainwater harvesting systems), by communities (e.g. water intakes) and by small-holder and commercial farmers (e.g. (drip irrigation, solar water pumping)     5. Develop protocols for the adoption of energy-efficient technologies that reduce fuelwood demand, (e.g. efficient charcoal kilns, fuelwood drying, efficient biomass stoves).     6. Establish a training of trainers programme for representatives of local departments of environment, CBOs, water committees, women's organisations and local cooperatives within each target country for EbA and water-efficient technologies based on the protocols developed under sub-activities 2.2.3–2.2.5.     7. Organise training workshops linked to community meetings within each target municipality to train local communities on EbA and water-efficient technologies, including visits to demonstration sites to facilitate farmer to farmer knowledge exchange. | | | * Private sector agreements * 3 EbA implementation protocols * 1 protocol for the adoptions of water-efficient technologies * 1 protocol for the adoptions of energy-efficient technologies * 7 training of trainers programmes * 36 training workshops | | |
| Activity 2.3. Provide technical assistance to farmers and rural communities for the development of natural resource-based businesses and alternative climate-resilient livelihoods. | | A community-based approach will be taken to improve the climate-resilience of vulnerable, natural resource-based livelihoods in the target municipalities. This will involve the establishment of technical training programmes to farmers and rural communities on locally appropriate natural resource-based business opportunities and climate-resilient practices that will improve the sustainability of natural resource-based livelihoods. This training will be underpinned by a detailed livelihood assessment that will identify climate risks impacting the livelihoods of local communities, as well as potential alternative practices that will reduce this vulnerability. The results of this assessment will be used to develop livelihood action plans for each municipality identifying at least three natural resource-based businesses and/or climate-resilient livelihoods options per municipality. Targeted training programmes workshop will be designed for each livelihood option, taking into consideration the local context and inputs from community consultations to customise the training for each municipality. These programmes will then be rolled out through community training workshops, with one workshop per livelihood being held per target municipality. | | 1. Conduct a livelihood assessment within each of the seven target catchments, focusing on climate risks and alternative options. 2. Conduct community engagement workshops to develop livelihood action plans for each target community based on the assessments conducted in 2.3.1. 3. Establish livelihood training programmes in each municipality for farmers and rural communities on locally appropriate natural resource-based businesses and climate-resilient livelihoods as identified in the livelihood action plans. | | | * 7 livelihood action plans * 108 training workshops | | |
| Activity 3.1. Establish regional knowledge hub for the dissemination of information on EbA in the Dry Corridor and Arid Zones. | | A regional knowledge hub will be established to facilitate the sharing of best practices and lessons learned for EbA across the seven target countries. The platform will be hosted by the CCAD, building on the existing Environmental Observatory portal. The knowledge hub will serve two main purposes. First, it will act as a repository for climate change adaptation information, including all protocols developed by the project as well as the best practices and lessons learned collected through the project’s monitoring and evaluation processes. Second, it will provide users with specific knowledge products that will guide policy- and decision-makers to effective implement sustainable landscape management practices. This will include guidance on how to access opportunities for accessing finance provided through the project, with specific focus on women’s economic empowerment. The knowledge products will also include technical assistance for creating business opportunities as well as technical guidelines for the assessment of ecosystem services. Training will also be provided to policy- and decision-makers at the municipal level on how to use the knowledge hub and associated tools. Finally, community organisations – including women’s groups – and traditional leaders will be trained to act as champions in developing, revising and disseminating information products to support the adoption of EbA and other resilient practices. This approach will facilitate the sharing of ideas and sustainable practices between communities from the grass root level, using existing structures and traditional methods which will not only extend the reach of the dissemination campaign, but also the uptake by local communities. | | * + 1. Establish a knowledge management hub linked to the Environmental Observatory to disseminate best practices and lessons learned from the project, to support decision-making related to EbA implementation.     2. Develop knowledge products to be disseminated through the knowledge hub, including sustainable landscape management standards and procedures, opportunities for access to financing and women’s economic empowerment as well as technical assistance, business opportunities, technical guidelines for the assessment of ecosystem services and their contribution to human well-being.     3. Train policy- and decision-makers at the municipal level on climate change impacts, including the impacts of gender inequality, and the role of EbA in mitigating climate change impacts to support political and technical decision-making for climate resilience in the Dry Corridor and Arid Zones.     4. Strengthen the technical capacity of community organisations, including women's groups, and local champions in developing, revising and disseminating information products to support the adoption of EbA and other resilient practices. | | | * 1 knowledge management hub * Knowledge products for:   + sustainable landscape management standards and procedures;   + opportunities for access to financing and women’s economic empowerment;   + sustainable natural resource-based business opportunities; and   + technical guidelines for the assessment of ecosystem services. * 36 training workshops   36 community champions | | |
| Activity 3.2. Raise awareness of financial mechanisms for the implementation of CCA interventions | | Output 1 is establishing several financial mechanisms that will be accessible to communities to support the adoption of sustainable land management practices. To ensure the effective uptake of these mechanisms, training will be provided at three levels. First, public officers and/or agencies will be identified each municipality to serve as community liaisons. These officers/agencies will be trained on how to access the various financial mechanisms and how to disseminate this knowledge to their communities. Second, medium—large scale private sector organisations and farmers will be trained on how to access loans through the EbA credit line. This training will be closely linked to the technical training provided under Outcome 2. And third, awareness will be raised among the most vulnerable communities on the EbA Credit Line and Trust Fund, and how to access them. This will include targeting community organisations, including women’s groups, to maximise the reach of the awareness campaign. | | * + 1. Train public officers/agencies at the municipal level to facilitate the uptake of financial mechanisms in their communities     2. Train medium–large scale private organisations/ farmers to access loans through the EbA credit line.     3. Raise awareness among vulnerable communities and their organisations, including women's groups, about available financial mechanisms, including the EbA Credit Line and Trust Fund. | | | * 36 municipal-level public officers/agencies trained * 36 training workshops targeting medium—large scale private sector organisations and commercial farmers * 36 awareness campaigns, involving at least one community organisation per municipality. | | |
| Activity 3.3. Enhance capacity of local-level policy-makers to integrate climate change adaptation and the valuation of natural capital into local policies | | To facilitate the mainstreaming of climate change adaptation – sustainable land management practices in particular – it is necessary to build a strong evidence base for the efficiency and effectiveness of sustainable practices. To achieve this, information will be collated from lessons learned through the project interventions as well as from other comparable ecological zones in other countries, supported by the development of methodologies for assessing the value of ecosystem services and natural capital. These methodologies will provide empirical evidence for the positive economic benefits of sustainable land management practices, which will support the mainstreaming of such practices into local development plans. Furthermore, an effective methodology for the valuation of ecosystem services will facilitate the establishment of economic incentives for SLM, including water funds and payment for environmental service schemes. Local governments will then be trained to make the policy changes to implement economic incentives for investment in SLM practices, with country-specific guidelines being developed to support this training. | | * + 1. Build an evidence base, using both in-country research and findings from comparable ecological zones in other countries, to clearly demonstrate the value and effectiveness of proposed adaptation activities to municipal-level policy-makers.     2. Develop or adjust a methodology to value ecosystems services to develop accounts profiles of natural capital so that it is integrated into development plans in the Dry Corridor.     3. Develop guidelines for local governments outlining protocols and criteria for implementation of economic incentives for SLM (e.g. water funds, payments for environmental services).     4. Train local governments to make policy changes, including the use of protocols and criteria for the adoption of EbA and implementation of economic incentives for SLM (e.g. water funds, payments for environmental services).     5. Organise workshops targeting municipalities within the Dry Corridor and Arid Zones to disseminate the evidence resulting from local government experiences to promote the integration of climate resilience in broader policies and actions across the region. | | | * Refined methodology for valuing ecosystem services * 7 country-specific guidelines for the implementation of economic incentives * 36 training workshops | | |
