

GOVERNMENT OF THE COMMONWEALTH OF DOMINICA

**MINISTRY OF ENVIRONMENT, RURAL MODERISATION, KALINAGO UPLIFTMENT AND
CONSTITUENCY EMPOWERMENT**

Leveraging Eco-Tourism for Biodiversity Protection in Dominica (LETBP)

TERMS OF REFERENCE

Position title	Technical Consultant-Update of a GPS Trail System and Maps for Feeder Trails
Project activity	Update of the GPS Trail System for the WNT and Protected Area Feeder Trails
Location	EALCRP Project Implementation Office
Duration	Six (6) months
Procurement Plan	DM-MOERMKU-439645-CS-INDV
Tentative Start Date	October 2024

I. Background

The Government of the Commonwealth of Dominica has received the grant funding from the Global Environment Facility (GEF), the world's largest funder of biodiversity protection, nature restoration, pollution reduction, and climate change, for the implementation of the project “*Leveraging Eco-tourism for Biodiversity Protection in Dominica*” (LETBP). GEF financing is channelled through the World Bank, as a GEF ‘implementing agency’. As such, LETBP is being implemented alongside other World Bank financed operations in Dominica, namely Emergency Agricultural Livelihoods and Climate Resilience Project (EALCRP).

The EALCRP is part of an overall developmental partnership initiative supporting medium and long-term recovery in Dominica after the devastating effects of Hurricane Maria, while LETBP focuses on leveraging Dominica’s natural environment as a driver of economic resilience, in line with the National Biodiversity Strategy and Action Plan 2014-2020 and the National Resilience Development Strategy 2020-2030. This overall program of support complements and is aligned with other development partner initiatives and fills critical gaps for agricultural development and biodiversity conservation.

A Project Implementation Unit (PIU) established within the Ministry of Agriculture, Fisheries, Blue and Green Economy (MAFBGE) coordinates the day-to-day management and execution of the EALCRP and will also support the administration of the LETBP project in joint execution with the Ministry of Environment, Rural Modernisation, Kalinago Upliftment and Constituency Empowerment (MERMKUCE). The PIU works in close coordination with the Central Services Unit (CSU), under the Climate Resilience Execution Agency of Dominica (CREAD), which supports on procurement, social and environmental risk management, and financial management, and serves as a shared resource for all World Bank financed project in Dominica.

II. Project Description

Leveraging Eco-tourism for Biodiversity Protection in Dominica (LETBP)

The LETBP project aims to coordinate and optimize the Government's approach to Protected Areas (PAs) management and forest systems and support the Government in its efforts to conserve biodiversity as part of its pursuit to establish Dominica as an eco-tourism destination. This will be achieved by improving regulation and enforcement of its natural capital, and by improving the Government's capacity to manage PAs in line with international best practice to simultaneously promote biodiversity conservation and economic development. The project consists of three components each addressing key pillars for eco-tourism and biodiversity protection and mutually supporting the overall Project Development Objective "*to improve management of Dominica's three national parks and the Waitukubuli National Trail*".

Key barriers identified to be addressed through the project implementation include (a) a limited integration of PAs planning and management into national key development processes (land-use planning, agriculture, forestry management, etc.); (b) a lack of awareness at the decision-making level of the value of the country's biodiversity; and (c) insufficient baseline data, weak monitoring capacities, and information needed to measure threats at the ecosystem level. Project components set out policy, investment, and capacity building and awareness raising interventions to promote conservation through the development opportunities provided by nature-based tourism, in pursuit of the Project Development Objective and Dominica's National Biodiversity Objective.

The first component (*Protected Areas Planning*) will support strengthening the institutional framework for PAs planning and management for three national parks (The Morne Trois Pitons National Park, The Morne Diablotin National Park and The Cabrits National Park) and the Waitukubuli trail network. This component will also assist in improving national and local capacities for PA monitoring and management through a strong stakeholder engagement approach and will include a thorough assessment on the role and value of ecosystem services as well the impact of Invasive Alien Species (IAS). The second component (*Biodiversity and Sustainable Ecotourism Operations*) will enhance the physical and institutional environment for the protection of biodiversity through the sustainable use of landscapes along the Waitukubuli National Trail (WNT) and in the three National Parks. This component will also improve financial management and visitor management which will greatly contribute to revenue mobilization, increased visitor experience and promotion efforts. The third component (*Sustainable Livelihoods*) will support enhanced opportunities for sustainable livelihoods for the Kalinago Community along the Waitukubuli National Trail and the areas surrounding PAs to engage in and benefit from Dominica's nature-based tourism sector. This will be accomplished through investment in sustainable land use and through the preservation and inter-generational transfer of traditional Kalinago knowledge and livelihood training to better integrate in tourism value chains.

