

**FIJI REDD+ Readiness Program
– supported by FCPF/World Bank**

TERMS OF REFERENCE

for Consultancy to undertake

**ANALYSIS OF DRIVERS OF DEFORESTATION AND FOREST DEGRADATION AND
IDENTIFICATION OF RESPONSE STRATEGIES**

1. INTRODUCTION

1.1 Background

Fiji has a forest cover of almost 1.1 million hectares, covering about 56% of the total land mass. Almost 90% of the land is communally owned by customary land owning units or mataqali. The Fiji National Forest Policy emphasizes the application of sustainable forest management principles and improving the livelihoods of rural forest owners. REDD+ is seen as an instrument to achieve these goals and will play an important role in Fiji's development path, as forests hold an important place in the country's culture, history, environment and economy. Fiji also recognizes REDD+ as an important opportunity to contribute towards global climate change mitigation while strengthening the socio-economic situation of its forest resource owners and protect and restore its forest ecosystems.

In 2010, Fiji Cabinet endorsed the Fiji National REDD+ Policy. The Policy provides the framework for the planning, coordination, and implementation of REDD+ activities. The implementation of activities is overseen by the National REDD+ Steering Committee (RSC). The committee is made up of twenty agencies from various sectors and coordinated through the REDD+ Secretariat. The Forestry Department (FD) is the lead national implementation agency for REDD+ and has a dedicated REDD+ Unit.

In May 2015, Fiji became a recipient of the Forest Carbon Partnership Facility (FCPF) REDD+ readiness grant amounting to USD3.8mil. A major component supported under this readiness financing is the development of a national REDD+ Strategy. The National REDD+ Strategy will detail options to effectively and efficiently address the drivers of deforestation and forest degradation and to promote the drivers for forest conservation, sustainable management of forests and the enhancement of forest carbon stocks. The success of the National REDD+ Programme hinges on the robustness of the National REDD+ Strategy and the development of robust options can only be guaranteed through a judicious and thorough assessment of the drivers of deforestation and forest degradation, carried out following an all-inclusive participatory consultation process.

1.2 Preliminary identification of drivers of deforestation and forest degradation in Fiji

In a series of Steering Committee workshops and stakeholder meetings, national experts identified a broad list of potential drivers and their current and future impact on Fiji's forest

emissions. Both underlying and direct drivers were assessed. The *underlying causes/drivers* are described as the complex interactions of fundamental social, economic, political, cultural and technological processes that are often distant from their area of impact. The *direct/proximate/immediate causes/drivers* are actions that directly impact forest cover and loss of carbon. It is vital to critically analyse each cause/driver to reach the underlying root cause for deforestation and forest degradation. Only then can effective responses be developed.

The results of the preliminary assessments are under Annex 1.

1.3 Preliminary identification of strategy options

Previous stakeholder workshops identified strategy options to address the drivers identified (as detailed in Annex 1). The results of the preliminary identification of strategy options are under Annex 2. These strategy options provide the basis for current actions in Fiji's proposed emissions reduction program. Actions to support the implementation of some of these options are already in progress.

2. OBJECTIVES & SCOPE OF THE CONSULTANCY

The overall objective of this consultancy is to undertake an inclusive, participative and transparent analytical process to:

a. Identify, assess and prioritize the direct and related underlying causes / drivers of deforestation¹ and forest degradation² in Fiji

b. Develop appropriate strategy responses to address the drivers identified

The specific objectives of this consultancy are to:

1. Identify and analyse all drivers and agents (both direct and underlying) of deforestation and forest degradation (including mangroves) and how past and current policies, governance, economy, culture, and social demands play a role in influencing these drivers;
2. Identify and assess the barriers to, and the agents for, forest conservation, sustainable management of forests and forest carbon stock enhancement at the national, subnational and local level and how past and current policies, governance structures, economic status, local culture, and social demands play a role in influencing these drivers;
3. Determine land use and forest cover change trends and assess associated drivers;
4. Identify strategy options and key interventions to address the drivers of deforestation and forest degradation and barriers to forest conservation, sustainable management of forests and forest carbon stock enhancement.

