# Forest Carbon Partnership Facility (FCPF) Technical Assessment of Final ER-PD of Fiji of June 16<sup>th</sup>, 2019

# I General Approach of the Review

The TAP team conducted a desk review of the December  $27^{th}$  early draft version of the Fiji ER-PD, remotely before the WB and TAP mission to Fiji January 20-26, 2019; held team discussions of the indicators in Fiji; and finished its first assessment February  $1^{st}$ . The TAP conducted a desk review of the March  $28^{th}$  2019 Advanced Draft April  $4^{th}$  –  $19^{th}$  which also reflects discussions during the January mission. TAP reviewed the June  $3^{rd}$  and then revised June  $14^{th}$  and  $16^{th}$  Final ER-PD versions on June  $4-20^{th}$ , including the annexes to the ER-PD.

# PART 1 OF TECHNICAL ASSESSMENT: Summary

**Date of Current Assessment:** 20 June 2019, of Fiji's June 16<sup>th</sup> 2019 Final ER-PD. **Assessment team members:** 

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Summary Assessment of the Quality and Completeness of the ER-PD:  Note on terminology in this assessment: Fijian society, the Fiji national government (including the Ministry of iTaukei Affairs) and Fiji's laws recognize traditional native Fijians as iTaukei or iTaukei Fijians, the majority ethnic group in Fiji, as well as Indo-Fijians or Fijians of Indian descent, the second-largest group, and other ethnic groups. ITaukei society, land tenure, governance etc. play substantial roles in the ER-PD design and activities. This assessment refers to iTaukei, and generally does not use the term "Indigenous Peoples" other than when in FCPF indicators or WB safeguards language.					
Overarching TAP comments:  Overall, the Final ER-PD of June 14 <sup>th</sup> refines the Advanced Draft of March 28 <sup>th</sup> by clarifying details of the set of proposed interventions, revising annual land use change activity data analysis methods, improving the uncertainty assessment and methods, moving significant detail on carbon accounting from the main text into detailed annexes, providing details of funding sought for the Program of to \$42m (down from the original \$110m), and improving the Benefit Sharing and environmental and social safeguards descriptions. A full set of maps clearly illustrate biophysical and land use data, and where interventions would occur. The calculations for the FREL are clear. The national government is deeply involved in the ER-PD process, and widespread consultations with stakeholders have been undertaken throughout the process.  Summary score: 58 are scored as YES (meeting the indicator), 5 as NO, and 17 as NA or not applicable, of the 80 total indicators and sub-indicators.	Indicators	Initial review	1st Assessment	2 <sup>nd</sup> assessment (final)	
For 6 indicators scored as NO by the TAP, major/material non-conformities include: the ER Program Entity has not yet fully demonstrated its authority to enter an ER-PA with					

the Carbon Fund (CF). Many previous minor non-conformities have now been addressed.				
Strengths include: Strong opening in the Executive Summary that now introduces the entire document and its findings; very high percentage of lands in the country involved; small proposed ER sales to CF of \$12.5m. Key government agencies and the prominent government/private Fiji Pine Ltd and Fiji Hardwood Corp. Ltd companies seem to be strongly involved in the Program, and the team has produced a quality ER-PD. A key strength is this ER-PD is very much a locally generated effort.				
On the aspects of social and environmental safeguards, the ER-PD is now supported by a comprehensive account on how it addresses both WB and UN Cancun Safeguards. More importantly the social and environmental risks associated with the proposed ER-P proposals have been identified, discussed and associated mitigation actions have been proposed (Tables 14.1, 14.2, and 14.3). In addition an Advanced SESA document has been produced through a working group and is now ready for national validation.				
The ER-PD strongly reflects iTaukei customary cultural, land tenure, and land use practices to craft an fairly unique proposal on how to implement REDD+ in this traditional context in the Pacific. This is potentially a major diversity contribution to the CF's portfolio. Effort is needed to improve the storyline that reflects the uniqueness of Fijis culture and how it can be used to improve the livelihood as well as build resilience of the people. The FGRM proposed builds directly on existing traditional iTaukei governance and grievance processes.				
<u>iTaukei traditional culture</u> derives from the iTaukei people and communities, the ancestral population, now roughly 45% of Fijians. iTaukei decision-making on land use occurs via a traditional consensus process; most land is owned and managed by individuals or clans known as <i>matagali</i> . iTaukei lands can be leased to government/private timber companies for plantation afforestation or harvest, via consensus, a process involving a prominent government agency known as TLTB, the iTaukei Land Trust Board.				
Benefit Sharing is likely to be strength of this eventual full ER-Program, since it builds on strong Benefit Sharing practices in traditional iTaukei society.				
II. Level of Ambition → Criteria 1 – 2, including issues relating to legal aspects  C. 1 [The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.]	1.1 1.2 1.3 2.1	YES YES YES YES	YES YES YES	YES YES YES YES
<b>1.1</b> [ the ER Program Measures aim to address a significant portion of forest-related emissions and removals				
The level of ambition is excellent, targeting around 90% of the country and its emissions and removals with district land use planning and interventions.				
<b>1.2</b> [ The ER Program is ambitious, uses new or enhanced ER Program Measures to reduce Emissions or enhance removals, is undertaken at a jurisdictional scale and/or takes a programmatic approach (i.e., involves multiple land areas, landowners or managers within one or several jurisdictions), and reflects a variety of interventions from the national REDD+ strategy in a coordinated manner.				

<ul><li>2.1 The Accounting Area represents xx% of the country [of significant scale and aligns with one or more jurisdictions; or a national-government-designated area (e.g., ecoregion) or areas.]</li><li>[Ambition and strategic rationale for the ER Program – 2.2, 2.3]</li></ul>				
The accounting area covers about 90% of the country and 94% of its forests.				
III. Carbon Accounting	3.1	YES	YES	YES
III (a) Scope and methods→ Criteria 3 – 6	3.2	YES	YES	YES
The ER-PD is very clear on the sources and sinks. Degradation emissions from logging,	3.3	NO	YES	YES YES
and fire are included; fuelwood harvesting and slash and burn agriculture are not	4.1 4.2	NO NO	YES YES	YES
included, as data are inadequate according to Fiji. Degradation sources now	5.1	YES	YES	YES
collectively are shown to add to up to over 10% of emissions and thus are reported.	6.1	YES	YES	YES
III (b) Uncertainties → Criteria 7 – 9	6.2	YES	YES	YES
Uncertainties are provided for activity data and emission factor data. QA/QC control	7.1	NO	NO	YES
methods are described and already in place for self-reported data on harvesting and	7.2	YES	NO	YES
replanting area and growth by companies.	8.1	YES	NO	YES
	8.2	NO	NO	YES
	9.1	YES	NO	YES
	9.2	NA	NA	NA
III (c) Reference Level→ Criteria 10 – 13	9.3	NA	NA	NA
	10.1	YES	YES	YES
The description of the current Program FREL is thorough, and this FREL approach is	10.2	YES	YES	YES
intended by FIJI to be used when it eventually makes a FREL submission to the	10.3	YES	YES	YES
UNFCCC. The FREL is an average over the FREL time period and has no adjustment.  The FREL emissions and removals are reported per sub-activity. The FREL period is	11.1	NO	YES	YES
from 2006-2016. The FREL period of fire is only from 2015-2018 because of a lack of	11.2	YES	YES	YES
data before 2015, while the image derived activity data has a slightly longer FREL	12.1	NO	YES	YES
(2006-2018 The FREL uses its own forest classification more suitable for carbon	13.1 13.2	YES NA	YES NA	YES NA
calculation than that used for UNFCCC submissions.	13.3	NA	NA NA	NA NA
	13.4	NA	NA	NA
III (d) Reference Level, Monitoring & Reporting on Emission Reductions → Criteria	14.1	NO	YES	YES
14-16	14.2	YES	YES	YES
The FREL and ER-PD period will use the same method. However, 3 of 5 input data for	14.3	YES	YES	YES
constructing carbon savings are proxy data collected from revenue service (logging) or self-reporting (plantations), and no protocols for these are described. Nesting of	15.1	YES	YES	YES
REDD+ pilot projects will be necessary, and early guidance on nesting methods now	16.1	YES	YES	YES
is provided, although detailed procedures will eventually be needed.	17.1	YES	YES	YES
III (e) Accounting for Displacement (leakage) → Criterion 17	17.2	YES	YES	YES
Risk of displacement is found to be low, and mitigation strategies are shown.	17.3	NA	NA	NA
	17.4 18.1	NA YES	NA YES	NA YES
III (f) Accounting for Reversals → Criteria 18 – 21	18.2	YES	YES	YES
A list of potential reversals and mitigation options to address them is presented,	19.1	YES	YES	YES
and the reversal buffer is quantified.	20.1	NA	NA	NA
	20.2	NA	NA	NA
	21.1	NO	YES	YES