The project will strengthen biodiversity protection, financial management and build capacity for the national parks and the national trail system personnel, as well as local communities. The direct project beneficiaries include communities and their members in targeted landscapes, farmers, tour guides, entrepreneurs, small and medium enterprises (SMEs) and community-based organizations (CBOs). Women, including within the Kalinago Community, bear the heavy burden of ensuring the livelihood sustainability of rural households and as of such are expected to benefit significantly. Benefits are expected to include improved access to skills training for business development, finance and markets, improved local governance, and subsequently more profitable community- or individually- owned businesses and increased household income, all while promoting conservation of Dominica's rich biodiversity endowment.

III. Objective of Assignment

The purpose of this consultancy is to develop a Global Positioning System (GPS) Trail System (through the collection of spatial data) and maps for the prioritized trails in the protected areas and feeder trails within Component two (2) of the LETBP project under the activity ‘*Update of the GPS Trail System for the WNT and Protected Area Feeder Trails*’.

The objective of this assignment is to improve and update existing databases and maps for three national parks and the Waitukubuli National Trail and to build capacities of the Forestry Division in GIS mapping and data management.

The GPS Trail System should consolidate all existing GPS data for Protected Areas prioritized trails and the Waitukubuli National Trail with newly recorded data for all feeder trails linked to eco-tourism sites and WNT.

The consultant will work in close collaboration and coordination with the Forestry, Wildlife and Parks Division and the Kalinago Division of the Ministry of Environment, Rural Modernisation, Kalinago Upliftment and Constituency Empowerment, the Ministry of Tourism, Physical Planning Division, Land and Surveys Division as well as the Project Implementation Unit.

Specific Objectives:

- 1) Development of comprehensive Geographic Information System (GIS) database for prioritized trails with the Protected Areas and the Waitukubuli National Trail, including eco-tourism sites and feeder trails.
- 2) Update Protected Areas and WNT maps with data referencing the feeder trails (including all other amenities).
- 3) Train Forestry Division staff in spatial data collection and analysis, map design, update and maintenance of the database including use of mapping software and GPS hardware.
- 4) Develop Operational manual for data collection, management and update of the database and maps.

IV. Key Responsibilities

- 1) Liaise/work with Forestry, Wildlife and Parks Division, Physical Planning Division and Land and Surveys Division to gather any existing GIS databases and maps relevant to this assignment.
- 2) Familiarize themselves with information on Dominica’s Protected Areas, WNT, Eco-Tourism sites and amenities.
- 3) Ensure consultations with the Forestry, Wildlife and Parks Division, Physical Planning Division and Land and Surveys Division.
- 4) Perform GIS mapping in collaboration with relevant staff from the Forestry, Wildlife and Parks Division for data collection exercises.
- 5) Develop training materials and an operational manual to ensure sustainability of the GPS Trail System.
- 6) Organize at least one (1) workshop with key stakeholders to review the beta database and maps with key stakeholders.
- 5) Prepare final database and maps based on recommendations from stakeholders.

V. Qualifications and Experience Required

Qualifications and Experience

1. Advanced University degree (bachelor's or higher) or equivalent professional qualification in Geographic Information Systems, Geography, geomatics or similar.
2. At least five (5) years of professional experience, GIS software (Arc GIS, QGIS, ODK), GPS equipment and mobile mapping.
3. Experience in drone mapping.
4. Interpretation of imagery.
5. Ability to use remote sensing software.
6. Experience of at least three (3) similar projects.
7. Proven experience in GIS training/capacity building.
8. Work experience in the Caribbean will be considered an asset, specifically in Dominica.
9. Experience in protected areas management or knowledge of Dominica's Protected Areas management system is an asset.

Skills

1. Excellent interpersonal and communication skills.
2. Strong teamwork skills and the ability to understand team needs and develop ideas to meet the assignment objectives.
3. Ability to meet deadlines and prioritize multiple tasks.
4. The ability to communicate complex procedures to other colleagues.
5. Attention to detail

VI. Reporting

The Consultant will report on a regular basis to the Project Implementation Unit Office and the Forestry, Wildlife and Parks Division as per the deliverable timelines below in a format to be decided once contracted.

VII. Terms of Assignment

The contract is expected to be awarded for a duration of six (6) months with an estimated 120 days of work on an 8-hours basis.

Specific Deliverable	Timelines
Submission of a detailed work plan with methodology and timelines and a Solutions Development Report or similar report to detail what software will be used for the consultancy	One (1) month after signing the contract
A Report on consultations with Forestry, Wildlife and Parks Division, Physical Planning Division and Land and Surveys Division	Two (2) months after signing of contract
Submission of a training module in spatial data collection, map creation, update, and maintenance of the database (including use of software and hardware).	Three (3) months after signing of contract
Submission of a GPS Trail System Operation manual for data collection, management and update.	Four (4) months after signing of contract
Submission of a GPS Trail System Beta version, maps and report on a stakeholder workshop.	Five (5) months after signing of contract
Submission of a GPS Trail System for Protected Areas with maps, and the Waitukubuli National Trail, including feeder trails and eco-tourism sites.	Five (5) months after signing of contract