| Activity 4.1. Implement EbA interventions within rural communities across the seven target catchments. | | On-the-ground EbA interventions will be implemented on public land across each of the target municipalities. Interventions are listed below.   * Conservation of existing forest ecosystems to maintain the provision of ecosystem services. * Active restoration of partially degraded forest ecosystems, including assisted natural regeneration and enrichment planting. * Establishment of agroforestry, silvopastoral and agrosilvopastural systems. * Establishment of fire breaks. * Establishment of mixed-use plantations using native species with multiple ecosystem services, including non-timber forest products. * Establishment of sustainable fuelwood plantations to reduce pressure on natural forests. * Soil conservation measures.   These interventions will serve as demonstration sites to promote the uptake of EbA practices through the financial mechanisms established through Output 1. Details on specific interventions and targets for each municipality are provided in Annex 17b. | | * + 1. Establish 36 tree nurseries focused on native species     2. Establish 4,101 ha of forest protection zones.     3. Protect and restore 1,728 ha of natural forest in major recharge areas and riparian zones.     4. Restore 4,334 ha of forested areas across seven catchments.     5. Restore 746 ha of pine forests in Guatemala, Honduras and Nicaragua.     6. Establish 1,127 km of agroforestry systems using diversified living fence arrangements in basic grains crops.     7. Establish 582 ha of agroforestry systems for natural shade in coffee plantations.     8. Establish 1,192 km of silvopasture systems using diversified living fence arrangements.     9. Establish 1,163 ha of silvopasture systems using individual trees.     10. Establish 4,569 ha of sustainable fuelwood and timber plantations.     11. Establish 108 km of firebreaks for forests and plantations.     12. Construct 108 km of living barriers for soil conservation.     13. Construct 108 km of superficial drainage for soil conservation. | | | * 36 tree nurseries * 4,101 ha of forest protection zones. * 1,728 of restored and protected natural forest * 4,334 ha of restored forest across seven catchments * 746 ha of restored pine forest * 1,127 km of agroforestry systems established using diversified living fence arrangements * 582 ha of agroforestry systems established in coffee plantations * 1,192 km of silvopasture treelines * 1,163 ha of silvopasture systems using individual trees * 4,569 ha of sustainable fuelwood plantations * 108 km of firebreaks * 108 km of living barriers * 108 km of superficial drainage solutions | | |
| Activity 4.2. Implement water- and energy-efficient technologies within rural communities across the seven target catchments. | | Water- and energy-efficient technologies will be installed in each target municipality. Rainwater harvesting interventions will target community buildings such as schools and clinics where they will benefit the most vulnerable people. By targeting communities, these interventions will also serve as demonstration sites of the technologies to promote uptake of interventions through the financial mechanisms established in Output 1. Similarly, energy-efficient technologies will be made communally available to maximise beneficiaries and promote upscales within the target communities and surrounding communities across the region. Upscaling will be promoted through the training and demonstration site visits implemented through Activity 2.3. Details on specific interventions and targets for each municipality are provided in Annex 17b. | | * + 1. Install 109 rainwater harvesting systems on public or community buildings using rooftop capture and plastic or geomembrane deposits for storage 25 m3) to supply water for 8-12 families.     2. Install 139 community-level rainwater reservoirs (500 m3).     3. Install 43 half-orange kilns for efficient charcoal production to be administered by existing local cooperatives. | | | * 109 rainwater harvesting systems on community buildings * 139 community-level rainwater reservoirs * 43 half-orange kilns for efficient charcoal production | | |
| **E.7. Monitoring, reporting and evaluation arrangements** | | | | | | | | | |
| The Project Manager (PM) will be responsible for the overall monitoring of project progress against the outcome-based indicators during implementation, as well reporting project progress to the Regional Project Steering Committee (RPSC). For on-the-ground monitoring of project interventions, a part-time Monitoring and Evaluation (M&E) Specialist will be employed to develop practical guidelines for — and operationalise — a performance monitoring framework to track the project’s progress towards achieving its targets. This will be achieved by: i) measuring the performance against the project indicators (Sections E.3–5) to evaluate the progress of the project; ii) reporting the project’s performance to the RPSC and Regional Project Management Unit (RPMU); and iii) providing technical support to the PM. In addition, a Gender Officer (GO) will be employed part-time to oversee and monitor the application of gender-disaggregated indicators.  The M&E Specialist and GO will perform regular visits — at least once a year to each country — randomly selecting municipalities to monitor on-the-ground implementation of project interventions. They will use these visits to cross-check the information provided by PFIs and beneficiaries in project monitoring reports. During each field visit, the M&E specialist and GO will collect qualitative data on the outcomes and difficulties experienced during implementation through focus group discussions with different beneficiaries, as well as through in-depth interviews with key stakeholders. Using this information, the M&E Specialist will compile six-monthly project reports to be shared with the RPMU and RPSC. These reports will outline project progress in each country as well as regionally, and will allow feedback and advisory support from the RPMU and RPSC in the case of potential project delays or other challenges that may arise during implementation. Annual project progress reports and annual gender reports will also be produced to be sent to the GCF Secretariat with information regarding project progress measured against expected outputs.  CABEI, as the Accredited Entity (AE) will perform supervision missions from year two of project implementation onwards, selecting three countries each year to visit and assess the status of project implementation. This process will allow CABEI to maintain oversight throughout the project’s lifetime. In addition, CABEI’s Credit Supervision Department — which oversees the destination and use of funds disbursed to PFIs — will monitor the project’s compliance with policies and procedures, as well as the alignment between implementation and project objectives.  As per the Accreditation Master Agreement (AMA), an independent consultant will be contracted by CABEI to conduct a Mid-Term Review (MTR) and the Terminal Evaluation (TE) of the project. Both evaluations will comply with GCF guidelines and international standards and will make use of qualitative as well as quantitative data analyses, including  interviews with relevant stakeholders, data provided by the M&E Specialist and GO, participative workshops and focus groups with beneficiaries to promote participative learning. The MTR will provide an assessment of project performance against its targets at the project’s mid-point. This will be a formative exercise and will include analysing whether the project is on track, what problems and challenges the project is encountering, and what corrective actions are required, so that the project can achieve its intended outcomes by project completion in the most efficient and sustainable way. The RPSC and RPMU will be informed of all MTR findings and will develop a management response to the evaluation recommendations along with an implementation plan. It will be the responsibility of the PM to monitor whether the agreed recommendations are being implemented during the remainder of the project’s operational life.  The TE will take place at the end of project implementation and will be an independent assessment of project performance against standard evaluation criteria (e.g. strategic relevance, effectiveness, efficiency, likelihood of impact and sustainability). This assessment will be done based on documented evidence, stakeholder interviews and, in most cases, a field mission. In addition to an assessment of expected results and impacts, unexpected outcomes will be evaluated, including unexpected co-benefits, best practices and lessons learned. The draft TE report will be sent to project stakeholders for comment and subsequently disclosed publicly.  The costs for results monitoring and performance evaluation are included in the project budget (Annex 3). | | | | | | | | | |