	21.2	NA	NA	NA
	22.2	YES	YES	YES
	23i	NO	NO	YES
III (g) Accounting for ERs → Criteria 22 - 23	23ii	NO	NO	YES
Estimation of ERs follows Meth. Framework methods.				
IV. Safeguards		NO	NO	YES
Actions undertaken to meet WB and Cancun Safeguards→ Criteria 24-26	24.2 25.1	NO NO	NO YES	YES YES
The safeguards section demonstrates a comprehensive understanding of both World Bank and UNFCCC Cancun Safeguard Principles (Table 14.3, Box 14.1) and	25.2 26.1	NA YES	NA YES	NA YES
also describes Fiji's own social and environmental safeguards. The sub-section which describes the key social and environmental risks and proposes mitigation actions (Tables 14.1 and 14.2) are key elements in Fiji's proposed environmental and social management framework (ESMF). The SESA and ESMF processes which were still pending, have now produced final versions that are under review and due as final instruments on July 8th, and at the time of this assessment have gone through a for national public validation workshop.	26.2 26.3	YES YES	YES YES	YES YES
The key elements of a Benefit Sharing Plan are described in detail, despite the absence of such a plan, which is due by December 2019, and its legal framework, have been described in the current version of the ER-PD.				
V. Sustainable Program Design and Implementation	27.1	YES	YES	YES
V. (a) Drivers and Land Resource Tenure Assessment → Criteria 27-28	27.2 28.1	NO YES	YES YES	YES YES
Key drivers of deforestation and forest degradation are discussed at length.	28.2	YES	YES	YES
Interventions are now more closely linked to the drivers analysis and appear more	28.3	YES	YES	YES
appropriate for the land use context than those in earlier ER-PD drafts.	29	YES	YES	YES
	30.1	NA	NA	NA
V. (b) Benefit sharing → Criteria 29 – 33	31.1	NO	NO	YES
The document highlights the government and ER Program design of BS Plan structure	32.1	NA	NA	NA
details, and involvement of different stakeholders at two years of discussions and	33.1	NO	NO	NO
consultations on Benefit Sharing arrangements. Design is advanced, though a Benefit Sharing Plan, while not yet due at this stage, has not yet been developed.	34.1	YES	YES	YES
	34.2	NO	NO	YES
V. (c) Non-Carbon Benefits → Criteria 34 – 35	35.1	YES	YES	YES
Ten priority non-carbon benefits are detailed. Inputs to design of the ER Program derived from the stakeholder engagement processes are referred to repeatedly (including for the two major REDD+ pilot projects), as evidence of engagement. The engagement process is not explained, however (minor nonconformity).	35.2	NA	NA	NA

VI. ER Program Transactions.  VI (a) ERPA Signing Authority and Transfer of Title To ERs → Criterion 36  The ER Program Entity has not yet fully demonstrated its authority to enter an ERPA with the Carbon Fund. A clear legal framework that addresses the legal nature of carbon rights and ERs may require new legal procedures. These are major non-conformities at present.  VI (b) Data Management and ER Transaction Registries → Criteria 37 - 38  Fiji has decided to maintain its own comprehensive national REDD+ Program and Projects Data Management System, and describes how it will function. Fiji decided to use the FCPF Centralized ER Transaction Registry during the necessary interim until the national registry will be operational.	NO NO YES YES NO NO YES NA NA	NO NO YES YES NO YES YES NA NA	NO NO YES YES NO YES YES NA NA
SUMMARY: 58 indicators are scored as YES (meeting the indicator), 5 as NO, and 17 as NA or not applicable.			
<b>25 OBSERVATIONS have been made: The TAP</b> recommends that Fiji address these Observations in any revised ER-PD if possible or as the Program is implemented; the latest would be prior to the first verification event,.			

### PART 2 OF TECHNICAL ASSESSMENT: DETAILED ASSESSMENT.

C. 1 The proposed ER Program is ambitious, demonstrating the potential of the full implementation of the variety of interventions of the national REDD+ strategy, and is implemented at a jurisdictional scale or programmatic scale.

**Ind. 1.1** The ER Program Measures aim to address a significant portion of forest-related emissions and removals.

YES

[Ambition and strategic rationale for the ER Program - 2.2

The area covered for this program is around 1.7 Mha or 90% of all land area of Fiji (p 27). 1 Mha of that land is forest (94% of all forest area in Fijj, p 27). The emission reductions generate during the ER-P implementation phase (2020-2024) is 3.5 MtCO2 (p 13, refer to 13-June-2019 ERPD ER-PD June 14 2019 version) gross and after buffers 2.25 MtCO2 available for the ER program. The same numbers are reported on p 178 (tables 13-2,13-3 (refer to 13-June-2019 ERPD ER-PD June 14 2019 version. This is an improvement from previous versions where different numbers have been reported throughout the ER-PD.

Breakdown (p 14, unnumbered table in MtCO2e, and p 15 unnumbered table on hectares . Table 4-4 p65 table shows a different breakdown but same total of hectares) (all pages refer to ER-PD June 14 2019 version)

- 1.97 MtCO2e Forest Protection (\$3.3 M p 97 (ER-PD June 14 2019)), (TAP calc 0.6 tCO2 saved per USD) of 9, 500 ha, of which
  - o 8,000 ha is avoided Deforestation of native forest
  - 1,500 ha is avoided deforestation of agroforest
     (p73 table 4-12, 13-June-2019 ERPD ER-PD June 14 2019 version
- 0.89 MtCO2e Afforestation / Reforestation (plantation companies) (\$7.8 M, p 97 Fiji Master v8) TAP calc
   0.11 tCO2 saved per USD) by extra planting 7,532 ha
  - o 6,095 ha of extra pine
  - 1,437 ha of extra hardwood
     (Table 4-6, p 68 13-June-2019 ERPD ER-PD June 14 2019 version
- 0.37 MtcO2e Agroforestry and alternative livelihoods (\$10.7 M, p97 Fiji masterv8) (TAP calc 0.03 tCO2 saved per usd) by improving 7,500 ha
  - 1,000 ha shade grown agriculture
  - o 5,000 ha riparian restoration
  - 1,500 ha alternative livelihood (table 4-9 p 71, 13-June-2019 ERPD ER-PD June 14 2019 version
- 0.14 MtCO2e Sustainable Management of Native Forest (\$ 1 M, p97 Fiji Master v8) (TAP calc 0. 14 tCO2 saved per USD) of 8,500 ha
  - 86,360 m3 reduced harvest by using reduced impact logging
     Table 4-5, p 67 13-June-2019 ERPD ER-PD June 14 2019 version
- 0.14 MtCO2e Community Planting, (\$13.8 p 97) (TAP calc 0.01 tCO2 saved per USD) by planting 5,750 ha
  - o 250 ha Fiji Pine Trust
  - 5,500 the 4 million tree planting initiative
     Table 4-8 p 60 (ER-PD June 14 2019 version).

All these activities are part of component 2 of the ER-Pd implementation plan. There are in total three components of the ER-PD plan, only component 2 generates GHG reduction. Component 1, improved land use planning over halve a million hectares does not seem to generates any GHG benefits.

In Annex 4-2 (Intervention Technical Note) each sub-intervention is described, and hectares involved mentioned (e.g. for intervention increased plantation: planting on degraded land by communities 5,750 ha, increased

softwood planting 6,000 ha, increased hardwood planting 1,400 ha). This is a very transparent way of planning interventions and anticipating results. Overall area affected by all interventions is about 30,000 ha (TAP calculation) or 2% of the ER-PD area. Linking this to the emission factors would be recommended for increased understanding and transparency,

Annex 8-1 (ER-PD June 14 2019 version) unfortunately does not describe the emissions and reduction in the above 6 categories but in 6 other activities (1- Emissions from deforestation, 2- Emissions from logging in Natural Forest, 3- Emissions from logging in soft- and hardwood plantations, 4- Emissions from fire within softwood plantations, 5- Removals from growth after logging Natural Forest, 6- Removals from afforestation/reforestation and 6- removals from growth in softwood and hardwood plantations. It is not evident how these two sets of activity relate to each other.

