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TERMS OF REFERENCE

Title: **Dreketi River Catchment GIS Consultancy**

Project: **Pacific Ecosystem Based Adaptation to Climate Change (PEBACC) Project**

Date: 21 working days : May – July 2020

Output: Development of a watershed map for the Dreketi River catchment

Background

The Pacific Ecosystem-based Adaptation to Climate Change (PEBACC) project is a climate change project funded by the German Ministry of Environment, Nature Conservation and Nuclear Safety (BMU) under its International Climate Initiative (IKI). The 5-year project commenced in July 2014 and, following a 12 month delay in start-up, is anticipated to end in mid-2020.

The over-arching outcome of the PEBACC project is that Ecosystem-based Adaptation (EbA) is fully integrated into development, climate change adaptation and natural resource management policy and planning processes in three Pacific island countries, providing replicable models for other countries in the region, and is successfully demonstrated through implementation at national, provincial and local levels.

One of the two project sites in Fiji is Macuata Province on the island of Vanua Levu. PEBACC sites have been selected to encompass a range of landscape and administrative scales, including national, provincial, island level and urban. Macuata Province was selected to represent provincial level EbA planning. Additional factors feeding into its selection as a project site were: a diverse range of high-quality intact and modified coastal and terrestrial ecosystems; clear linkages between terrestrial land uses and coastal ecosystems; the presence of an ecosystem of global significance – the Great Sea Reef; strong linkages between economic activity and utilization of ecosystems (sugarcane farming, aggregate mining, forestry and fishing), the presence of initiatives to advance environmental stewardship, and the potential for climate change to impact on critical ecosystems linked to economic and social well-being.

PEBACC undertook an Ecosystem and Socio-economic Resilience Analysis and Mapping (ESRAM) for Macuata Province to inform EbA planning in the province. Based

on the outcomes of this exercise an EbA Options Assessment report was produced. An Implementation Plan was produced to guide the allocation of project resources towards the implementation of demonstration activities.

The EbA Implementation Plan recommended that project resources be directed towards i) a review and update of the province's Natural Resource Management Strategy the term of which is set to expire in 2018 and ii) support to the Fiji government's aspiration to have the Great Sea Reef declared a Ramsar site. Details pertaining to these two proposed interventions can be found in the report: Ecosystem-Based Adaptation Implementation Plan for Macuata Province, Fiji: PEBACC: Pacific Ecosystem-Based Adaptation to Climate Change Project (2017) prepared by WPN.

PEBACC is partnering with WWF-Pacific to carry out the above two activities in Macuata province. This ToR pertains to Activity 2 – Broadening of the Qoliqoli Cokovata Ramsar management plan to include management of land-based activities with particular emphasis on the Dreketi river catchment, specifically **Objective 3: Develop an Integrated Catchment Management Plan for the Dreketi river catchment and strengthening of the Land Care Network in Dreketi district**

Major duties and responsibilities:
Under this agreement, the Consultant will complete the following detailed sections:

(I) Develop a watershed map for the Dreketi River Basin, which will cover the following overlays and information- ***[Note: Some of the listing provided have been mapped and the consultant will build on this as referenced in the Annex]***

Natural

A. Watershed Boundary within the Landscape
B. Topography and Elevation
C. Slope and Soil Type
D. Rivers and Streams within the Watershed (named and by stream order)
E. 2020 Baseline demarcation of remaining intact natural habitats
    a. Native Forest
    b. Mangroves and mangrove allies
    c. Native buffers along waterways
F. Major Standing Water bodies- Lakes/ponds
G. 2020 existing protected areas- Community and National
H. 2020 water quality of waterways
I. Key Biodiversity Areas- Birds etc

Geo- Political

J. Watershed District Boundaries
K. All existing villages, settlements and towns
L. All access roads
M. Converted Land for-
    a. Plantation Production Forest (Pine etc)
    b. Agricultural Land by Production Type (Rice/Sugar Cane/Cocoa etc)
    c. Aquaculture
N. Extraction Areas
    a. Mineral Mining (Bauxite)
    b. River Gravel Extraction
    c. River Sand Mining
O. Ownership Boundaries
    a. Native Lands
    b. Leased Lands
    c. Freehold lands
    d. State Lands
P. Landscape Vulnerabilities
    a. Erosion and landslides
    b. Flooding zones
    c. Sediment

(II) Draft Watershed Map

A. Draft Watershed Map(s) for internal review

(III) Final Watershed Map

A. Incorporated changes into the draft watershed map(s)

B. Final Watershed Map(s) for Planning and Stakeholder Dissemination

Key Deliverables

The consultant will:

A. Accomplish the tasks specified in the Scope of Work above.

B. Provide copies of relevant data, communication and maps relating to the tasks carried out

C. Provide final products as detailed in the scope of work

Duration and Timing-

21 working days (Spread Over May – July, 2020)