¹ Deforestation is defined as – the conversion of forest to another land use or the long-term reduction of the tree canopy cover below the minimum ten per cent threshold

² Forest degradation is defined as - the long-term reduction of the overall potential supply of benefits from the forest, which includes carbon, wood, biodiversity and other goods and services

2.1 Scope

- a. The analysis should consider findings from previous stakeholder consultancies and recommendations.
- b. Past, current and future policy, legal, socio-economic, governance and cultural influences from different sectors and stakeholders driving deforestation, forest degradation, forest conservation, sustainable forest management and enhancement of forest carbon should be detailed in the analysis with clear distinction between the direct and underlying causes.
- c. An opportunity cost analysis of major land uses will be undertaken to determine the main economic drivers of deforestation and forest degradation (refer to section 2a.6 of the R-PP)
- d. Whilst the focus of the study is on determining national level strategic responses, sub-national and local-level issues and considerations will also need to be identified.
- e. The analytical work should provide strategic directions for national readiness and support the implementation framework for the proposed Reducing Emissions and Enhancing Livelihoods Program. With regards to the latter, the consultancy should refer to the [FCPF Carbon Fund Methodological Framework \(December 2013\)](#) and present information to meet the relevant criteria and indicators relating to the drivers of deforestation and forest degradation.
- f. The analytical work on forest cover change should encompass the period between 2001 and 2012 and should be based on national datasets on forest cover change assessment for 2001-2007; forest cover change assessment for 2007-2012; and accuracy assessment of forest cover change using FAO Collect Earth or other suitable applications. Future projections should be made up to 2030.
- g. The analysis, including the development of strategy options, should include the active participation of all concerned stakeholders from all the relevant sectors and different levels of governance. The principles of Free, Prior, and Informed Consent and the national REDD+ consultation and participation plan should be followed.

3. TASKS

The following tasks will be carried out to meet the objectives of the consultancy

- i. Identification, analyses and prioritization of direct and underlying causes/drivers of deforestation and forest degradation and agents for forest conservation, sustainable management of forests and forest carbon stock enhancement**

Identification of direct and underlying drivers

1. Carry out a comprehensive desk review of existing information and data and an all-inclusive and participatory stakeholder consultation process to identify current and anticipated underlying and direct causes/drivers of deforestation and forest degradation (including mangroves) and the political, economic, environmental, tenure, social, and cultural influences on these drivers. More specifically:

- Identify the economic activities (local, national and international) and associated policies, regulations and incentives that currently and potentially demand the conversion of forest areas and degradation
 - Undertake an Opportunity Cost Analysis. The analysis should provide the opportunity cost of different land uses causing deforestation and forest degradation in Fiji. The analysis should quantify the economic returns from land use change in terms of tonnes of CO₂ equivalent.
 - Analyse how current sectoral policies, strategies, regulations and incentives (particularly the agriculture, environment, energy, mining, infrastructure, tourism and urban development sectors); and governance and institutional structures influence the patterns and extent of deforestation and forest degradation
 - Analyse how land tenure and land ownership structures and formal and informal/traditional land access arrangements influence forest and resource utilisation, including deforestation and forest degradation
 - Analyse the social and cultural demands that place pressure on forests including traditional structures, norms and laws and the needs of vulnerable and marginalised groups
 - Assess the role of local communities in deforestation and forest degradation and their degree of dependency on forest resource
2. Identify the barriers to, and the agents/drivers for forest conservation, sustainable management of forests and forest carbon stock enhancement at the national, sub-national and local levels and the various political, economic, environmental, social and cultural influences on these drivers. More specifically:
- Identify the economic activities and associated incentives that are proven and/or have potential to support forest conservation, sustainable management of forest and forest carbon stock enhancement
 - Assess the effectiveness of current sectoral policies, strategies, and regulations; and governance and institutional structures, that serve to promote forest conservation, sustainable management of forest and forest carbon stock enhancement
 - Analyse the influence of current land tenure structures and formal and informal land access arrangements in supporting forest conservation and sustainable management of forests
 - Assess the effectiveness of traditional structures, norms and laws in supporting forest conservation, and the sustainable management of forests
 - Identify the main policy, economic, social, cultural, environmental and land tenure issues that are barriers for afforestation and reforestation activities