The emissions during the FREL period (2006-2016) are estimated to be 1.3 MtCO2/yr (p 14, unnumbered table), the emissions in the ER time period (2020-2024) are estimated to be around 0.70 MtCO2/yr (no buffer extracted)(p 177, table 13-1 and 13-2 13-June-2019 ERPD ER-PD June 14 2019 version). A significant reduction is thus anticipated. After subtraction of uncertainties, buffers, reversal, degradation and other factors (p 177 13-June-2019 ERPD ER-PD June 14 2019 version) the amount available to the CF between 2020-2024 is 2.25 MtCO2 (p177).

Details ER-PD area is 1.64 Mha, (p 38, table 3-4, ER-PD June 14 2019 version):

1,105,077 ha of forest (p 31), of which

- native forest
  - 915 kha is (p 38, table 3-4) 13-June-2019 ERPD ER-PD June 14 2019 version or
  - 863 kha (p 39, table 3-5)

with closed forest 500 kha (p 39) and open forest 365 kha (p 39)

- pine plantation
  - -76 kha is (p 38) or
  - 70 kha on (p 39)
- 60 kha is mahogany plantation (p 38 and p 39)
- mangrove
  - -54 kha (p38) or
  - 52 kha (p 39).

ER-PD Accounting Area has almost 1 Mha of current forest area. With an average of 250 t CO2/ha (a weighted average of upland and lowland forest carbon content). The TAP thus calculates a the current carbon stock in the ER-PD forest area of around 250 MtCO2 stock. An emission reduction as anticipated of 2.52 MtCO2e is (with buffer extracted) would be > 1% of stock saved. That is according to the TAP a significant amount for Fiji's forests.

**OBSERVATION**: A significant improvement to previous versions. In this version all the emissions/removals and area numbers are streamlined and coherent throughout the document.

Ind. 1.2 The ER Program is ambitious, uses new or enhanced ER Program Measures to reduce Emissions or enhance removals, is undertaken at a jurisdictional scale and/or takes a programmatic approach (i.e., involves multiple land areas, landowners or managers within one or several jurisdictions), and reflects a variety of interventions from the national REDD+ strategy in a coordinated manner.

YES

[Ambition and strategic rationale for the ER Program – 2.2, 2.3]

Overview: The Program has a large jurisdictional approach that is targeted at the three largest islands in Fiji consisting of 11 provinces; 20 Districts in the ERP accounting area have been selected for specific interventions.

The program is diversified on the interventions. Component 1 is focused on District-level improved land use planning for long term sustainability and mitigating reversals. Component 2 contains the main emissions reduction (3.5 MtCO2e 2020-2026, before buffer subtraction, p 177 (ER-PD June 14 2019 version) activities. The Program interventions consist of (Exec. Summary):

1. Forest protection

- 2. Afforestation/Reforestation of plantations
- 3. Agroforestry for alternative livelihoods
- 4. Sustainable management of Native forest
- 5. Community planting.

Most of the major land types and tenures are represented: the majority of Program lands would be private land planting to plantations by govt/private forest companies like Fiji Pine and Fiji Mahogany via leases with landowners. Total program cost \$42.4 M USD (p 18, ER-PD June 14 2019 version), company contribution \$8.3 M USD (p 18, non-numbered table). Total cost of reducing emissions around thus 42.4 M for 3.5 MtCO2e = \$12 USD per ton CO2e.

There are excellent tables per intervention with a clear understanding what each intervention contributes to the total reduced emissions. Table 98-2, p 102 the main table on the FREL with reduced emissions/reductions is very clear. There is clear information on the extra effort on planting by companies above business as usual levels.

**OBSERVATION**: The TAP observes that mangrove forest of about 53,000 ha scattered along coasts are not included in ER-PD. Fiji notes that mangrove will be considered under "Coastal Wetlands (Blue Carbon)" in the Low Emission Development Strategy (p 94); and states that in a stepwise approach mangroves will be added to the carbon accounting system by 2022 (Fiji responses to CFP questions, June 7). Mangroves seem to contribute to current emissions since they have declined in area by 25% between 2003 and 2013 (p 35). This decline and associated emissions are not accounted for in the ER-PD. The drivers of this change are addressed as part of a new to be developed land use Master Plan (p 43) that covers coastal area, though it has not yet been approved. The TAP applauds Fiji's roadmap for including mangroves.

**OBSERVATION**: Operational and financial planning could be more clearly presented.

- a) Finance Plan discussion and specifically Table 6-2 and 6-3 are very clear and detailed on spending per intervention, the proposed sale to the C Fund is 11 M of the \$42m thus 28% of total cost.
- b) Role of private forestry companies Current companies contribute 18% (\$7.9 M USD) of the funds to this program. It is not clear how their financing of ER-PD activities would occur. le, how the funding would be generated and move, to whom, and how the REDD team would track private funds. Incentives for these big companies to participate in and comply with ER-PD plans and activities are not clear. Eg, to follow diameter limit tables for plantation harvest (p 59), when they do not do this now. Discussion of implementation arrangements does not how the private sector is involved in implementation and their relationship to the Min. of Forestry and other entities.

# **OBSERVATION** on Organization:

Climate Smart Agric. is significant in the proposal —defined as "wide, ranging from crop production, agroforestry, livelihood and aquaculture". The ER activity will focus on kava (a culturally important root crop) production and agroforestry and scale up minimum tillage technique and integrated farming techniques, and do holistic planning and implementation for these crops. How this could arrest forest loss and carbon emissions associated with agriculture expansion is not entirely clear. Further, the relationship of the Min. of Ag to the Min. of Forestry (in overall charge of the ER-PD), and how they would work together in the Program could be clarified.

The indicator has been met.

# C. 2 The Accounting Area matches a government- designated area that is of significant scale

**Ind. 2.1** The Accounting Area is of significant scale and aligns with one or more jurisdictions; or a national-government-designated area (e.g., ecoregion) or areas.

YES

[Accounting Area of the ER Program – 3.1].

The proposed Accounting Area and Program activities within it would encompass the vast majority of the country's land base and be coordinated by the key national government agencies and private timber companies.

All three major islands covering 90% of the entire land area are part of the ER-PD. 11 provinces, 155 administrative districts and 982 registered village (p 85 and table 6-1) would participate in activities. In addition, 20 Districts in the ERP accounting area have been selected for specific intervention (p 51). In these district ERP budgeted activities will focus and Integrated District Land Use and Management Plans that support and commitment of 120 communities over an area of 510,319 ha over 5 years (p 49) will be implemented.

The ER-PD covers 94% of all Fiji's forest cover). Mangrove (5% of all forest) and coconut (p 94) are excluded from the ER-PD; mangrove will be included in about 2 years when better data are available, according to the June 16<sup>th</sup> ER-PD.

There are two REDD+ project nested in the ER-P area, which were established before the ER-P program was developed: Drawa Rainforest Conservation Project and Nakauvadra Community Based Reforestation project (p 113, and in Annex 9.2) are mentioned (p 14). Government of Fiji does not have formal nesting guidelines yet therefore the Drawa Project Area will be excluded from the ER program accounting area to avoid double counting (p 14). The Nakauvadra Community Based Reforestation project does not result in the issuance of tradable emission reductions as the CCB Standard and is thus not important for accounting or reduction under ER program

Theory of Change Fig 4-1 has been fully developed and explained in depth, to clarify linkages between drivers of land use change and the interventions selected.

The indicator has been met.

C. 3 The ER Program can choose which sources and sinks associated with any of the REDD+ Activities will be accounted for, measured, and reported, and included in the ER Program Reference Level. At a minimum, ER Programs must account for emissions from deforestation. Emissions from forest degradation also should be accounted for where such emissions are significant.

**Ind. 3.1** The ER Program identifies which anthropogenic sources and sinks associated with any of the REDD+ Activities will be accounted for in the ER Program

YES

[Description of Sources and Sinks selected – 8.1]

The ER-PD is very clear on the sources and sinks (e.g. Table 4-4, p 57 shows the hectares "saved" per impact component). <u>Included</u> sources of emissions are Deforestation, and Degradation from logging and fires; and removals from enhancements include forest conservation and enhancement of carbon stocks. The full table of all the tCO2e of the sinks and sources is given in Table 8-2, p 102.

<u>Details</u>: The accounting is very complete and includes growing stocks after logging and net plantation carbon stock via harvest and replanting (see for details p 99).