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| **RISK ASSESSMENT AND MANAGEMENT** | | |
| F.1. **Risk factors and mitigations measures (max. 3 pages)** | | |
| A summary of the identified risks to the proposed project’s implementation and sustainability, associated impacts and mitigation measures are presented in the risk tables below. Risks were classified according to the following risk matrix (Table 4), with a summary presented in Table 5. Overall, the risk assessment concludes that the proposed project’s overall risk rating is Category B.  Table 4. Risk matrix to determine risk categorisations[[92]](#footnote-93).   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | |  | **Impact** | | |  | **Risk** | | |  |  | |  | Low | Medium | High |  |  | Very Low Risk | |  | |  |  | 1 | 2 | 3 |  |  | Low Risk | | **Likelihood** | | Low | 1 | 1 | 2 | 3 |  |  | Medium Risk | | Medium | 2 | 2 | 4 | 6 |  |  | High Risk | | High | 3 | 3 | 6 | 9 |  |  | Extreme Risk |   Table 5. Project risk factors and mitigated risks.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Factor #** | **Likelihood** | **Impact** | **Risk** | **Mitigation Potential** | **Mitigated Risk** | | **1** | Medium | Medium | Medium Risk | High | Very Low Risk | | **2** | Medium | Low | Low Risk | Medium | Very Low Risk | | **3** | Medium | Low | Low Risk | High | Very Low Risk | | **4** | Medium | Medium | Medium Risk | High | Low Risk | | **5** | Medium | High | High Risk | High | Medium Risk | | **6** | Low | Medium | Low Risk | Low | Low Risk | | **7** | Low | Medium | Low Risk | Medium | Very Low Risk | | **8** | Medium | Low | Low Risk | Low | Very Low Risk | | **9** | Medium | Medium | Medium Risk | Medium | Low Risk | | **10** | Low | High | Medium Risk | High | Very Low Risk | | | |
| **Selected Risk Factor 1** | | |
| Category | Probability | Impact |
| Technical and operational | Medium | Medium |
| Description | | |
| Behaviour change does not occur and the implementation of proposed project activities cease after conclusion of the project, because rural communities are unwilling to invest in EbA interventions. Ecosystem degradation and unsustainable practices continue. | | |
| Mitigation Measure(s) | | |
| The project will facilitate long-term change in land-use practices and uptake of EbA by making financial instruments available to support investment into EbA. In addition, the project will engage directly with communities as well as with local and national governments to create an enabling environment for EbA interventions, including through:   * incorporating comprehensive engagement with communities for planning, implementation and monitoring of EbA initiatives (for example Activities 1.1 and 2.1); * providing training for communities, commercial farmers and decision-makers to develop capacity for supporting and implementing EbA and to build a common understanding of the benefits of these approaches (for example Activity 2.2); * developing protocols and guidelines for the adoption of EbA and water/energy-efficient technologies that will guide ongoing training(Activity 2.2); * developing an evidence base for the effectiveness of EbA in the local context including assessing the economic benefits of these interventions (Activity 2.3); and * mainstreaming climate adaptation and EbA into local- and national-level policies, to promote ongoing implementation of EbA interventions beyond the project lifetime (Activity 3.3).   A detailed Exit Strategy has been developed to ensure the proposed project’s long-term sustainability and to decrease the likelihood that this risk will occur (Section B.6). | | |
| **Selected Risk Factor 2** | | |
| Category | Probability | Impact |
| Technical and operational | Medium | Low |
| Description | | |
| High turnover of staff in implementing institutions, frequent changes in government bodies and limited institutional memory results in a disruption and/or delays in the project implementation and may jeopardise the sustainability of the project. | | |
| Mitigation Measure(s) | | |
| Decisions, best practices and lessons learned will be documented throughout the project to support institutional memory that will sustain project activities. This memory will also be strengthened through the regional knowledge hub that will be established under Activity 3.1. Protocols for EbA will be developed in both English and the main local languages to guide new staff who become involved in EbA implementation during and after the project. Furthermore, through the project, PFIs and communities will be trained and engaged in the implementation as well as the monitoring and evaluation of EbA as well as water- and energy-efficient interventions, thereby strengthening the capacity of local communities and institutions to plan and implement EbA. Where possible, the RPSC will make use of established regional and national structures to capitalise on well-established practices and systems that are familiar to government staff. | | |
| **Selected Risk Factor 3** | | |
| Category | Probability | Impact |
| Technical and operational | Medium | Low |
| Description | | |
| Overlapping or misalignment between the proposed project activities and those being implemented by other departments or organisations in the project area. | | |
| Mitigation Measure(s) | | |
| The proposed project has been designed with extensive stakeholder engagement and desktop research to ensure that there is alignment with any past and ongoing initiatives in the region. Regular engagements will be conducted with relevant individuals/organisations to prevent duplication of effort, support collaboration and ensure that current and future projects are aligned with the proposed project’s interventions. Coordination mechanisms — including the regional knowledge hub which will facilitate the sharing of lessons learned — will be established at the regional and national levels to ensure synergy among efforts of government and other national and regional stakeholders. | | |
| **Selected Risk Factor 4** | | |
| Category | Probability | Impact |
| Technical and operational | Medium | Medium |
| Description | | |
| Inadequate engagement with local-level stakeholders and project partners. This may result in limited integration of local knowledge into project activities. | | |
| Mitigation Measure(s) | | |
| The project design has involved extensive engagement with local-level stakeholders over a period of three years to ensure support for project activities and extensive engagements with project partners and stakeholders will continue during the project’s implementation (detail provided in Annex 7: Stakeholder engagement plan). Implementation activities will build on the local knowledge and experience of PFIs (Output 1) and other local organisations. In addition, communities will be engaged in the planning of EbA interventions and their monitoring and evaluation (for example Activity 2.1) to ensure alignment between project activities and the needs of local stakeholders. | | |
| **Selected Risk Factor 5** | | |
| Category | Probability | Impact |
| Technical and operational | Medium | High |
| Description | | |
| Limited technical capacity among PFIs, government authorities and local communities to channel funds for and implement EbA interventions. | | |
| Mitigation Measure(s) | | |
| Training and technical assistance will be provided for relevant PFIs, government authorities and local communities that will be involved in project activities. In particular, a technical assistance facility will be established to facilitate financial institutions’ abilities to access funds for EBA interventions. In addition, technical capacity of government authorities and local communities will be strengthened to improve their abilities to: i) implement EbA protocols in a scientifically rigorous manner; and ii) monitor and evaluate the success of these interventions. | | |
| **Selected Risk Factor 6** | | |
| Category | Probability | Impact |
| Technical and operational | Low | Medium |
| Description | | |
| Natural disasters undermine the: i) implementation of EbA interventions and result in economic loss and/or damage to the interventions; and ii) restoration and sustainable management of forests, wetlands and agro-systems. | | |
| Mitigation Measure(s) | | |
| The project’s EbA and water/energy-efficient interventions will target areas that have been identified as being vulnerable to climate change impacts. For example, EbA will be implemented in sites that are prone to drought as a measure to reduce the risk or physical impact of this type of climate-related natural disaster. Water/energy-efficient solutions will also increase the resilience of these communities to droughts. Furthermore, the project will integrate information on local climate change risks and impacts into training for PFIs and communities to ensure that forecasts are taken into consideration during the planning and implementation of EbA interventions. The RPMU will also oversee the incorporation of forecasts into project planning and implementation. | | |
| **Selected Risk Factor 7** | | |
| Category | Probability | Impact |
| Technical and operational | Low | Medium |
| Description | | |
| Social tensions may arise as existing power relations within the community might disrupt equal opportunities to use and benefit from water- and energy-efficient technologies. | | |
| Mitigation Measure(s) | | |
| The project’s activities have been designed to be transparent and will maintain a broadly consultative approach throughout the implementation period. The beneficiaries of the water- and energy-efficient technologies have been identified through local stakeholder consultations. In addition, the activities have been designed to ensure that all individuals are afforded access to the technologies, which will be installed in public facilities — for example rainwater harvesting in schools — rather than in private households. Mechanisms for resolving conflicts and addressing disputes and complaints will be established to ensure that the project’s activities are transparent and that the project management team can be held accountable by beneficiary communities. | | |
| **Selected Risk Factor 8** | | |
| Category | Probability | Impact |
| Governance | Medium | Low |
| Description | | |
| Changes in political leadership, which may result in delays in implementation. | | |
| Mitigation Measure(s) | | |
| Regular engagement with non-political actors — such as government agency officials, local authorities, staff and local community members — will be prioritised during project implementation. Additionally, formulation of local ordinances, mainstreaming of project interventions in local planning and budgeting systems will ensure that political issues will have negligible impact on the sustainability of project interventions. Finally, support from regional bodies such as the CCAD will promote continued political support. | | |
| **Selected Risk Factor 9** | | |
| Category | Probability | Impact |
| Governance | Medium | Medium |
| Description | | |
| Insufficient coordination, collaboration and information-sharing between countries and implementing partners at a regional level and between relevant government departments, research institutions and private sector entities within the countries. This can result in the limited participation of relevant institutions and agencies, reducing the timely delivery and effectiveness of the project. | | |
| Mitigation Measure(s) | | |
| Detailed implementation arrangements have been designed to ensure effective coordination of project activities between regional stakeholders. These arrangements are outlined in Section B.4. The relevant institutions were involved in the design of the project activities and have agreed on all roles and responsibilities. Coordination between them will be supported by regular meetings/engagements between implementing partners to facilitate information sharing.  In addition, project countries, relevant government departments, research institutions and the private sector will be encouraged to share information through a number of technologies and systems that will be established or strengthened by the project. Technologies and systems will be selected based on the most appropriate approaches to sharing information in both the relevant regional and local contexts. Examples include:   * a regional knowledge hub to facilitate sharing of best practices and lessons learned across countries and sectors as well as to provide policy- and decision-makers with relevant information regarding EbA; * cooperation agreements with stakeholders to promote an understanding of roles and responsibilities within the project and facilitate effective participation; and * training workshops for local authorities, community organisations and partner financial institutions, among others, to ensure a shared understanding of EbA and water/energy-efficient strategies. | | |
| **Selected Risk Factor 10** | | |
| Category | Probability | Impact |
| Other | Low | High |
| Description | | |
| Inadequate incorporation of gender, and environmental and social safeguard (ESS) considerations into the implementation of the proposed project activities as well as its management structures and systems. | | |
| Mitigation Measure(s) | | |
| The project has been assessed according to the GCF’s environmental and social protection standards and associated risks and mitigation measures have been identified. In addition, a Gender Action Plan has been developed and will be implemented to ensure that gender equality is incorporated into all interventions. An Environmental and Social Management Plan (ESMP) has also been designed based on a detailed screening process. The ESMP will provide a framework for ensuring that project activities do not have a negative impact on the environment or local communities. | | |