Analysis and prioritization of the identified drivers and agents

3. Analyse how future national and local policies, regulations, incentives and economic, environmental, social and cultural issues will influence the identified drivers and agents, including the creation of potential new drivers and/or enhancement of existing drivers.
4. Analyse how current and future relevant Government and Private sector investment plans (particularly in the agriculture, environmental, energy, mining, infrastructure, tourism and urban development sectors) will manipulate the identified drivers / agents and assess the likely impact on future deforestation, forest degradation in the areas of interest
5. Assess the current and future influences international policies and national commitments to international conventions (especially the Rio Conventions) and treaties have/will have on the identified drivers of deforestation and forest degradation and the agents for forest conservation, sustainable management of forests and carbon stock enhancement.
6. Identify the relevant stakeholders, marginalised groups and other interest groups involved in each identified driver and analyse their economic, environmental and social interests in the context of the identified driver e.g. determine the benefits or negative impacts on household and community livelihoods, and additional environmental impacts for each of the identified direct causes of deforestation and degradation.
7. Determine the current patterns and future trends of forest cover and land use change at the national level (e.g. natural forest to degraded forest; non-forest to forest) and a detailed description of the agents/drivers of the change,
8. Map (using Fiji's forest cover map as a base map) preliminary priority areas where deforestation and degradation are most persistent and areas that are under future potential threat and for each area describe the associated direct driver(s) and underlying causes and their impact (potential).
9. Map preliminary areas with high potential for forest conservation and reforestation/afforestation activities and describe the existing and potential future agents to support these activities.
10. Based on the analytical work above, prioritise the drivers / agents according to its current and potential level of impact on forest cover in Fiji

ii. Identification of strategy options to address the underlying and direct drivers/causes and agents

A set of concrete policies, programs and actions to address each of the prioritized drivers of deforestation and/or forest degradation and the agents promoting forest conservation, sustainable management of forests and reforestation and afforestation should be defined.

1. The proposed strategic options and actions should clearly distinguish between those addressing the underlying causes/agents and the strategies and actions addressing direct causes/agents.
2. The development of strategy options and associated activities should be carried out through a participatory consultative process.
3. Options identified should include economically, socially and environmentally sound policy and regulatory frameworks and governance and institutional structures. To this end, the following are to be undertaken:
 - a. Critically assess the role and the strengths, weaknesses and gaps relating to governance structures and institutional capacities to address the identified drivers and agents;
 - b. Critically analyse forest sector governance and its institutions including the cross-sectoral coordination mechanism;
 - c. Assess the willingness and institutional support of the various sectors (especially those associated with the main drivers) to contribute efforts to address/mitigate the identified drivers/causes and agents
 - d. Identify supporting policies and legislation that can be enhanced or developed to address/mitigate the identified drivers/causes and agents.
4. Assess and identify options and actions that will not compromise local economic development and local community and household livelihoods. The Opportunity Cost Analysis should inform this assessment;
5. Assess and identify options and actions that will not compromise social and cultural values and assets but will support and strengthen traditional structures and local governance. To this end, the following are to be undertaken:
 - a. Determine the factors that will influence local communities and traditional structures to reduce deforestation and forest degradation and support forest conservation, sustainable management of forests and reforestation and afforestation
 - b. Assess how traditional laws and land use and access arrangements can be enhanced to support efforts in addressing the direct drivers of deforestation and forest degradation
6. Consider gender issues and the needs and aspirations of marginalised and vulnerable groups during the assessment and identification of options and actions
7. Analyse the capacity of the national REDD+ institutional structures to effectively put in place measures to implement the proposed strategies
8. Present information to respond to Criterion 27 (The ER Program describes how the ER Program addresses key drivers of deforestation and degradation) of the [FCPF Carbon Fund Methodological Framework \(2013\)](#)

iii. Transfer of skills and knowledge

In the course of the assignment, the consultants are expected to create a learning environment for relevant local officers and members of the steering committee agencies. Workshops and training will include the following areas - approaches and methodologies for assessing and analysing socio-economic impacts, technical assessments relating to biomass changes, opportunity cost analyses, and GIS/RS methodologies on the analysis of land use changes.