- 3. Deforestation = conversion from forest to non-forest
  - Activity data from satellite data
    - Annual Activity data from satellite, Annex 8.2 p unnumbered likely p 10 and table 8-3, p
       112
      - 92,939 ha lowland 2006-2016 = 6905 ha/yr. TAP calculates 7,744 ha/yr.
        - o in new Annex 8-1, unnumbered page, likely p8 (13-June-2019) = 8,332 ha/yr, a 5% difference then the TAP calculation or a 15% difference of own reputed data
      - 24,631 ha upland 2006-2016 = 2194 ha/yr TAP calculates 2,052 ha/yr,
        - o in new Annex 8-1, unnumbered page, likely p8 (13-June-2019) = 2,682 ha/yr

- Emission data from Fiji national forest inventory for lowland forest. Lowland forest stock: (AGB+BGB 87.9 Ct/ha =) 322 tCO2e/ha p 119 and upland forest stock (AGB + BGB = 71.2 tC/ha=) 262 tCO2/ha.
   Carbon stock after conversion is (17.1 tC/ha=) 62.7 tCO2/ha
- TAP ESTIMATION OF TOTAL: (7,744 \* (322 62.7)) + (2,052 \* (262-62.7)) = 2.4 MtCO2e/yr
- ER-P value **2.5 MtCO2/yr** (p 120).
- The small discrepancy is because of the ER-P data have been improved by Monte Carlo exercise.
- 2. Degradation = Logging in natural forest, hardwood plantations and softwood plantation. Full accounting is provided of wood removed, include damages of logging and the regrowth of volume after logging.
- Emission from logging
  - Activity data reported by government annually in m<sup>3</sup> extracted (table 8-6, p 115)
    - Natural forest logging:
- 558,046 m3 extracted 2006-2016
- Softwood plantation extracted: 3,679,095 m3 extracted 2006-2016
- Hardwood plantation extracted: 684,195 m3 extracted 2006-2016
- Full accounting of wood removed, include damages of logging and infrastructure. Emissions are calculated from m<sup>3</sup> extracted and converted to emissions via a Timber expansion factors from literature (1.05 tC/m<sup>3</sup> p 118 table 8-10),
- TAP ESTIMATION: (50,731 \*1.05)+ (334,463\*1.05) + (62,199\*1.05) = 0.47 MtCO2/yr
- Sequestration after logging
  - Activity calculated from area affected by logging (1,798 ha/yr, p 14). Annual data on harvested areas were taken from digital logging maps, provided by logging companies and cleaned up by the ER-PD team).
  - Sequestration calculated by hectares affected multiplied by a mean annual C increment after logging (0.99 tC/ha/yr, p 16. This value is derived from unpublished data, which is not a strong reference.
     The data also is not compared to other increment factors in the tropics and therefore adds to uncertainty.
- Emissions from Fire
  - o 1,428 ha/yr burnt (2015-2018) softwood plantation, annex 8.3 p 18,
  - Emission factor (AGB and BGB) is 310 tCO2/ha (TAP calculation, 180 t/ha dm converted to C by 0.47, converted to CO2 by 44/12)
  - TAP ESTIMATION OF TOTAL: = 0.6 MtCO2e/yr.
- 3. Reforestation = is conversion of non-forest to natural forest.
  - Natural forest lands:
    - mean annual carbon increment for afforestation/reforestation 2.63 t/ha/yr- p23
    - Area replanted in native forest
      - 70,212 ha lowland 2006-2016 = no number given, TAP calculates 5,851 ha/yr
      - 14,803 ha upland 2006-2016 = no number given TAP calculates 1,233 ha/yr
  - o Plantations Activity data annual provided by the plantation management companies in ha
    - Softwood planted: 4,080 ha 2006-2016 table 8-8, p 114
    - Hardwood planted: 3,053 ha 2006-2016 table 8-8 p 114
    - Emission data. Timber volumes extracted were converted to total tree biomass
      - Growth factor hardwood (two data points in different annexes)
        - 4.14 tC/ha/yr Annex 8.2 unmarked page, p10
        - 1.5 tC/ha/yr Annex 8.3 unmarked page, p36 TAP assumes this is the right one?
      - Growth factor softwood

- 4.7 tC/ha/yr Annex 8.2 unmarked p11 and Annex 8.3 p30
- Harvest softwood and hardwood emissions data not given (hardwood assumed 500 tCO2/ha, softwood assumed from annex 8.3 fire estimation of average aboveground biomass 150 t/ha = 150\*0.47\*44/12 = 260 tCO2/ha)
- Replanting of areas during the FREL in hectares and plantations that were planted before the start year 2006 and were not harvested before 2016 (end of the FREL)
  - Activity data sources from self-reporting from wood plantation companies
  - Emission data estimated based on the mean annual increment (MAI) reported for Hardwood and Softwood Plantations.

**OBSERVATION**: The growth factors (ie, emission factors for growth of hardwood and of softwood plantation) used should be clarified. The reforestation data, growth factors, hectares, formulas for the calculations are all in the different annexes and tables, however for the sake of transparency, it would be good to have the carbon calculation linked to each intervention, in a revised ER-PD.

The TAP finds the indicator is met.

Ind. 3.2 The ER Program accounts for emissions from deforestation. [Description of Sources and Sinks selected -8.1]

YES

Deforestation is accounted for and monitored with Landsat satellite data. Emission data are from Forest inventory for upland and lowland forest separately. The indicator is met.

**Ind. 3.3** Emissions from forest degradation are accounted for where such emissions are more than 10% of total forest-related emissions in the Accounting Area, during the Reference Period and during the Term of the ER-PA. These emissions are estimated using the best available data (including proxy activities or data).

YES

[Description of Sources and Sinks selected – 8.1]

Emissions from Degradation from logging are well accounted (see indicator 3.1). Activity data for logging is derived from the revenue service and logging companies. There is good data in annex 8.3 on volume logging natural forest and plantation, and a protocol for how the data collected from the companies is quality tested and verified is summarized (p 110).

The area burnt in softwood plantations was also based on self-reported data from Fiji Pine plantation (p 122) for 2015-2018. The data was checked with MODIS satellite hotspot data. Area burnt 2015-2018 was estimated to be 5,715 ha generating 0.14 MtCO2e.

**OBSERVATION:** In the activity data calculation on p 68 table 4-7 (ER-PD June 14 2019) burnt area is only counted as degradation. The TAP is not clear if fire is also part of the deforestation impacts. This should be clarified if a revised ER-PD version is produced, or during implementation – certainly before first verification.

**OBSERVATION**: Degradation is calculated from logging, fire, and fuelwood use. Slash and burn agriculture may also be a significant source of degradation or deforestation but few data are available. The TAP recommends the Program review these data for the Final ER-PD and determine if they have become significant or not.

The indicator is met.

C. 4 The ER Program should account for, measure and report, and include in the ER Program Reference Level, significant carbon pools and greenhouse gases, except where their exclusion would underestimate total emission reductions.

**Ind. 4.1** The ER Program accounts for all Carbon Pools and greenhouse gases that are significant within the Accounting Area, both for Reference Level setting and Measurement, Monitoring and reporting (MMR).

**YES** 

[Description of Carbon Pools and greenhouse gases selected – 8.2]

Above and below ground pools are included; Soil, Dead matter, and litter are not included (p 102, table 7.2). For deadwood and litter no national data is available and so data will be assumed to be 0. Soil carbon might increase since a large part of the intervention is planting trees on degraded land however the data is insufficient and will be put as 0. The choice for carbon pool makes sense, it is practical and the main carbon sources are covered.

CO2, CH4 and N2O emissions are included in the ER-PD (p 103) although only to address the emissions from fire. There is a special new annex dealing with fires, Annex 8.4, in response to TAP questions during the Fiji mission.

Also emissions from fuelwood collection, a major driver of emissions in many tropical countries, is studied in this ER-PD. In Annex 8.4 p 6: Estimation of Emissions from Fire and Fuelwood, fuelwood emissions in the FREL period are estimated to be around 83 ktCO2/yr or less than 2% of the FREL. It is therefore not further regarded in this ER-PD.

The indicator is met.

Ind. 4.2 Carbon Pools and greenhouse gases may be excluded if:

YES

- I. Emissions associated with excluded Carbon Pools and greenhouse gases are collectively estimated to amount to less than 10% of total forest-related emissions in the Accounting Area during the Reference Period; or
- II. The ER Program can demonstrate that excluding such Carbon Pools and greenhouse gases would underestimate total emission reductions.