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| **GCF POLICIES AND STANDARDS** |
| G.1. **Environmental and social risk assessment** |
| The environmental and social risk associated with the project was evaluated in accordance with GCF’s Environmental and Social Safeguards (ESS). According to the assessment, the project is considered to be Category B or Medium Risk. This categorisation is supported by an Environmental, Social Assessment and associated Management Plan (Annex 6). The assessment and management plan comply with GCF requirements by: i) defining the context and baseline of each target area in which the interventions will be implemented; ii) identifying all negative and positive impacts associated with each of the proposed interventions; and iii) providing a management plan to describe how any adverse impacts identified during risk screening will be accounted for or mitigated throughout the project implementation period. The primary environmental and social risks that may be associated with the project — as identified by the assessment — are presented below.  Overall, the environmental and social risks assessed to be presented under this project are minor and can be mitigated and/or effectively managed with the implementation of an appropriate strategy. The project is expected to result in net-positive environmental and social benefits in the long term, which include: i) supporting economic security and environmental benefits by facilitating access to micro-finance and grant facilities for the implementation of small-scale EbA interventions; and ii) increasing water security through improved catchment management and the provision of water-efficient technologies and systems. However, several risks have been identified that, if not adequately managed, will reduce the resilience of certain communities or result in adverse environmental, social or economic impacts. These potential impacts are detailed below.  **Environmental impacts**  Several potential environmental impacts have been identified as being associated with the implementation of the proposed activities. These impacts are, however, avoidable and can be mitigated effectively through appropriate management measures. The main environmental impacts include:   1. a possible increase in the use of pesticides and fertilisers in the EbA options, which may create both environmental and social risks by polluting natural resources; 2. an increase in the emission of short- and long-lived climate pollutants, by the execution of protocols and EbA measures, especially if the implementation of agroforestry systems includes the use of chemically sourced nitrogen fertilisers; 3. methodological approaches to assessing ecosystem services may generate biases at the time of assessment, affecting the perceived importance of specific ecosystems, therefore impacting on biodiversity and habitats; and 4. unintended promotion of deforestation for fuelwood to be used in the furnaces and stoves being marketed under the project.   The environmental impacts listed above can be effectively managed by, for example: i) the dissemination of specific guidelines on the use of fertilisers; ii) awareness-raising on strategies for the sustainable harvesting of fuelwood; and iii) clear methodological approaches to assessing ecosystems. For further information on specific management and mitigation strategies relating to each activity, please refer to Annex 6: Environmental and Social Management Plan (ESMP).  **Social impacts**  The potential for adverse social impacts under the project has been assessed as more likely than environmental impacts. These adverse impacts largely pertain to the potential for economic and cultural displacement, adverse economic impacts resulting from debt accrued through the use of financing mechanisms and restrictions on land use. The main potential social impacts include:   1. non-recognition or alteration of Indigenous People’s livelihood strategies, cultural practices, religious beliefs or governance structures; 2. economic displacement and an increase in economic insecurity in the event that credit conditions are not suitable for small producers, or that interest rates are not commensurate with the return rate of EbA interventions; 3. increased restrictions on land-use for small scale farmers, Indigenous Peoples or other marginalised groups; 4. unequal opportunities for indigenous peoples and other marginalised groups to benefit from the project interventions, particularly if the opportunities are not promoted in an accessible, culturally appropriate and inclusive manner; and 5. limited inclusion of all stakeholder priorities given the large geographic extent, diverse stakeholder groups and range of sociocultural contexts.   These impacts are all manageable or avoidable and can be effectively reduced and/or mitigated through the implementation of appropriate management strategies. For further information please refer to Annex 6: ESMP.  **Indigenous Peoples**  Potential adverse impacts on Indigenous Peoples are a critical concern for the GCF and although no unavoidable impacts on Indigenous Peoples have been identified in the risk screening, certain interventions may result in unintended impacts. However, it is important to note that the project has been designed to be open and inclusive and it will consider the languages, dialects and cultural practices of all beneficiary groups throughout implementation to ensure equal access and fair distribution of project benefits. In addition, because adaptation measures have been designed with an ecosystem-based approach that inherently respects Indigenous Peoples’ cultural relationship with their territory, it is assumed that Indigenous Peoples will not be affected. CABEI — as the AE — has experience in facilitating the inclusion of Indigenous Peoples in GCF-financed projects and will maintain oversight.  **Grievance Redress Mechanism**  The established CABEI Grievance Redress Mechanism (GRM) will be implemented for this project. The mechanism is approved by the GCF and has been used for a prior GCF project. The GRM will be used at all stages of the project and will provide an accessible, rapid, fair and effective response to concerned stakeholders, especially any vulnerable groups who may lack access to formal legal systems or support. For further information please refer to Annex: 6 ESMP. |
| G.2. **Gender assessment and action plan** |
| During project preparation, a gender assessment was conducted to understand the differential vulnerability to, and impact of, climate change on women and men in the Dry Corridor and Arid Zones of the seven participating countries. From the findings of this assessment, and an analysis of the proposed project solution, a gender action plan (GAP) was developed. The process to produce these components included a desktop review of available literature, as well as stakeholder and beneficiary consultations held in Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama and Dominican Republic. The assessment does note that gender-disaggregated data is limited, particularly regarding indicators and information on land tenure, participation in decision-making, livelihood activities, and access to credit and finance.  Traditional gender roles and stereotypes in the project area, as well as the resulting asymmetrical power differences they produce, create a culture of social exclusion that leaves women vulnerable to the impacts of climate change, with reduced capacity or opportunity to adapt. The patriarchal and sexist roles, norms and stereotypes create inequalities in social relations and cultural institutions, wherein men maintain ‘productive’, income-generating roles and women perform mostly ‘reproductive’, unpaid duties. Notably, this manifests in women’s: i) reduced knowledge of information systems (such as early warning or forecasts); i) low participation in training; iii), limited access to finance and credit; iv) inequitable management and control of natural resources and land; v) greater exposure to violence; vi) limited participation in decision-making institutions; and vii) exclusion from accessing benefits and public resources for development. In addition to undermining their agency, capabilities and safety, this system limits the realisation of women and girls’ rights, which is particularly evident in rural and indigenous contexts where gender inequalities are most pronounced and baseline vulnerability (for all genders) is highest.  The profile of migration from the region has changed in the past decade, with women increasingly becoming active agents in the migration process, rather than passive actors relative to the husbands or male family members’ decisions. This is notable because migrant women face additional risks to men because of the same gender conditions that shape their vulnerability at origin. This can manifest in isolation, lack of social networks, precarious employment conditions, unsafe living environments, and exposure to violence, exploitation and even enslavement.  Although potentially more relevant to mitigation activities, the assessment also notes that female environmental and rights activists in the region are particularly targeted by extractive industries (mining, hydroelectric, monocultures and/or oil) for violence, stigmatisation and criminalisation. These conditions, wherein women experience discriminatory, violent and exclusionary practices, are unfavourable to their continued participation and representation in activist spaces, which may result in unfavourable biases and even further inequality.  Regarding climate change, consultations conducted for the assessment described the effects of droughts and floods on women, which include: i) multiplication of the ‘reproductive’ day, wherein women’s burden of work increases; ii) negative impacts on agriculture and fishing for smallholder families, particularly for female-headed households; iii) increased migration and displacement; iv) decreased forest cover reducing access to resources like water, food, fuels, and non-timber forest products (including herbs and medicinal plants) which has additional implications for household health; v) reduced opportunities for women in income-generating work such as agriculture or handcrafts (as a result of reduced resources); vi) reduced access to clean drinking water, which has further opportunity costs for women and girls’ exposure and time spent collecting water; vii) negative impacts on women’s largely-marginalised physical and mental health due to stress, hunger and malnutrition, heatstroke and kidney disease, and ‘household’ diseases such as Zika and mites.  The assessment describes how the conditions and vulnerabilities described above will influence project implementation, particularly noting how social exclusion may preclude women from participating meaningfully in decision-making processes and accessing the benefits of the project, such as training and economic empowerment. To mitigate against biasing against women as project beneficiaries during implementation and subsequently, the gender action plan outlines several interventions in response. These interventions will help ensure the project does not unintentionally contribute to perpetuating or worsening gender equality and gender-based climate vulnerability in the Dry Corridor and Arid Zones. The GAP seeks to ensure women are empowered and enabled to meaningfully contribute to, and benefit from, project activities and that stakeholders’ actions and project processes make considerations for the needs, interests and vulnerabilities of women. The GAP includes clear targets, gender-sensitive design features and quantifiable performance indicators to promote women’s participation and benefits from the project.  The actions of the GAP include:   * developing women-oriented financial products and services to finance EbA investments; * capacity-building and awareness-raising amongst stakeholders on the importance and implementation of gender mainstreaming/gender equality; * strengthening the technical capacities of women’s organisations at the local level; and * ensuring the active participation and empowerment of women producers and women's organisations in project processes.   Implementation arrangements of the project also include a Gender Officer under the RPMU and a gender expert in each of the NCUs.  The full gender assessment and project-level gender action plan are included as Annex 8. |
| G.3. **Financial management and procurement** |
| As demonstrated by its status as an Accredited Entity to the GCF, CABEI has extensive expertise in working with international funds and has a good track record in implementing projects using international financial management practices. For the proposed project, CABEI will be responsible for the fiduciary aspects and will be accountable for all financial and investment activities.  The procurement of goods and services (including consultants’ services) for activities financed by the GCF will be carried out following CABEI’s standard practices and procedures — including its procurement and consultants’ guidelines — which are aligned to those of the GCF, as well as to all national laws. Further details on the procurement of goods and services, as well as CABEI's applicable procurement procedures are provided in the Procurement Plan in Annex 10.  CABEI will provide to the GCF:   * Annual progress reports on the status of project implementation, including the disbursements made during the relevant period — or more frequent progress reports if requested by the GCF; and * an annual audited financial statement of the specific account prepared by an independent auditor or evaluation body.   CABEI will observe the highest ethical standards during the procurement and execution of this project. CABEI will ensure: i) substantive quality of project implementation; ii) effective use of both international and national resources allocated to it; and iii) proper coordination among all project stakeholders, in particular national, sub-national and local partners. Details of the project management structure of the project and the respective roles that will be played by CABEI are provided in Section B.4. Implementation arrangements. |
| G.4. **Disclosure of funding proposal** |
| *Note: The Information Disclosure Policy (IDP) provides that the GCF will apply a presumption in favour of disclosure for all information and documents relating to the GCF and its funding activities. Under the IDP, project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Information provided in confidence is one of the exceptions, but this exception should not be applied broadly to an entire document if the document contains specific, segregable portions that can be disclosed without prejudice or harm.*  *Indicate below whether or not the funding proposal includes confidential information.*  No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.  With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:   * full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity’s disclosure policy, and * redacted copy for disclosure on the GCF website.   The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information. |