4. SUGGESTED METHODOLOGY

- Literature review of existing work on the various drivers of deforestation and forest degradation (and barriers to enhanced removals) in Fiji.
- Comprehensive community consultations and field visits to sites where deforestation and/or forest degradation are prevalent; sites with potential threat; sites with biodiversity hotspots, sites currently being harvested and sites with or planned reforestation and afforestation with current potential users. These sites will also include selected mangrove areas and concerned communities.
- Comprehensive consultations at national, divisional and local level with various stakeholders and the various ethnic user groups on marginalized land/forest
- Spatial analysis of land use change and correlation to specific drivers of deforestation and forest degradation and their socio-economic context;
- Refer to internationally recognized frameworks for identifying and reporting on drivers and barriers.
- Undertake capacity building activities and ensure transfer of knowledge to stakeholders working on REDD+ issues;
- Regularly consult with the REDD+ Secretariat to ensure an effective feedback process with the REDD+ Steering Committee.

All stages of reporting will be presented to the National REDD+ Steering Committee (RSC) for feedback and validation. This will be organized through the REDD+ Secretariat. All relevant reports and key stakeholder contacts will be provided by the REDD+ Secretariat.

5. SCHEDULE AND DELIVERABLES

The commencement of the services shall come into force and effect on the date (the “Effective Date”) of the Client’s notice to the Consultant instructing the Consultant to begin carrying out the Services.

The overall timeframe (from signing of contract) for the analysis of the drivers and underlying causes for deforestation, forest degradation and potential enhancement of forests and the identification of strategy options will be 17 weeks. All draft reports will be submitted to the REDD+ Secretariat who will be responsible for organizing the review workshops with the RSC.

All comments from the RSC will be sent to the consultants within a maximum time period of 1 week from the date of submission of the draft.

The table below summarizes the schedule for the consultancy.

Task	Deliverable	Schedule
1. Literature review (policies, studies) & draft methodology development 2. Draft a consultation plan (aligned with the national consultation and participation plan)	Inception report including workplan and consultation plan submitted to REDD+ Secretariat	Within 10 days from the Effective Date
3. Facilitate inception workshop - Presentation and discussion of work plan, methodology and data collection with RSC	Approved inception report including workplan and consultation plan	Within 2 weeks from the Effective Date
4. Analysis of drivers, underlying causes and agents of forest cover change, forest degradation and forest enhancement	1st draft report on Analysis of Drivers (submitted for review)	Within 7 weeks from the Effective Date
5. Incorporation of comments from RSC 6. Modelling of future development of the drivers & underlying causes and mapping of sites with significant drivers 7. Prioritization of drivers	2nd draft report on Analysis of Drivers (including map of significant DD sites and prioritisation of drivers) (submitted for review)	Within 9 weeks from the Effective Date
8. Incorporation of RSC comments and finalisation of report	Final report on Analysis of drivers	Within 11 weeks from the Effective Date
9. Identification of Strategy Options – conduct national-level and divisional stakeholder consultations	1st draft report on Strategy Options (submitted for review)	Within 13 weeks from the Effective Date
10. Incorporation of comments from RSC 11. Draft consolidated report on Analysis of Drivers and Strategy Options 12. Conduct stakeholder consultation workshop on draft	1st draft consolidated report on Analysis of Drivers and Strategy Options (submitted for review)	Within 15 weeks from the Effective Date
13. Incorporation of comments from RSC 14. Validation workshop for finalisation	Final consolidated report on Analysis of Drivers and Strategy Options	Within 17 weeks from the Effective Date

At the end of the consultancy, the following products are expected:

1. A comprehensive report on the “Analysis of the Drivers of Deforestation and Forest Degradation and the barriers to, and the agents/drivers for forest conservation, sustainable management of forests and forest carbon stock enhancement”.

The analysis will include specific sections and/or supplementary reports on the policy, governance, institutional, economic, social, and environmental assessments.

2. A comprehensive report on the “Identification of Strategy Options” based from the Analytical report in #1 above.

6. PAYMENT SCHEDULE

This will be a short-term consultancy, payment is scheduled accordingly. Validation workshops and national consultation meetings cost will be separately covered by the Ministry of Forests.

Output	Payment (%)
Inception report including workplan and consultation plan	10%
Final report on Analysis of Drivers	40%
Final consolidated report on Analysis of Drivers and Strategy Options	50%

7. DURATION

The overall assignment should be completed within 17 weeks from the Effective Date.