[Description of Carbon Pools and greenhouse gases selected – 8.2]

All relevant pools and greenhouse gases are included. The arguments why deadwood, soils and litter and hardwood products were excluded seem solid.

The indicator is met.

C. 5 The ER Program uses the most recent Intergovernmental Panel on Climate Change (IPCC) guidance and guidelines, as adopted or encouraged by the Conference of the Parties as a basis for estimating forest-related greenhouse gas emissions by sources and removals by sinks.

**Ind. 5.1** The ER Program identifies the IPCC methods used to estimate emissions and removals for Reference Level setting and Measurement, Monitoring and reporting (MMR).

**YES** 

[Description of method used for calculating the average annual historical emissions over the Reference Period – 8.3]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area—9.1]

Throughout the document the IPCC Good Practice Guidance 2006 methods are referenced, the latest guidance (eg throughout section 8 on the FRL), and in many places IPCC default data from IPCC, 2006 are used. IPCC default equations were used to calculated emissions and correctly applied. Wetlands are rarely mentioned and thus not a significant land cover type in Fiji, so the 2013 IPCC Wetlands Supplement guidance does not seem to be relevant.

The indicator is met.

C. 6 Key data and methods that are sufficiently detailed to enable the reconstruction of the Reference Level, and the reported emissions and removals (e.g., data, methods and assumptions), are documented and made publicly available online. In cases where the country's or ER Program's policies exempt sources of information from being publicly disclosed or shared, the information should be made available to independent reviewers and a rationale is provided for not making these data publicly available. In these cases, reasonable efforts should be made to make summary data publicly available to enable reconstruction.

# **Ind. 6.1** The following methodological steps are made publicly available:

YES

- I. Forest definition:
- II. Definition of classes of forests, (e.g., degraded forest; natural forest; plantation), if applicable:
- III. Choice of activity data, and pre-processing and processing methods
- IV. Choice of emission factors and description of their development
- V. Estimation of emissions and removals, including accounting approach
- VI. Disaggregation of emissions by sources and removal by sinks
- VII. Estimation of accuracy, precision, and/or confidence level, as applicable
- VIII. Discussion of key uncertainties
- IX. Rationale for adjusting emissions, if applicable
- X. Methods and assumptions associated with adjusting emissions

[Forest definition used in the construction of the Reference Level 9.2]

[Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

The vast majority of the data involved in the FRL construction are made available publicly in the text, annexes and available commissioned technical papers. Forest definition is taken from FAO 2006 (p 94) and has the usual size (>0.5 ha), cover (> 10%) and height (>5m) criteria and includes stocked and unstocked land. The FAO categories open and closed forest is NOT retained in this ER-PD. Instead upland and lowland forest is distinguished. The decision to distinguish between Lowland and Upland Natural Forest was based on significant changes in structural, carbon and floristic characteristics in forests in Fiji below and above approximately 600 m a.s.l. ( p 106, ER-PD June 16 2019).

A piece of land is forest or non-forest (binary) with a carbon number attached to each class. These upland and lowland forests are defined as "all areas classified as forest. It includes primary (native) forest, human modified forests as well as small areas planted with native or introduced tree species which don't require concessions and cannot be distinguished from medium resolution imagery. It excludes forest in plantation lease areas." (p 108 table 8.1 (ER-PD June 14 2019). Several interventions are focused on agroforestry and there is a detailed overview of activities for all categories that generates reduced emissions including agroforest interventions. separate activity data on interventions including agroforestry (table 4-13p 73, 74,75, ER-PD June 14 2019 version). However, the activity description list the anticipated area influenced but not emission data linked to the detailed activities.

Three of the five activity data sources for constructing emissions/removals are data collected via government survey or company reporting. The other two input activity data are from satellite data for deforestation and reforestation; the revenue service for extraction of logging volume; logging company data for area logged and plantation company data for harvested volume and area and replanted area. All these activity data are defined and clear. The revenue service data and logging volume company data are yearly, and the quality control is described in page 146 Fig. 9.3 is gathered and/or processed.

Emission factors are well defined. There are data from IPCC default values, and data from the national forest inventory, other than one data value, carbon increment after logging (source is personal communication). The data, factors and the calculations are not broken down and therefore not easy or possible to replicate.

Uncertainties in the satellite data is well described and well documented with error tables.

The Chapter on reference level (chapter 8, page 105, ER-PD June 16 2019) mentions that the FRL is from 2006-2016 thus 11 year (p116, table 8-9 ER-PD June 14 2019). Afforestation and deforestation now detected by annual satellite data have a time period of 12 years (2005-2017), and the reference time for fire is 4 years.

Removals and emissions and sequestrations are disaggregated and calculated separately (see indicator 3.1). No Adjustment Factors are applied.

**OBSERVATIONS**: Uncertainties are discussed, but further details to more fully explain how some are addressed would be helpful. The uncertainties of the reported data (logging, replanting, fire) are mentioned and briefly discussed (p 114) but are deemed insignificant, though it is also mentioned on the same page that procedures were changed when inaccuracies were found. A short discussion on the possibility of illegal logging states that there is no illegal logging (p 126). The trees cut by smallholders are also deemed insignificant, since they cannot be sold and only are used locally. A fuller discussion that clarifies these minor issues would strengthen any revision of the ER-PD if one occurs, or could be addressed in some methods update document during implementation.

The TAP finds this indicator has been met.

**Ind 6.2** For the following spatial information, maps and/or synthesized data are displayed publicly, and reasonable efforts are made to explain how these were derived from the underlying spatial and other data, and to make key data sets or analyses publicly available:

YES

- II. Accounting Area
- III. Activity data (e.g., forest-cover change or transitions between forest categories)
- IV. Emission factors
- V. Average annual emissions over the Reference Period
- VI. Adjusted emissions

Any spatial data used to adjust emissions, if applicable.

[Forest definition used in the construction of the Reference Level 9.2]

[Description of method used for calculating the average annual historical emissions over the Reference Period 8.3] [Activity data & emission factors used for calculating the average annual historical emissions over the Ref. Period 8.3]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

Responses to specific indicators:

- I. Accounting Area: Yes
- II. Activity data (e.g., forest-cover change or transitions between forest categories): Yes.
- III. Emission factors: Yes.
- IV. Average annual emissions over the Reference Period: Yes.
- V. Adjusted emissions: NA

Maps: ER Program locations and where interventions would occur are clear. There now are several maps that give a good overview of the Program, specifically maps Figs. 3-1, 3-2 and 3-3 of the ER-PD accounting area, and Fig. 4-3 Forest Cover Map of the ER-P Accounting Area, also depicting the 20 Districts under ERP.

Annex 8.1 gives an overview of age of pine plantations and AGB (above round biomass) in tons of carbon (for 10 years to 17 years) as part of the fire emission calculation (p 20 ?).

**OBSERVATION**: For transparency and replicability, the carbon content (tC/ha) of plantation in different ages for pine and mahogany would have been welcome.

Full annual emissions in FREL period are given on page 128, table 8.17 (ER-PD June 14 2019), split out in

-	emissions from deforestation in natural forest	(29.6 MtCO2e – 2006-2016)
-	emissions from logging in natural forests	( 2.1 MtCO2e – 2006-2016)
-	emissions from biomass burning in softwood plantations	( 1.7 MtCO2e – 2006-2016)
-	emissions from harvesting in Hardwood and Softwood Plantation	s ( 6.6 MtCO2e – 2006-2016)
-	carbon removals from regrowth after logging in natural forests	(- 0.46 MtCO2e – 2006-2016)
-	carbon removals from afforestation / reforestation	( -3.6 MtCO2e – 2006-2016)
-	removals from Hardwood and Softwood Plantations	(-18.0 MtCO2e – 2006-2016)
-	Total emissions, total removals and total net	(NET 18.0 MtCO2e - 2006-2016)

(The total net emission value in Final ER-PD earlier version (version 3-June-2019) was 14 MtCO2e, thus an upward change of around 20% exists in the Final June 16 version.

The indicator is met.

# C.7 Sources of uncertainty are systematically identified and assessed in Reference Level setting and Measurement, Monitoring and reporting

**Ind 7.1** All assumptions and sources of uncertainty associated with activity data, emission factors and calculation methods that contribute to the uncertainty of the estimates of emissions and removals are identified.