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| ANNEXES | | | | |
| **H.1. Mandatory annexes** | | | | |
|  | | Annex 1 | | NDA no-objection letter(s) [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_1_template_-_NDA_no-objection_letter.docx/dac6e101-5a91-63b3-817e-627286c79c85) |
|  | | Annex 2 | | Feasibility study - and a market study, if applicable |
|  | | Annex 3 | | Economic and/or financial analyses in spreadsheet format |
|  | | Annex 4 | | Detailed budget plan [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_4_template_-_Detailed_budget_plan.xlsx/2d34b526-e650-804a-81ca-ecb5a293985d) |
|  | | Annex 5 | | Implementation timetable including key project/programme milestones [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_5_template_-_Implementation_timetable.xlsx/2e73b0d1-3f1d-5870-609a-3e6b39905e9c) |
|  | | Annex 6 | | E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3):  [**(ESS disclosure form provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_6_form_-_ESS_disclosure_report.dotx/b5fd8542-6a8a-5a37-f099-5e6d6744fa25)  Environmental and Social Impact Assessment (ESIA) or  Environmental and Social Management Plan (ESMP) or  Environmental and Social Management System (ESMS)  ☐ Others (please specify – e.g. Resettlement Action Plan, Resettlement Policy Framework, Indigenous People’s Plan, Land Acquisition Plan, etc.) |
|  | | Annex 7 | | Summary of consultations and stakeholder engagement plan |
|  | | Annex 8 | | Gender assessment and project/programme-level action plan [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_8_template_and_guide_-_Gender_assessment_and_action_plan.doc/fe5711ca-8fcf-1a14-5d3e-804aad1a7827) |
|  | | Annex 9 | | Legal due diligence (regulation, taxation and insurance) |
|  | | Annex 10 | | Procurement plan [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_10_-_Procurement_plan.docx/4a360e64-5f03-e02e-408b-6239fccaedb3) |
|  | | Annex 11 | | Monitoring and evaluation plan [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_11_template_-_Monitoring_and_evaluation_plan.docx/6a3b64be-9712-454b-b948-99cf8ffc43bb) |
|  | | Annex 12 | | AE fee request [**(template provided)**](https://www.greenclimate.fund/documents/20182/193373/Funding_Proposal_Annex_12_template_-_AE_fee_request.xlsx/4e9450c0-6bf0-8290-24b7-2ff43ca95c01) |
|  | | Annex 13 | | Co-financing commitment letter, if applicable [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_13_template_-_Co-financing_commitment_letter.docx/16bb3e0a-be63-19cd-d352-460176f4a569) |
|  | | Annex 14 | | Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule |
| **H.2. Other annexes as applicable** | | | | |
|  | | Annex 15 | | Evidence of internal approval [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_15_template_-_Evidence_of_internal_approval.docx/dcb5743a-46d9-0e8f-2da6-b9b58371f82b) |
|  | Annex 16 | | Map(s) indicating the location of proposed interventions | |
|  | Annex 17 | | Multi-country project/programme information [**(template provided)**](https://www.greenclimate.fund/documents/20182/574712/Funding_Proposal_Annex_17_template_-_Multi-country_project_programme_information.xlsx/95110afa-ab09-f948-1abe-5887bcfec594) | |
|  | Annex 18 | | Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project | |
|  | Annex 19 | | Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity | |
|  | Annex 20 | | First level AML/CFT (KYC) assessment | |
|  | Annex 21 | | Operations manual (Operations and maintenance) | |
|  | Annex x | | Other references | |

