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Implementing a Ridge to Reef approach to Preserve Ecosystem Services, Sequester Carbon, Improve Climate Resilience and Sustain Livelihoods in Fiji

Inception Report

Submitted to: Dept. of Environment, Govt. of the Republic of Fiji

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Project Team





ACTIVITY 1.1.2.1

Sustainable Livelihoods – Creating iterative learning for Fiji





Assessment of sustainable livelihood opportunities, using best practices from Fiji and other countries, to conserve biodiversity.



Approach

Topics to be explored:

- \circ What are sustainable livelihoods? Why do we need it?
- \circ The context of Fiji Need for intervention
- Examples of sustainable livelihoods elsewhere
- Current livelihoods in Fiji
- Sustainable livelihoods and Fiji location based case studies (potential opportunities)
- The way forward policy linkages and replication potential
- Framework: DFID's Sustainable Livelihoods Framework to be potentially employed for data collection and analysis
- Methods: Secondary literature review; key informant interviews and, focus group discussions with policy-academia-community stakeholders

Considerations, Questions and Needs



- > One extensive on-ground consultation will be conducted in the end of March
- We will select two cases (one terrestrial and the other marine) for the assessment of sustainable livelihoods opportunities; any priority sites/villages that need to be included during field visits maybe identified initially
- Additional documentation and existing studies on key livelihoods, concerns and stakeholder perspectives, to be shared by the Ministry of Waterways and Environment in advance, would be most helpful
- Facilitation by the Ministry for identifying and reaching out to key contacts (government and academicians) that need to be interviewed during the field visit
- Support for arranging community interactions during the field visit

Potential Stakeholders



- Minister for Agriculture, Rural and Maritime Development, Waterways and Environment
- Minister for Fisheries
- Minister for Forestry
- Ministry of Fijian affairs
- Minister for Lands and Mineral Resources
- Fiji Locally Managed Marine Area Network
- > Community stakeholders in any of the 8 selected PAs (one marine and one terrestrial)
- Academicians and practitioners in the region

Timelines



			May	
W11	W10	W11	W12 W13	W14

ACTIVITY 1.2.1.1 & 1.2.1.2

Valuation of Ecosystem Services for Waidina Sub-catchment and Rewa Delta Mangroves and Seascape PA





- 1. Valuation of biodiversity conservation, carbon sequestration, water catchment and other ecosystem services of native forested portions of the Waidina sub catchment (including Sovi Basin PA and Wainavadu).
- 2. Valuation of biodiversity conservation, carbon sequestration, harvested wild goods (subsistence and artisanal fisheries) and other ecosystem services of Rewa Delta mangroves and seascape PA.

Approach

(Slide 1 of 4) The Energy and Resources Institute

Methods: Secondary literature review; key informant interviews and, focus group discussions with policy-academia-community stakeholders.

		Waidina sub catchment (Sovi Basin PA and Wainavadu) – 1 d	of 2
Sr.No	Ecosystem services	Method	Remarks
1	Bi odiversity conservation	The monetary value of sacrificing timber harvest would be estimated to identify the cost of the biodiversity conservation provided by forest.	In addition to this, the restoration cost forest management and cost of reintroduction of endangered species would also be considered.
2	Carbon sequestration	In this case, the social cost of carbon would be identified and multiplied with the annual quantity of carbon sequestered.	In case of land use changes, the quantity of carbon released would also be taken into consideration.
3	Water catchment (Flood regulation)	Avoided cost method would be used in which the damage cost in the event of flood would be calculated.	
4	Water provisioning	The marginal agricultural productivity due to irrigation benefits would be estimated. This would be used with the economic value of water for agriculture to estimate the economic value of additional water recharge.	
5	Water purification	The annual drinking water requirements met by the study area without the need of a water treatment plant would be estimated. Using the average cost of treating water for domestic supply from different Municipalities in Fiji, the economic value of water purification services would be estimated.	





		Waidina sub catchment (Sovi Basin PA and Wainavadu) - 2 of 2
Sr.No	Ecosystem services	Method	Remarks
6	Soil conservation	The economic value of soil conservation in the study area would be estimated using the avoided offsite costs from sedimentation. The physical quantity of soil erosion avoided is used together with cost estimates on soil conservation project costs to derive the economic value of soil conservation.	
7	Tourism	It would be calculated based on Producer surplus in which Total tourism revenue and total industry costs along with the ecosystem contribution factor would be identified for the study area.	The ideal method is the Travel Cost method in which primary data needs to be collected by surveying individual tourists.
-	Non Timber Forest Produce	Market Price method would be applied in this case. The use of wood and forest products would be identified and the cost would be estimated based on	
9	Timber and Fuel wood	the market value of the products.	
10	Employment Generation	The economic value of employment would be estimated in the study in terms of man days generated by the study area for management as well as community-based eco-tourism. The local wage rate would be used to derive site-specific economic values from employment generated.	