YES

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 8.3]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

[Identification and assessment of sources of uncertainty 13.1]

Three of the five activity data sources for constructing emissions/removals are data collected via government survey or company reporting. The other two input activity data, deforestation and reforestation, are obtained from satellite data.

An accuracy matrix on the accuracy of detecting change with Landsat data was produced (annex 8-2, 13-June-2019) unmarked page, likely p 14 ). Though the overall accuracy is acceptable (0.86) this is false number in change accuracy matrix since the goal of the exercise is to detect change and the overall accuracy gives a measure of how well all classes are detected including the classes who do not change. And since no-change is

the default and usually has the most area in these classes, overall accuracies can be acceptable while the classification of change might be none significant. The TAP calculated an accuracy of change detection (classes Forest (F) to  $(\rightarrow)$  Non-Forest (NF) in Lowland and upland, and NF $\rightarrow$  F in lowland and upland, coded in annex 8-2 respectively as 171, 172, 711 and 712) of 0.58 which the TAP considers low but workable.

A low accuracy can be remedied by adjusted sampling scheme and an adjustment of areas linked to accuracies and total area of each class. Both these methods are used and described in (likely) page 12-15 of the new Annex 8-2 (16 June 2019 version).

Activity data have been estimated using a sampling-based approach as recommended in the international literature. The application of an unbiased estimator to sample data collected by probability sampling for estimation of area and construction of confidence intervals of area estimates satisfy the IPCC Good Practice criteria for establishing greenhouse gas inventories. Bootstrapping was used to construct confidence intervals and as opposed to application of a stratified variance estimator to the sample data -- not using a variance estimator is not incorrect, just unusual and is not a nonconformity.

All activity data area estimates are significantly different from zero at the 90% confidence level (I assume that would be the case also at 95% confidence level judging from the margin of errors). The bias-adjusted area estimates with confidence intervals are the data used for the calculation of carbon emissions and removals -- as such, the rather low producer's accuracies of class 171, 172 711 and 712 (up- and lowland forest loss and gain) are of secondary importance and do not constitute a non-conformity. The scarcity (<0.5%) of the activities of interest complicates the mapping and high map accuracies cannot be excepted.

The use of Landsat as a source of reference data is acceptable according to the literature provided that the collection of reference observations is a more accurate process than the mapping process -- manual interpretation land surface conditions in the reference data is a more accurate process than automated supervised classification.

The approach of estimating the activity data 2006-2016 and then simply dividing the estimates by ten to obtain annual areas assumes that the bias scales linearly in time. There are no evidence that such an assumption is invalid, and considering the scarcity of the activities on the land surface, it is highly unlikely that an attempt to obtain an independent annual estimates of activity data would be successful. Examples of annual estimation by dividing an estimate that represents a longer time period exist in the published literature.

A new page in the Final ER-PD (p 113) further details the accuracy assessment on self-reported data. Forest degradation, logging in natural forest data is based on data from Fiji's Timber Revenue System reporting (Annexes to Fiji ERP Document, p. 87) see map Fig 8-5, p 122 (ER-PD clean version 13-June-2019) and volume extracted and area affected are listed in unnumbered table at Annex 8-1 (version 13-June-2019 track changes, on unnumbered pages likely p 14, 15). ER-PD for areas logged in Natural Forest between 2006 and 2016 (total area: 19,783 ha). The areas and m³ harvested and replanted in plantation is data from the commercial plantation companies, Fiji Pine and Fiji Hardwood. Companies submit areas harvested, volume extracted, and areas replanted, to the Ministry in accordance with standard operating procedures (p 113). To get accurate data the Ministry conducts regular training (not clear how regular) on the data collection methods and carries out quality checks on the submitted data. The type of quality checks is not explained in the ER-PD neither are there numbers given on accuracy, if there have been quality checks. The ER-PD states there is no sampling error since data is based on a census.

After a spot check carried out by the Ministry, corrections were made based on random sampling of a proportion of logged and replanted areas, the ER-PD reports (p 113).

In summary, the reported data has quality checks and standard operational procedures largely in place.

**OBSERVATION**: However, these checks and procedures are not thoroughly described, and uncertainty analysis has not been carried out for them. The TAP is unclear how degradation (logging from commercial harvest) will be differentiated from deforestation. Is not clear if there a danger that the same tree removal would be counted as both deforestation and forest degradation. The same holds true for wood harvested in softwood

and hardwood plantations (Annexes, p. 100 and 107). The TAP considers this a minor non-conformity, though, since it would not lead to breakdown in the systems delivery. A clarification of these minor issues would improve a revision to the ER-PD if one occurs, or could be addressed in the implementation stage prior to first verification.

Table 12-1 (p 164, 165, ER-PD June 14 2019) is fully devoted to uncertainties of activity data, listing the sources of Uncertainty of Emission Factors and table 12-1, p166, ER-PD June 14 2019) assesses the total uncertainty of emissions and removals.

**OBSERVATION**: The uncertainties of the numbers for illegal logging and for under-reporting are not addressed. The self-reporting data from plantations do not have confidence intervals. And there is no discussion or identified source of random errors. Adding these would be a welcome addition.

Errors that are the result of assumptions (eg, what is upland vs lowland forest) are not discussed. The mismatch between land cover to land use is not discussed. Forests and plantations might be severely understocked (field mission TAP team). This would mean that carbon content of forest and plantations are much more varied than assumed, which would possibly add a large source of uncertainty not discussed.

**OBSERVATION:** Further there are no analyses of human analyst error in identifying the different land use classes (used as activity data in the calculations of deforestation and reforestation emissions). These errors are likely low, since these classes are usually easy to distinguish by human analysts. Agroforestry and trees-on-farm are mentioned as interventions and cannot easily be distinguished by land cover data, however, and no data on these classes are shared. Addressing these minor issues also would strengthen a revised ER-PD or later update documents during implementation.

The TAP finds the indicator met.

**Ind 7.2** The sources of uncertainty identified in Indicator 7.1: are assessed for their relative contribution to the overall uncertainty of the emissions and removals. [Identification and assessment of sources of uncertainty 13.3]

YES

An uncertainty analysis for the activity data derived from satellite is performed and an accuracy assessment is shown in annex 8- Full Monte Carlo analyses were performed on these data. In that sense the criteria is met.

The other self-reported activity data from companies and government census is discussed (p 113) but all deemed insignificant and no uncertainty analyses were carried out.

The ER-PD now offers substantial detail on use and quality of self-reported data (p 113). Fiji Pine, Fiji Hardwood Limited and natural forest logging contractors self-report actual timber volume extracted, thus no sampling error. Since standard operating procedures are used for these measurements, systematic measurement error of logs is likely to be small. Due to QA/QC checks performed by MOF staff, unreported logs are considered minimal. Digital maps of harvested areas from the logging plans provided by the loggers within natural and planation forests were used to determine the area logged and area of replanting and thus regrowth after logging. To avoid overestimation of carbon stock regrowth following replanting or natural regeneration in natural forest areas post-harvest, MOF conducts a QA/QC check of harvested and replanted areas, and makes corrections based on random sampling. Some remaining uncertainty is considered relevant to ER estimates for Forest Degradation and Enhancement of Carbon Stocks (Plantations) activities. To address this, the uncertainty related to harvested areas is categorized as medium in the Monte Carlo simulation, and uncertainty related to replanted areas is classified as large (Chapter 12, Annex 12.1, Chapter 12 offers detail).

The TAP finds the indicator is met

C 8 The ER Program, to the extent feasible, follows a process of managing and reducing uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting.

**Ind 8.1** Systematic errors are minimized through the implementation of a consistent and comprehensive set of standard operating procedures, including a set of quality assessment and quality control processes that work within the local circumstances of the ER Program.

**YES** 

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period, 13.2]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area]

Three of the five activity data sources for constructing emissions/removals are data collected via government survey or company reporting. The other two input activity data are estimated from sample data collected from satellite data (deforestation and reforestation). Uncertainties in the estimates of activity data are quantified for the satellite data. The data collected from company reports do have a quality control method (Figure 9-3,) and although the errors are not quantified, this should help produce a reliable dataset.

Quality control procedures and processes for reducing uncertainty associated with each activity are clearly spelled out. Deforestation in Natural Forest, Lowland and upland Quality control procedure in table 9-2, p 132, Forest Degradation in Natural Forest, p 134, Forest Degradation in Logged Natural Forest p135, Burnt Softwood Plantation p136, Carbon Enhancement in Natural Forest p137.