8. QUALIFICATIONS AND EXPERIENCE

The assignment will be conducted by a team of experts possessing in-depth knowledge of the land use in Fiji and its related policies, regulations and national development objectives. The team also has to provide expertise in spatial analysis and GIS.

The following expertise and working experiences is required:

Key Expert	Minimum Qualification	Additional skills that will be an advantage
K-1: Team Leader	<ul style="list-style-type: none"> • Master’s degree in forestry, agriculture, environmental economics, natural resource management or similar • At least eight years working experience in the REDD+ field • Experience in undertaking analytical studies on the drivers of deforestation and forest degradation • Familiar with the World Bank Carbon Fund 	<ul style="list-style-type: none"> • Understanding of the institutional governance framework of the national REDD+ programme in Fiji • Familiar with socio-economic issues in Fiji or Pacific Island

Key Expert	Minimum Qualification	Additional skills that will be an advantage
	Methodological Framework	countries
K-2: Legal expert	<ul style="list-style-type: none"> • Bachelor's degree in Law or related field • At least eight years working experience in the legal field • Familiar with legal, policy, and institutional frameworks on environmental issues and/or land use in Fiji 	<ul style="list-style-type: none"> • Experience in carrying out analytical studies on legal issues relating to land use in Fiji
K-3: Forest governance expertise	<ul style="list-style-type: none"> • Master's degree in forestry, environmental economics, forest governance or similar. • At least five years working experience in a field related to forest governance • In lieu of a Master's degree, a relevant Bachelor's degree with at least 10 years working experience in the field will be accepted. • Experience in undertaking analytical studies on forest governance 	<ul style="list-style-type: none"> • Familiar with forest governance issues in Fiji • Experience in undertaking analytical studies on the drivers of deforestation and forest degradation • Understanding of REDD+
K-4: Expert on social and land tenure structures	<ul style="list-style-type: none"> • Master's degree in land management, social sciences or related field. • At least eight years working experience in a related field. • In lieu of a Master's degree, a relevant Bachelor's degree with at least 12 years working experience in the field will be accepted. • Experience in conducting social and land tenure assessments especially relating to the forestry sector and forest communities • Knowledge and understanding of land tenure arrangements and issues in Fiji • Understanding of REDD+ safeguard issues 	<ul style="list-style-type: none"> • Experience in carrying out gender assessments • Experience in undertaking analytical studies on the drivers of deforestation and forest degradation • Familiar with the application of participatory tools
K-5: Economist	<ul style="list-style-type: none"> • Master's degree in natural resource economics or similar • At least eight years working experience in the field of resource economics or similar • In lieu of a Master's degree, a relevant Bachelor's degree with at least 12 years working experience in the field will be accepted. • Experience in conducting opportunity cost analysis or cost-benefit analysis • Experience in economic analyses of greenhouse gas emission losses and gains in the agriculture, forestry and land use sector 	<ul style="list-style-type: none"> • Familiar with economic issues in Fiji • Experience in undertaking analytical studies on the drivers of deforestation and forest degradation • Understanding of REDD+

Key Expert	Minimum Qualification	Additional skills that will be an advantage
K-6: Socio-economic assessment expert	<ul style="list-style-type: none"> • Master's degree in social sciences or related field. • At least eight years working experience in a related field • In lieu of a Master's degree, a relevant Bachelor's degree with at least 12 years working experience in the field will be accepted. • Proven experience in conducting socio-economic assessments at both community and national level • Understanding of REDD+ • Experience in conducting gender assessments 	<ul style="list-style-type: none"> • Experience in carrying out socio-economic assessments in Fiji • Familiar with participatory tools for consultations and facilitation skills at all levels • Experience in undertaking analytical studies on the drivers of deforestation and forest degradation
K-7 Participatory consultation expert	<ul style="list-style-type: none"> • Master's degree in communications, social sciences or a related field. In lieu of a Master's degree, a relevant Bachelor's Degree with at least 10 years working experience in the field will be accepted. • Proven experience in the application of participatory tools and approaches • Strong experience in facilitating consultations at all levels – from community to national • Excellent communication and reporting skills 	<ul style="list-style-type: none"> • Previous work experience in Fiji or in the Pacific Island region Fiji • Understanding of local language
K-8: Expert(s) on remote sensing, statistics and modelling	<ul style="list-style-type: none"> • Master's degree in GIS/RS or a related field. • At least 5 years work experience with GIS applications and remote sensing • In lieu of a Master's degree, a relevant Bachelor's degree with at least 10 years working experience in the field will be accepted • Experience in carrying out statistical analysis & modelling of current and anticipated land use / forest cover changes 	<ul style="list-style-type: none"> • Understanding of REDD+ MRV (measuring, reporting and verification) requirements • Experience in undertaking analytical studies on the drivers of deforestation and forest degradation