		Rewa Delta Mangroves and Seascape Protected Are	ea – 1 of 2
Sr.No	Ecosystem services	Method	Remarks
1	Bio diversity conservation	The monetary value of sacrificing timber harvest (mangrove) would be estimated to identify the cost of the biodiversity conservation provided by forest.	In addition to this, the restoration cost coral reefs and cost of reintroduction of endangered species would also be considered.
2	Carbon sequestration	In this case, the social cost of carbon would be identified and multiplied with the annual quantity of carbon sequestered.	In case of land use changes, the quantity of carbon released would also be taken into consideration.
3	To urism & recreation	Benefit transfer method would be applied in this case in which the unit values identified in the previous studies would be extrapolated to the study area.	The ideal method is the Travel Cost method in which primary data needs to be collected by surveying individual tourists.
4	Cu ltural values	Benefit transfer method would be applied in this case in which the unit values identified in the previous studies would be extrapolated to the study area.	
5	Ed ucation Research Bio prospecting	Benefit transfer method would be applied in this case in which the unit values identified in the previous studies would be extrapolated to the study area.	





Sr.No	Ecosystem services	Method	Remarks
6	Co astal flood protection	Benefit transfer method would be applied in this case in which the unit values identified in the previous studies would be extrapolated to the study area.	
7	Su bsistence fishery	Benefit transfer method would be applied in this case in which the unit values identified in the previous studies would be extrapolated to the study area.	
8	Co mmercial fishery	Benefit transfer method would be applied in this case in which the unit values identified in the previous studies would be extrapolated to the study area.	
9	M inerals & aggregate mining	Benefit transfer method would be applied in this case in which the unit values identified in the previous studies would be extrapolated to the study area.	



Considerations, Questions and Needs

- Maps and Boundaries of the study area.
- Access to literature on the study area (not available in public domain) e.g: Report by National Trust of Fiji.
- Local stakeholders in the study area
- Access to data from various ministries.
- Support from university students to collect primary data, if required e.g- In case of travel cost method.
- Facilitation to enable meetings with relevant stakeholders to understand the study area and finalise the ecosystem services.
- Help in identifying and reaching out to key contacts (government and academicians) that need to be interviewed during the field visit
- > Help in arranging community interactions during the field visit

Potential Stakeholders



- Biodiversity Conservation and carbon sequestration: Ministry of Fisheries and Forest (MFF)
- > Water regulation and supply: Water department
- Soil conservation: Ministry of land and mineral resources: Ministry of waterways
- > Tourism: Tourism department
- > NTFP: Ministry of Fijian affairs
- Ministry of Environment
- Researchers & academicians from University of Fiji and University of the South Pacific
- Fishery: Fiji Locally Managed Marine Area Network, CORAL, Ministry of Fisheries & Forests, Fiji
- Tourism & Recreation: Ministry of Labour, Industrial Relations, Tourism and Environment, Fiji, South Pacific Tourism Organisation (SPTO)
- Ministry of land & Mineral resources, Fiji
- Ministry of Education, Fiji
- Wildlife Conservation Society (WCS)
- > International Organisations: UNDP; IUCN; WWF; Conservation International; Global Environment Facility

Timelines



	Feb	ruary	March		April		May		June	
Activity	1 st - 14 th	15 th – 28 th		16 th – 31 st		16 th – 30 th			1 st – 15 th	16 th – 30 th
Literature Review										
Identification of ecosystem services										
Identification of Gaps & Finalisation of services to be studied										
Field visit										
Development of Questionnaire, Primary & secondary data collection (If required)										
Data Analysis										
Report Preparation										

ACTIVITY 3.1.2.1

Documentation of Integrated Catchment Management Process





Project Objective

Document catchment management plan process for Fiji context and with regards to Nadi river basin IWRM demonstration project, land use planning study for Tuva, and other catchments, Ra/CRISP research studies and Sovi (Waidina) basin.