All reported data have the Management Services Division responsible for defining data collection protocols and conducting QA/QC processes. The QA/QC process for self-reported data from companies on harvest and replanting areas, volumes etc. for example is detailed (p 113), but other such processes are not spelled out as clearly.

The uncertainty in these data are dealt with by systematically and applying same values over the FREL and the ER period. Systematic errors have been minimized – sample data collected by probability designs identify systematic errors; the effects of systematic errors are accommodated by the use of an unbiased estimator when applied to sample data. The uncertainties are estimated using international guidelines, the satellite-generated data have been adjusted for error, and standard controls for the company-reported data are now in place.

**OBSERVATION**: Some other data on TEF, MAIC, MAIV factors, were partly from expert opinion, which is not a strong reference and could be source of bias. Stronger references from the literature ideally should be used as the system is improved and implemented. This can be addressed in a ER-PD update or during implementation.

The TAP finds the indicator is met.

**Ind 8.2** Random errors and other uncertainties are minimized to the extent practical based on the assessment of their relative contribution to the overall uncertainty of the emissions and removals.

YES

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 10, 13]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

[Identification and assessment of sources of uncertainty 13.1]

The emission factors are defined and have large uncertainties (also via Monte Carlo, so the spread of data is understandably large). Random errors are just inherent statistical fluctuations from one measurement to another and are reduced by simply increasing the number of observations. Random errors are sometimes referred to as just "noise" in the data.

The ERPD assessment focuses on residual uncertainty. This may have been reduced through appropriate measures, which may be why more detail is not presented, and why detailed estimates of the residual uncertainty as compared to total uncertainty are not considered necessary.

**OBSERVATION**: The TAP observes that a more thorough discussion of the random errors would be welcome.

Random data errors are discussed on p 113. For logging data, procedures are in place to minimize error. Potential errors in deforestation estimates because of illegal logging, as well as self-reported data on fire, planting and removals are discussed briefly. None are deemed significant and thus are not minimized. Additionally, self-reported statistical data on harvest and replanting area and volume, etc. are actual values achieved in the field, as opposed to surveys or calculated estimates – so they inherently tend to have minimal uncertainty.

Table Error! No text of specified style in document.-2 details Fiji 's stepwise improvement plan for the National Forest Monitoring System and for the FREL. This is based on the well-known Global Forest Observations Initiative Country Needs Assessment process, and outlines a thorough data improvement and capacity building set of steps Fiji plans to undertake over the next few years. Four of the first five (of 18) planned steps address issues mentioned above at least in part.

This is considered a minor non-conformity. Additional detail would strengthen the ER-PD if it is updated, or could be provided prior to first verification.

The TAP finds the indicator is met.

C 9 Uncertainty of activity data and emission factors used in Reference Level setting and Measurement, Monitoring and reporting is quantified in a consistent way, so that the estimation of emissions, removals and Emission Reductions is comparable among ER Programs

Ind 9.1 Uncertainty associated with activity data and emission factors is quantified using accepted international standards, for example by providing accuracy, confidence interval, distribution of error, and propagation of error. Where errors in data and methods are considered large as defined in IPCC Guidelines, Monte Carlo methods (numerical simulations) should be used to estimate uncertainty

YES

[Activity data and emission factors used for calculating the average annual historical emissions over the Reference Period 13.1]

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

As mentioned, three of the five activity data sources for constructing emissions/removals are data collected via government survey or company reporting. The other two input activity data are from satellite data (deforestation and reforestation).

In Table 12.3 and 12.4 all activity data and emission parameters have an assigned uncertainty quantification. Very detailed and well described.

**OBSERVATION**: The uncertainties of the numbers because of illegal logging, and under reporting, are not addressed. The self-reporting data from plantations do not have confidence intervals. And there is no discussion or identified source of random errors. This could be a welcome addition.

A Monte Carlo analysis is presented, and Table 12-3 provides the final FREL with upper and lower bounds resulting from the Monte Carlo exercise table. Fiji has clarified that all the activities mentioned in the FREL have gone through a Monte Carlo exercise (Fiji document replying to TAP questions, June 10). The full activities for FREL are (1) emissions from deforestation in natural forest, (2) emissions from logging in natural forest, (3) emissions from biomass burning in softwood plantations, (4) emissions from harvesting in Hardwood and Softwood Plantations, (5) carbon removals from regrowth after logging in natural forests, (6) carbon removals from afforestation / reforestation, (7) carbon removals from Hardwood and Softwood Plantations).

The TAP finds the indicator is met. Uncertainties are quantified and MC analyses have been carried out. Uncertainty in AD and EF used in setting the reference level has been met. The construction of distributions defined by sample-based estimates and confidence intervals from which values of AD and EF are sampled in a Monte Carlo simulation satisfies the reporting criteria.

Ind 9.2 Uncertainty of the estimate of Emission Reductions is quantified using Monte Carlo methods. Underlying sources of error in data and methods for integrated measurements of deforestation, forest degradation and enhancements (e.g., as in a national forest inventory) are combined into a single combined uncertainty estimate and are reported at the two-tailed 90% confidence level

N.A.

[Quantification of uncertainty in Reference Level setting 13.2]

Not applicable at this stage.

**Ind 9.3** Uncertainty of Emissions Reductions associated with deforestation, forest degradation and enhancements are reported separately if measured through separate (i.e., non-integrated) approaches and when degradation is estimated using proxy data.

N.A.

[Quantification of uncertainty in Reference Level setting 13.2]

Not applicable at this stage.

C 10 The development of the Reference Level is informed by the development of a Forest Reference Emission Level or Forest Reference Level for the UNFCCC

Ind 10.1 The Reference Level is expressed in tons of carbon dioxide equivalent per year

YES

[Estimated Reference Level 9.7]

All data is expressed as it should be in hectares and tonnes carbon and tonnes CO2e. In Annex 8.3 (Estimation of Forest Reference Level) there are N2O and CH4 emissions factors (Table 2 pp 77-78) from fuelwood burning (respectively 0.2 g N2O/kg dry matter burnt, 6.8 g/kg dry matter burnt) from IPCC 2006 Vol. 4, chapter 2, Table 2.5, and the conversion factors from N2O and CH4 to CO2e are taken from IPCC 2014, Box 3.2, Tab. 1, as specified on p 77 of the annex (not specified what the conversion factor actually is).

FREL Page 128, table 8-7 (ER-PD June 14 2019)(in MtCO2e/yr)

FREL emission = 2.9 (Def) + 0.2 (Deg) + 0.16 (Fire) + 0.6 (Planh) = 3.9

FREL sequestration = 0.04 (Inc) + 0.32 (Ref) + 1.64 (Planp) = 2.0

FREL TOTAL = 1.9

(Definitions: Def= deforestation, DEG= degradation, Fire = fire Planh = harvest of plantation, Inc= increase in carbon stock after logging, Ref = reforestation/afforestation, Planp = planting new plantations)

**OBSERVATION**: the conversion factors of non-CO<sub>2</sub> to CO<sub>2</sub>e used should be clarified, to be certain the most recent IPCC conversion factors should be used. The TAP perceives that the appropriate factors have been used, but it would be helpful for the final ER-PD to state this definitively.

The indicator is met.

**Ind 10.2** The ER Program explains how the development of the Reference Level can inform or is informed by the development of a national Forest Reference Emission Level or Forest Reference Level, and explains the relationship between the Reference Level and any intended submission of a Forest Reference Emission Level or Forest Reference Level to the UNFCCC

YES

[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.8]

The report builds on earlier reports from Fiji. Its First National Communication Under the Framework Convention on Climate Change (2005) does include the importance of soft and hardwood plantation and deforestation. The softwood plantations at that time covered 43,000 ha, hardwoods 42,000 ha, together with estimated sink of -10 MtCO2. Deforestation (1985 to 1996) averaged 2,645 ha/yr (current FREL 3,077 ha/yr), and reduction of protected forest was estimated as 1.55 kha. It was assumed that the cleared forests were mainly used for agricultural purposes, but drivers in the ER-PD are more diverse: Forest conversion to crop production, Forest conversion to pasture (livestock), Poorly planned infrastructure development, Conventional Logging, Traditional use (p 37).

The older FAO FRA data and tables and measurement based on this in the ER-PD (e.g. Table 4-15) classifies open and closed strata. However, for the ER-PD analysis these FRA categories where not retained (p 94). The change in choice of strata was the result of an evaluation of the mapping accuracy. The mapping of these strata was not possible with sufficient accuracy. Further the carbon difference between the open and closed strata was less clear and more pronounced between the newly chosen classes upland and lowland. Throughout the ER-PD, all analyses are now carried out with the strata upland and lowland forest.