CONTACT

For further information on these terms of reference please contact:

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ANNEX 1

The following tables are only preliminary assessments of drivers for deforestation and forest degradation in Fiji. It is not uncommon to have the same drivers causing degradation and then deforestation.

Table 1 Drivers of deforestation in Fiji

Past (1990-2000)	Current (2000-2015)	Future (2015-2030)	Agents	Carbon impact	Corresponding IPCC key category
<u>Underlying driver: Economic development (and population growth in some instances)</u>					
<u>Direct Driver:</u> Agriculture (subsistence & commercial) <ul style="list-style-type: none"> Past- Ginger era 	Commercialization of Taro and yaqona, ginger, horticulture, with government push for more exports and import substitutions	Trend will increase with current incentives for agriculture (scholarships for agriculture, funds for farming)	Land owners / lease holders	Large source	LC – land converted to crop land
Forest conversion for pasture lands and grazing	ongoing	Expected to continue with current incentives for dairy farming	Land owners / lease holders	Large source	LG – Land converted to grass land
Mining	Mining (bauxite)	Expected to increase due to international demand for mineral	Mining companies	Small source	LO – Land converted to other land
Tourism - coastal forest reclamation for infrastructure and recreational activities (Denarua, Yasawas, Mamanucas)	Increasing in extent (mangrove areas, Naisoso, Natadola)	Trend of tourism infrastructure expansion will continue (Maritime islands, Lau)	Tourism development	Medium source	LO – Land converted to other land
Energy Production Hydro Dams for Electricity, e.g. Monasavu dam, and for Water supply, e.g. Vaturu dam	Vaturu/ Wainikasou	Future plans for Vaturu/ Wainikasou dam for water and energy both Increasing demand for renewable energy (more dams, biofuels-deforestation) Water dams for Waidina (Sovi basin) and Navua River	Energy policy	Small to medium source	LO – Land converted to other land
<u>Underlying driver: Population growth</u>					
<u>Direct Driver:</u> Forest conversion for formal & informal settlements, (relocation of villages)	Ongoing trend and continues to increase, e.g. Waila city	Continue to increase in all type of housing development, (up class housing, gated	Urban development / communities	Medium source	LS – Land converted to settlement

Past (1990-2000)	Current (2000-2015)	Future (2015-2030)	Agents	Carbon impact	Corresponding IPCC key category
	development, new housing schemes along coasts and new infrastructure	communities / settlements, Maui beach resort, *tourism), James Town development – mangrove area	s, illegal squatters		
<u>Underlying driver: Weak governance</u>					
<u>Direct Driver:</u> Poorly planned Infrastructure development	On-going	Increasing			
<u>Underlying driver: Lack of law enforcement</u>					
<u>Direct driver:</u> Human-induced forest fires for hunting	On-going	Continued	Farmers, arsonists for hunting or accidental	Medium source	LC – Land converted to crop land LG – Land converted to grass land
<u>Underlying driver</u>					
<u>Direct driver:</u> Natural Disasters, e.g. cyclones, hurricanes and floods	On-going	Continued	Resistance and resilience of ecosystems lower due to human management	Negligible	FF – Forest land remaining forest land

Table 2 Drivers of forest degradation in Fiji

Past (1990-2000)	Current (2000-2015)	Future (2015-2030)	Responsibility	Carbon impact
Commercial/ conventional logging	Ongoing	More access roads – increase logging Logging trend may also decrease in natural forests considering the shift from logging to conservation with incentives	Logging companies / Department of Forestry; market demand	Small – medium source
<ul style="list-style-type: none"> • Firewood collection • Continuous harvesting of mangroves in given area for firewood • Collection of non-timber forest products 	Increasing fuel wood collection for forests Escalating mangrove harvesting (firewood & construction)	Potentially decreasing as energy infrastructure is being developed	Energy policy, Department of Energy, communities	Small source (high impact on mangroves)