Approach

> Methodology:

- \circ Secondary literature review and Stakeholder consultation
- Review of existing IWRM/ICM projects of Fiji
- \circ $\,$ Reference from ICM projects globally $\,$
- Inputs from forestry/livelihood/economic assessment for documentation of ICM for identified catchments

Considerations, Questions and Needs



- Provide existing studies and reports (which are not available online)
- Policy documents related to IWRM/ICM prepared for Tuva catchment and Sovi Basin
- Identification of key Environmental Laws and Regulations
- Facilitation by the Ministry in identifying and reaching out to key contacts (government and academicians) that need to be consulted during the field visit
- Help in arranging community interactions during the field visit

Potential Stakeholders



- Minister for Agriculture, Rural and Maritime Development, Waterways and Environment
- Minister for Fisheries
- Minister for Forestry
- Ministry of Fijian affairs
- Minister for Lands and Mineral Resources
- Fiji Locally Managed Marine Area Network
- > Community stakeholders in any of the 8 selected PAs (one marine and one terrestrial)
- Academicians and practitioners in the region

Timelines



Activities	Timeline (in month)						
	1	2	3	4			
Revive of existing ICM projects							
Review of Land use planning process							
Stakeholder consultation along with Institutional mapping, Governance, socio-economic and livelihood status							
Documentation of Integrated Catchment Management Plan for the priority basins							

ACTIVITY 3.2.1.1

Integrated Natural Resource and Catchment Management Policy (INRCM)





To create an Integrated Natural Resources and Catchment Management Policy (INRCM) framework submitted to the Department of Environment for Ministerial consultations and Cabinet approval.



Approach

> Topics to be explored:

- Need analysis for an integrated natural resources catchment management (INRCM) policy in Fiji
- Study of best practices of integrated catchment and coastal management frameworks from around the world
- Analysis of the current policies, management plans and frameworks in place, which directly impact the key natural resources [water, land, forest and biodiversity]
- o Identification of potential stakeholders for community led management
- Developing a draft INRCM policy framework, in relation to the existing Green Growth Framework (GGF) and Integrated Coastal Management plan
- Framework: Developing a mixed framework with aspects from DPSIR framework, Resources framework, Issues framework, and Opportunities framework
- Methods: Secondary literature review and assessments; key interviews and, focus group discussions with policy-academia- community stakeholders

Considerations, Questions and Needs



- Considering the short timeline, one round of stakeholder consultation will be conducted in the middle of the planned work timelines end of march, to gather feedback, inputs and insights. Hence, it will be beneficial if any specific objectives and goals from the DoE's point of view and additional documents or reports (that are not available in public domain) can be provided in the beginning stage of the project.
- Help in facilitation of Ministerial and community-level engagements during the visits along with introduction mails and contact details of relevant sector experts and stakeholders.
- Based on the data template, updated statistics and information regarding the same will be helpful in creating a robust management policy based on the current situation

Potential Stakeholders



- > The Fijian Government- Key Ministries identified below, but more may be explored
 - Ministry of Waterways and Environment
 - Ministry of Economy
 - Ministry of Agriculture
 - Ministry of Fisheries
 - Ministry of Forests
 - Ministry of Lands and Mineral Resources
 - Ministry of iTaukei Affairs
- Academia and Universities
 - Fiji National University
 - University of Fiji
 - University of the South Pacific
- Research organizations and Think-tanks
- > Civil society organizations and other local community led bodies (to be identified with the help of DoE)





	Febu	urary	March			April				Мау				
PLANNED ACTIVITIES:	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14
Secondary assessment of the current sectoral policies under the concerned Ministries														
Analysis and incorporation of the existing GGF and ICM in the new INRCM framework														
Identification of gaps within the current policy regimes for a INRCM														
Mapping of relevant stakeholders														
Developing a Questionnaire														
Developing a data template														
Preparation of draft INRCM framework														
Stakeholder engagement: Meeting with the Govt. departments and concerned stakeholders														
Developing a stakeholder engagement report (including their recommendations & inputs)														
Incorporating stakeholder feedback and comments to the draft INRCM framework														
Submitting the framework to DOE and UNDP for final comments														
Finalizing and submitting the final INRCM framework to DOE and UNDP														

Next Steps – Ministry of Waterways & Environment



- 1. Department of Environment (DOE) to appoint a key nodal person who will be in touch with TERI and help in facilitating project activities on the ground and addressing project related concerns
- 2. DOE to share key documents (existing studies/ reports) and specific directions, if any, for the various project components
- 3. DOE to make introduction between TERI and the identified key ministries (potential stakeholder slides), with regards to this project work, to enable TERI to start interactions and data collection
- 4. Based on the points highlighted in the 'Considerations, Questions and Needs' slides, DOE to suggest measures to address these and raise concerns, if any
- 5. The field visit for data collection and stakeholder engagement is tentatively planned to take place between March 25th to April 5th. DOE to give approval of the dates and help in facilitating the stakeholder meetings/ consultations.

Thank you.

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ENVIRONMENT



HABITAT



SECURITY