*\* Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*

1. with a population of 10.5 million, representing ~22% of the total population of the six countries across which it extends [↑](#footnote-ref-2)
2. Brinkhoff, T. 2017. *City Population*. Available at: <http://www.citypopulation.de>. [↑](#footnote-ref-3)
3. Respective countries’ economic situations are described in Section B.5, with additional detail provided in Section 2.3 of Annex 2: Feasibility Study. [↑](#footnote-ref-4)
4. Projected 2050 extent based on Representative Concentration Trajectory (RCP) 8.5, since according to the latest Emissions Gap Report published by UN Environment (2017), national commitments will only reach one third of the emissions reduction required by 2030 to meet current mitigation objectives. [↑](#footnote-ref-5)
5. Hijmans et al., 2005. Very high resolution interpolated climate surfaces for global land areas. International Journal of Climatology, 25: 1965-1978. [↑](#footnote-ref-6)
6. Ramirez-Villegas & Jarvis, 2010. Downscaling Global Circulation Model outputs: The Delta Method. Decision and Policy Analysis Working Paper No. 1, CIAT. Available at: http://ccafs-climate.org/downloads/docs/Downscaling-WP-01.pdf [↑](#footnote-ref-7)
7. Allen et al., 2006. Evapotranspiración del cultivo: guías para la determinación de los requerimientos de agua de los cultivos. FAO, Rome; Droogers & Allen, 2002. Estimating reference evapotranspiration under inaccurate data conditions. Irrigation and Drainage Systems 16: 33-45. [↑](#footnote-ref-8)
8. The calculations consider that a month is dry when the relationship between precipitation and evapotranspiration is less than 0.5. [↑](#footnote-ref-9)
9. living on under USD 3.20 per day [↑](#footnote-ref-10)
10. As estimated in 2017. Thomas Brinkhoff: City Population, <http://www.citypopulation.de> [↑](#footnote-ref-11)
11. Borgen Project, 2017. Costa Rica’s Poverty Rate. Available at: <https://borgenproject.org/about-costa-ricas-poverty-rate/>. [↑](#footnote-ref-12)
12. Borgen Project, 2017. Panama’s Poverty Rate. Available at: <https://borgenproject.org/panama-poverty-rate/>. [↑](#footnote-ref-13)
13. IPCC (2014). Fifth Assessment Report of the Intergovernmental Panel on Climate Change. [↑](#footnote-ref-14)
14. Kreft et al., 2016. Global Climate Risk Index 2017. Who suffers most from extreme weather events? Weather-related loss events in 2015 and 1996 to 2015. Bonn: Germanwatch e.V. [↑](#footnote-ref-15)
15. These form part of the El Niño Southern Oscillation (ENSO) cycle, which is an irregularly periodic variation in winds and sea surface temperatures over the tropical eastern Pacific Ocean. The warming phase is known as El Niño and the cooling phase as La Niña. The ENSO cycle strongly influences the region’s climate. [↑](#footnote-ref-16)
16. Cai et al. 2015. ENSO and greenhouse warming. Nature Climate Change, 5: 849. [↑](#footnote-ref-17)
17. FAO. 2017. Chronology of the Dry Corridor: The impetus for resilience in Central America. Available at: http://www.fao.org/in-action/agronoticias/detail/en/c/1024539 [↑](#footnote-ref-18)
18. The rain season in the Dry Corridor lasts from May to October, interrupted in August by a period of lower precipitation known as the mid-summer drought, *canícula* or *veranillo*. [↑](#footnote-ref-19)
19. Rauscher et al., 2008. Extension and intensification of the Meso-American mid-summer drought in the twenty-first century. Climate Dynamics 31: 551-571. [↑](#footnote-ref-20)
20. Lyra, A., Imbach, P., Rodriguez, D., Chou, S.C., Georgiou, S. and Garofolo, L., 2017. Projections of climate change impacts on central America tropical rainforest. Climatic Change, 141, pp.93-105. [↑](#footnote-ref-21)
21. Guojian, W., 2017. Continued increase of extreme El Niño frequency long after 1.5 °C warming stabilization. *Nature Climate Change* **7**, 568–572. Available at: <https://www.nature.com/articles/nclimate3351>. [↑](#footnote-ref-22)
22. Fasullo, J. T., Otto-Bliesner, B. L., & Stevenson, S., 2018. ENSO’s changing inﬂuence on temperature, precipitation, and wildﬁre in a warming climate. *Geophysical Research Letters*, 45, 9216–9225. https://doi.org/10.1029/2018GL079022. [↑](#footnote-ref-23)
23. Lyra, A., Imbach, P., Rodriguez, D., Chou, S.C., Georgiou, S. and Garofolo, L., 2017. Projections of climate change impacts on central America tropical rainforest. Climatic Change, 141, pp.93-105. [↑](#footnote-ref-24)
24. Lyra, A., Imbach, P., Rodriguez, D., Chou, S.C., Georgiou, S. and Garofolo, L., 2017. Projections of climate change impacts on central America tropical rainforest. Climatic Change, 141(1), pp.93-105. [↑](#footnote-ref-25)
25. World Food Programme et al., 2017. Food security and emigration: Why people flee and the impact on family members left behind in El Salvador, Guatemala and Honduras. Available at: https://www.wfp.org/content/2017-food-security-emigration-why-people-flee-salvador-guatemala-honduras [↑](#footnote-ref-26)
26. United Nations Office for the Coordination of Humanitarian Affairs (OCHA), Regional Office for Latin America and the Caribbean, 2014. Drought in Central America Situation Report No. 01 (as of December 10, 2014). [↑](#footnote-ref-27)
27. Food and Agriculture Organisation of the United Nations (FAO), 2016. Dry Corridor, Central America, Situation Report — June 2016. [↑](#footnote-ref-28)
28. FAO, 2018. Central America, Drought causes crop losses in “Dry Corridor” in Central America. GIEWS update 27 August 2018. [↑](#footnote-ref-29)
29. Further details regarding climate change impacts are presented in Section 7 of Annex 2: Feasibility Study. [↑](#footnote-ref-30)
30. Hannah et al., 2017. Regional modeling of climate change impacts on smallholder agriculture and ecosystems in Central America. Climatic Change 141: 29-45. [↑](#footnote-ref-31)
31. CEPAL y CAC/SICA, 2014a. Impactos potenciales del cambio climático sobre el café en Centroamérica, LC/MEX/L.1169, México, DF. [↑](#footnote-ref-32)
32. CEPAL y CAC/SICA, 2014b. Impactos potenciales del cambio climático sobre los granos basicos en CentroAmérica. LC/MEX/L.1123, México, DF [↑](#footnote-ref-33)
33. Imbach et al., 2017. Coupling of pollination services and coffee suitability under climate change. Proceedings of the National Academy of Sciences. [↑](#footnote-ref-34)
34. Details of expected impacts are presented in Tables 7.1 and 7.2; Section 7 of Annex 2: Feasibility Study. [↑](#footnote-ref-35)
35. Hannah et al., 2017. Regional modeling of climate change impacts on smallholder agriculture and ecosystems in Central America. Climatic Change 141: 29-45. [↑](#footnote-ref-36)
36. Hannah et al., 2017. Regional modeling of climate change impacts on smallholder agriculture and ecosystems in Central America. Climatic Change 141: 29-45. [↑](#footnote-ref-37)
37. Bouroncle et al., 2017. Mapping climate change adaptive capacity and vulnerability of smallholder agricultural livelihoods in Central America. Climatic Change, 141: 123–137. [↑](#footnote-ref-38)
38. Imbach et al., 2012. Modeling potential equilibrium states of vegetation and terrestrial water cycle of Mesoamerica under climate change scenarios. Journal of Hydrometeorology, 13: 665-680. [↑](#footnote-ref-39)
39. Details are provided in Section 5 of Annex 2: Feasibility Study. [↑](#footnote-ref-40)
40. A comprehensive list of past and ongoing projects, programmes and initiatives, as well as details of their focus and alignment with the proposed project, is presented in Section 9 of Annex 2: Feasibility Study. [↑](#footnote-ref-41)
41. “Ecosystem-based Adaptation refers to “the use of biodiversity and ecosystem services to help people adapt to the adverse effects of climate change” (Convention on Biological Diversity, 2009) [↑](#footnote-ref-42)
42. In the Dry Corridor, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama have committed to restoring 6.4 million hectares in total, while the Dominican Republic has committed to restoring 0.09 million hectares . El Salvador, Honduras, Nicaragua and Panama: 1 million hectares per country; Guatemala: 1.2 million hectares ; Costa Rica: 2.7 million hectares. Available at: http://www.wri.org/our-work/project/initiative-20x20. [↑](#footnote-ref-43)
43. [www.solucionesabe.org](http://www.solucionesabe.org) [↑](#footnote-ref-44)
44. Details are provided in Section B.1 and Section 6 of Annex 2: Feasibility Study. [↑](#footnote-ref-45)
45. *Mancomunidades* are associations of municipalities with legal personality that provide a practical framework for resource management across municipalities. [↑](#footnote-ref-46)
46. ‘On-lending’ in this context refers to the process whereby accredited PFIs will borrow money from CABEI through the EbA credit line at below-market rates. They will then lend this money with its associated rates (on-lend) to non-regulated financial institutions, farms, enterprises and households for implementation of EbA and other adaptation measures. [↑](#footnote-ref-47)