Past (1990-2000)	Current (2000-2015)	Future (2015-2030)	Responsibility	Carbon impact
Invasive species (weeds, pests & disease) Succession of invasive species , African tulips, (domesticated cattle & pigs on free run)	Increasing	Increasing	Farmers, Departments Forestry, Agriculture, Livestock, Biosecurity	Small source
Fire – cause forest degradation at edge of the forests (influenced by climate change)	Potentially decreasing as traditional livelihoods decline with urbanization		Farmers, communities	Small source, mostly impacting plantations

ANNEX 2

Preliminary identification and assessment of strategy options for Fiji.

Driver/ Reference Activity	Strategy Options	Co-Benefits of Strategy Option
Agriculture	<ul style="list-style-type: none"> Develop a national land use plan Review policy and legislation that encourage unsustainable clearing of forests for agriculture Rehabilitate degraded sites and grasslands, for agriculture development to avoid farmer encroachment into forests Raise awareness on and enforcement of the Land Use Capability Classification System Promote sustainable farming approaches and technologies <ul style="list-style-type: none"> Agroforestry and multi-cropping systems that promote the inclusion of trees in farming Intensive farming to make optimal use of small areas of land Diversify on cash crops Support value-adding of forest produce and create niche markets for forest communities to access high-end markets (e.g. hotels) Introduce, promote and invest in alternative livelihoods (aside from cash crops) Establish and train local landcare and forestcare groups to facilitate sustainable land use in forest areas 	<ul style="list-style-type: none"> Overall sustainable management of natural resources More income generating opportunities for farmers Higher crop and income diversification leads to increased resilience against climate change impacts and natural disasters Increased appreciation of economic value of forests Local communities are skilled in various SLM technologies
<ul style="list-style-type: none"> Large-scale forest conversion by local communities for cash crops 	<ul style="list-style-type: none"> Develop local land use plans with communities and relevant supporting agencies to promote sustainable forest management Conduct educational programmes through the Provincial Offices and Divisional Offices Promote eco-tourism in feasible forest areas Conduct biodiversity assessment of these sites and 	<ul style="list-style-type: none"> Biodiversity conservation Better understanding of value of standing forests Broader income generating base

Driver/ Reference Activity	Strategy Options	Co-Benefits of Strategy Option
	inform and educate local communities <ul style="list-style-type: none"> • Implement Fiji's NBSAP and proposed protected area network • Ecosystem valuation • Promote value adding technologies for forest products 	
Mining	<ul style="list-style-type: none"> • National land use planning where ecological and social values of forests are considered against mining impacts • Review legislation to ensure more thorough ecological and social consultations and assessments are carried out • Enforce EIA and HIA 	<ul style="list-style-type: none"> • Decrease in pollution and adverse health impacts caused by mining • Protection of forest ecosystem services
Infrastructure development	<ul style="list-style-type: none"> • Integrated land use planning to also include socio-economic and ecosystem impact assessments • Sustainable Infrastructure Development • Proposed infrastructure planning and development to be captured in the national land use plan 	<ul style="list-style-type: none"> • Conservation of mangroves and ecosystems • More sustainable development of the local population • A more intact environment will increase resiliency of infrastructure and local communities against climate change impacts and natural disasters
Forest fires	<ul style="list-style-type: none"> • Review legislation • Law enforcement • Local community awareness and education programmes • Active community involvement in enforcement and patrolling (fire wardens) 	<ul style="list-style-type: none"> • Local communities have an increased awareness and appreciation on the value of forests
Unsustainable timber harvesting	<ul style="list-style-type: none"> • Enforce the national harvesting code of practice • Afforestation/Reforestation programmes to increase timber supply • Promote reduced impact logging • Improved Law Enforcement of SFM • Replant abandoned plantation sites • Education/Awareness for small-scale timber operators • Promote the utilisation of lesser known commercial timber species 	<ul style="list-style-type: none"> • Biodiversity conservation • Economic diversification • Improved capacity and education for small-scale timber operators • Added value to standing forests