47. This Fund receives contributions from public sources, private organisations and NGOs that are channelled through a mercantile trust legally established as a patrimonial fund of increasing endowment. An independent finance manager invests the capital and the revenues are used to carry out concrete actions (e.g. restoration and conservation of water sources, management, improvement of infrastructure). [↑](#footnote-ref-48)
48. http://waterfunds.org/ [↑](#footnote-ref-49)
49. A description of the target municipalities and catchments is provided in Section 12 of Annex 2: Feasibility Study. [↑](#footnote-ref-50)
50. with ad hoc meetings held whenever necessary [↑](#footnote-ref-51)
51. United Nations Office for the Coordination of Humanitarian Affairs (OCHA), Regional Office for Latin America and the Caribbean, 2014. Drought in Central America Situation Report No. 01 (as of December 10, 2014). [↑](#footnote-ref-52)
52. Food and Agriculture Organisation of the United Nations (FAO), 2016. Dry Corridor, Central America, Situation Report — June 2016. [↑](#footnote-ref-53)
53. FAO, 2018. Central America, Drought causes crop losses in “Dry Corridor” in Central America. GIEWS update 27 August 2018. [↑](#footnote-ref-54)
54. Data sourced from EM-DAT: The Emergency Events Database - Universite catholique de Louvain (UCL) - CRED, D. Guha-Sapir - www.emdat.be, Brussels, Belgium. Accessed 15 October 2019 [↑](#footnote-ref-55)
55. purchasing power parity [↑](#footnote-ref-56)
56. IMF, 2017. World Economic Outlook Database. Available at: <http://www.imf.org/external/ns/cs.aspx?id=28>. 2019. [↑](#footnote-ref-57)
57. World Bank, 2019. GDP growth (annual %). Available at: <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>. [↑](#footnote-ref-58)
58. CIA Factbook. 2017 estimations. Available at: https://www.cia.gov/library/publications/the-world-factbook/rankorder/2186rank.html source. [↑](#footnote-ref-59)
59. World Bank, 2019. World Development Indicators 2017. [↑](#footnote-ref-60)
60. The Human Development Index (HDI) is a composite statistic of life expectancy, education, and income per capita indicators. [↑](#footnote-ref-61)
61. UNDP, 2018. Human Development Report 2018, pp. 22–25. Available at: <http://hdr.undp.org/sites/default/files/2018_human_development_statistical_update.pdf>. [↑](#footnote-ref-62)
62. The Gini coefficient is a measure of inequality of income or wealth. Higher numbers indicate greater inequality. [↑](#footnote-ref-63)
63. Nicaragua and Guatemala: estimations from CIA Factbook. 2014. Available at: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2172rank.html>. Data for other countries from World Bank, 2016. Available at: https://data.worldbank.org/indicator/SI.POV.GINI [↑](#footnote-ref-64)
64. UNDP 2011. Adaptation to climate change in Costa Rica: An assessment of necessary investment and financial flows. Project: Capacity Development for Policy Makers to Address Climate Change. Available online at: http://www.undpcc.org/en/financial-analysis/results. [↑](#footnote-ref-65)
65. focusing on conservation of terrestrial and marine ecosystems, conservation of inland aquatic ecosystems, prevention of forest fires, and awareness raising [↑](#footnote-ref-66)
66. Sir Iliff, William. 2010. The costs to developing countries or adapting to climate change: new methods and estimates - the global report of the economics of adaptation to climate change study (English). [↑](#footnote-ref-67)
67. Sir Iliff, William. 2010. The costs to developing countries or adapting to climate change: new methods and estimates - the global report of the economics of adaptation to climate change study (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/360351468127796135/The-costs-to-developing-countries-or-adapting-to-climate-change-new-methods-and-estimates-the-global-report-of-the-economics-of-adaptation-to-climate-change-study [↑](#footnote-ref-68)
68. National Centre for Atmospheric Research (NCAR), wettest scenario [↑](#footnote-ref-69)
69. Commonwealth Scientific and Industrial Research Organization (CSIRO), driest scenario [↑](#footnote-ref-70)
70. Honduras, Nicaragua, Guatemala, the Dominican Republic and El Salvador are among the fifteen most vulnerable countries in the world to climate events. Kreft et al., 2016. Global Climate Risk Index 2017. Who suffers most from extreme weather events? Weather-related loss events in 2015 and 1996 to 2015. Bonn: Germanwatch e.V. Available online at: https://germanwatch.org/sites/germanwatch.org/files/publication/16411.pdf [↑](#footnote-ref-71)
71. Hannah et al., 2017. Regional modeling of climate change impacts on smallholder agriculture and ecosystems in Central America. Climatic Change 141: 29-45. [↑](#footnote-ref-72)
72. Báez et al., 2017. Shaking up economic progress: Aggregate shocks in the Latin America and the Caribbean. International Bank for Reconstruction and Development/The World Bank. Available online at: https://openknowledge.worldbank.org/bitstream/handle/10986/28892/121664-WP-Final-Report-Aggregate-Shocks-and-Economic-Progress-English-web.pdf?sequence=1&isAllowed=y [↑](#footnote-ref-73)
73. Báez et al., 2017. [↑](#footnote-ref-74)
74. The Central American integration System (SICA) is a regional institution that facilitates diplomatic and economic integration between Central American states. The members of the organisation are Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and the Dominican Republic. <https://www.sica.int/sica/sica_breve_en.aspx> [↑](#footnote-ref-75)
75. CCAD, 2014. Estrategia Regional Ambiental Marco 2015 – 2020 (ERAM). Available at: <http://www.sica.int/download/?94463> [↑](#footnote-ref-76)
76. CCAD, 2010. Estrategia Regional de Cambio Climático (ERCC). Available at: <http://www.sica.int/download/?96568> [↑](#footnote-ref-77)
77. CCAD, 2003. Estrategia Regional para la Conservación y Uso Sostenible de la Biodiversidad en Mesoamérica. Available at: <http://www.sica.int/download/?9032> [↑](#footnote-ref-78)
78. CCAD & CAC, 2014. Programa Estratégico Regional para el Manejo de los Ecosistemas Forestales (Perfor): región de Centroamérica y República Dominicana. Available at: <http://www.sica.int/download/?96569> [↑](#footnote-ref-79)
79. COMISCA, CCAD & CAC. 2008. Estrategia Regional Agroambiental y de Salud de Centroamérica 2009-2024. Available at: <http://www.sica.int/download/?23679> [↑](#footnote-ref-80)
80. CAC, 2017. Estrategia Agricultura Sostenible Adaptada al Clima para la región del SICA (2018-2030). Available at: <http://apps.iica.int/observatorio-girsa/Content/Archivos/Publicaciones/Archivos/10112017_EstrategiaASAC-CAC.pdf> [↑](#footnote-ref-81)
81. CAC, 2010. Estrategia Centroamericana de Desarrollo Rural Territorial 2010 - 2030 (ECADERT). CAC, SICA, San José. Available at: <http://www.sica.int/download/?80566> [↑](#footnote-ref-82)
82. CCAD, 2010. Estrategia y Plan para la Gestión Integrada de Recursos Hídricos en Centroamérica (ECGIRH). Available at: <http://www.sica.int/download/?79057> [↑](#footnote-ref-83)
83. GCF. 2018. Funding Proposal: Productive Investment Initiative for Adaptation to Climate Change. Available at: <https://www.greenclimate.fund/projects/fp097> [↑](#footnote-ref-84)
84. Central American Markets for Biodiversity (CAMBio): Mainstreaming biodiversity conservation and sustainable use within Micro, Small and Medium-sized Enterprise Development and Financing. Implemented from 2006–2017. Further information available at: <https://www.thegef.org/project/central-american-markets-biodiversity-cambio-mainstreaming-biodiversity-conservation-and> [↑](#footnote-ref-85)
85. Nicaragua was incorporated into the project after its inception and was therefore not included in the initial consultations. [↑](#footnote-ref-86)
86. Assuming 5 members per household [↑](#footnote-ref-87)
87. including agroforestry, silvopasture, agrosilvopastural systems, forested areas, and sustainable fuelwood plantations. [↑](#footnote-ref-88)
88. This policy uptake scorecard will have four levels and will measure the extent of use of the incentives for EbA in relevant local government policies and plans. Level 0: Incentives not integrated meaningfully into municipal policy; Level 1: Incentives narrative woven through the draft municipal policy; Level 2: Action plans have been developed for implementation of incentives for EbA; Level 3: Budgets allocated to implement the incentives. [↑](#footnote-ref-89)
89. Within the MEbA II project an institutional capacity scorecard has been developed that assesses the capacity of a given institution in five main dimensions and expresses findings over 100 points in total, implemented with 13 institutions in Latin America and Sub-Sahara Africa:

    EbA solutions: does the institution have a basic understanding of concrete EbA and efficient water management solutions and is it able to distinguish and verify the application of these solutions by target end beneficiaries (survey-based)?

    Information management: is internal information management structured in a way that enables the assessment of loan applications based on EbA and water/energy-efficient technology protocols (e.g. via MEbA II EbA capacity and EbA verification indicators) and spur ongoing learning to enable autonomous and effective EbA by target end beneficiaries?

    Risk management: is the institution in a position to integrate climate and ecosystem risk management (identification, measurement, monitoring and mitigation of these risks) into daily operations, including incorporating business continuity and contingency plans?

    Products & services: is the portfolio of financial and non-financial products sufficiently sophisticated to integrate EbA and water-efficient technology-focused products and services relevant to PFI’s areas of operations?

    Marketing: is the marketing management incorporating all aspects needed to raise awareness of target end beneficiaries regarding the importance and potential impact of climate change, ecosystem services and water scarcity

    Questions are scored between 1 and 10 points with different weights applied; 20% percentiles define 5 segments of development status of an institution. [we do not have it as that – we use it to steer TA and close gaps] Each question is scored from 0—2, with: 0 = not at all, 1 = partially; and 2 = to a large extent/completely. An overall score is calculated, with a maximum score of 8. These four criteria will be elaborated, reviewed and validated at inception phase of the project. [↑](#footnote-ref-90)
90. The indicator scale is based on four-step criteria of capacity assessment for each stakeholders group:

    Are the stakeholders aware of the current and expected impacts of climate change and the availability of climate-resilient practices available to adapt to these impacts?

    Do local institutions have access to the EbA and water/energy-efficient technology protocols?

    Do local institutions have the capacity to monitor and evaluate the state of ecosystems and the effectiveness of EbA interventions at the landscape level?

    Do local institutions have the capacity to train farmers on the adoption of EbA and water/energy-efficient technologies?

    Each question is scored from 0—2, with: 0 = not at all, 1 = partially; and 2 = to a large extent/completely. An overall score is calculated, with a maximum score of 8 given four criteria. These four criteria will be elaborated, reviewed and validated at inception phase of the project. [↑](#footnote-ref-91)
91. This policy uptake scorecard will have four levels and will measure the extent of CCA mainstreaming in relevant local government policies and plans. Level 0: CCA not integrated meaningfully into municipal policy; Level 1: Evidence-base in place to guide policy adjustments in local municipalities; Level 2: CCA narrative woven through the draft municipal policy; Level 3: Policies updated to fully account for climate change adaptation. [↑](#footnote-ref-92)
92. United Nations Office for Disaster Risk Reduction. 2017. National Disaster Risk Assessment, Governance System, Methodologies, and Use of Results. [↑](#footnote-ref-93)