Since a FREL has not yet been submitted to the UNFCCC by Fiji, and since Fiji now plans to use the new ER-PD methods and approach for its eventual submission to UNFCCC, these two major documents and processes will be consistent.

Additional work will be undertaken to implement consistent use of this improved stratification: "In a stepwise approach, a priority of the NFMS MRV (see Chapter 9) is to improve the NFI sample frame to capture carbon stocks and stock changes in open and closed forest within the upland and lowland strata. In parallel to NFI data collection improvements, the semi-automated algorithms for mapping land cover change will be calibrated to enable the capturing of changes in and between open and closed forest classes. These combined improvements will facilitate a move away from a proxy approach to monitoring and reporting degradation to a direct approach using a combination of remote sensing and ground-based data" (June 14<sup>th</sup> ER-PD, p 103).

The indicator has been met.

**Ind 10.3** The ER Program explains what steps are intended in order for the Reference Level to achieve consistency with the country's existing or emerging greenhouse gas inventory

YES

[Relation between the Reference Level, the development of a FREL/FRL for the UNFCCC and the country's existing or emerging greenhouse gas inventory 9.6]

Fiji is planning to develop a full National forest monitoring system, catalyzed by the development of the ER-PD. The Ministry of Forestry will use more remote sensing data than previously (ER-PD section 9). The NMFS will use the same variables and measurements and methods as the FREL. New quality assurances will be built for the data that is collected by reporting to the ministries (logging companies and plantation company's data). New organizational structures between Ministry of Economy, Climate Change division (UNFCCC focal point and responsible for biannual reporting to the UNFCCC) and the Ministry of Forest are set up (the ministry of forestry is responsible for the NMFS). See Figure 9-1 for institutional coordination and table 9-1 for the responsibilities.

A new unit will be established, Management Service Division, "responsible for measurement, monitoring and reporting activities including data collection and management and verifying outputs from the National Forest Monitoring System. This is a significant step forward for Fiji in its ability to consistently report forest change statistics", and is "aimed at improving the quality and completeness of the inventory data collected". Tables 9-1 to 9-13 and the text below Table 9-13 lay out the Division's and other entities' responsibilities for producing the FREL in great detail. Section 9.2 explains the organizational roles played by Min. of Forestry and Min. of Economy's Climate Change and International Cooperation Div. in coordinating production and approval of submissions to UNFCCC, including the GHG inventory and FREL.

#### C 11 A Reference Period is defined

Ind 11.1 The end-date for the Reference Period is the most recent date prior to two years before the TAP starts the independent assessment of the draft ER Program Document and for which forest-cover data is available to enable IPCC Approach 3. An alternative end-date could be allowed only with convincing justification, e.g., to maintain consistency of dates with a Forest Reference Emission Level or Forest Reference Level, other relevant REDD+ programs, national communications, national ER program or climate change strategy

YES

#### [Reference Period 9.1]

The Reference period is defined as 2006-2016, thus 11 years. From the 6 activities measured, 3 activities have a different baseline period. Fire has a 4 year baseline period, deforesting and reforesting a 12 year basely period instead of the 11 year baseline period.

The end date of 2016 is (almost) 2 years before the TAP mission (Jan 2019) conform the framework guidance.

The activity data is annual which gives a good idea of the drivers and of possible change in drivers. The fluctuation seems normal but there are large annual swings.

- The afforestation data varies between (2005-2017) satellite derived
  - o 10,000 ha (2007-2008) to 2,300 ha (2010-2011) in lowland
  - o 3,600 ha (2006-2007) to 250 ha (2016-2017) in upland
- the reforestation data varies between (2005-2017) satellite derived
  - o 13,000 ha (2013-2014) to 2,700 (2007-2008) in lowland
  - o 5,000 ha (2015-2016) to 600 ha (2005-2006) in upland
- Degradation logging 2006 2016 reported
  - o 81,000 m3 in 2008 and 26,000 M3 in 2013
- Fires only in softwood plantation 2015-2018
  - o 730 ha in 2018 and 2,700 in 2017
- Area planted in plantation 2006-2016 reported
  - o 1,500 ha (2006), 0 ha (2016) softwood
  - o 1,000 ha (2012) 0 (2013 -2015)Observation:
- Fire reference period is short 2015-2018.
- The high variability of the data, makes the average a less strong measurement for all of the FREL activity data. Consequently, it will be more difficult to detect real decrease during the MMR period since the MMR period is only 5 years.

The indicator has been met.

**Ind 11.2** The start-date for the Reference Period is about 10 years before the end-date. An alternative start-date could be allowed only with convincing justification as in Indicator 11.1, and is not more than 15 years before the end-date.

YES

### [Reference Period 9.1]

The FREL starts 2006 and goes through 2016, thus 11 years. The exception on the 11 years reference period is the reference period for fires, for which data are only available from 2015-2018, table 8-13, p 123 (ER-PD June 14 2019) and the Deforestation/reforestation period of 12 years. There is no fire data available before 2015, which explains the short time period for fires.

Although the time periods for all FREL components are not equal, the impact on the FREL seems negligible.

# C 12 The forest definition used for the ER Program follows available guidance from UNFCCC decision 12/CP.17

**Ind 12.1** The definition of forest used in the construction of the Reference Level is specified. If there is a difference between the definition of forest used in the national greenhouse gas inventory or in reporting to other international organizations (including an Forest Reference Emission Level or Forest Reference Level to the UNFCCC) and the definition used in the construction of the Reference Level, then the ER Program explains how and why the forest definition used in the Reference Level was chosen.

YES

[Forest definition used in the construction of the Reference Level 9.2]

The definition of forest follows FAO FRA (p 94) guidelines and has been used for UNFCCC reporting. The current ER-PD uses different strata then in previous FRA and UNFCCC reporting. The current choice of strata is an improved design to understand and measure carbon better. Currently, the same strata will be used in the NMFS and so the NMFS data is difficult to compare to FRA and UNFCCC and other older data, always given in open and closed forest. The text mentions that the NMFS will in the future go back to reporting open and closed forest (p 94).

Part of the interventions to reduce emissions is the enhancement of carbon stock by agroforestry. Agroforestry will focus on restoration of riparian zones (5,000 ha) and shade-grown agriculture (5,000); p 10 and Table 4-9 p 63, specify 7,500 ha of agroforestry establishment. Agroforestry is also used to arrest forest loss associated with agriculture expansion (p 23, 24). Agroforestry is described (p 62) as "integrate small timber production, fine timber, fuel woodlots and fruiting trees, with crop production".

**OBSERVATION**: It is not fully clear if this category is classified as forest or as crops. This should be simple to clarify in the next ER-PD version. It should not have significant implications for the reference level calculations, since the lands are included, the area is small, and it is simply not clear if they considered forest of agricultural lands.

Coconut palm and mangrove are not included in the ER-PD or defined as forest (on land).

The indicator has been met.

C 13 The Reference Level does not exceed the average annual historical emissions over the Reference Period. For a limited set of ER Programs, the Reference Level may be adjusted upward by a limited amount above average annual historical emissions. For any ER Program, the Reference Level may be adjusted downward.

Ind 13.1 The Reference Level does not exceed the average annual historical emissions over the Reference Period, unless the ER Program meets the eligibility requirements in Indicator 13.2. If the available data from the National Forest Monitoring System used in the construction of the Reference Level shows a clear downward trend, this should be taken into account in the construction of the Reference Level

YES

[Average annual historical emissions over the Reference Period 9.6, 13.2]

Table 13-1 spells out the FREL and the emissions savings in one table.

This FREL has an average emission of 1.64 MtCO<sub>2</sub>/yr over the Reference Period of 2006-2016, shown in Table 8-2 p 107 and Table 8-16, p 126 (ER-PD June 14 2019). Average annual estimated emissions for the ER-P period of 2020 to 2024 are 1.3m t CO2e, with total estimated net emissions reductions of 450,515/yr or 2.25m over the 5-year ER-P term (Table 13-1). no adjustment is requested or pertinent.

**Ind 13.2** The Reference Level may be adjusted upward above average annual historical emissions if the ER Program can demonstrate to the satisfaction of the Carbon Fund that the following eligibility requirements are met:

NA

- (i)Long-term historical deforestation has been minimal across the entirety of the country, and the country has high forest cover (country or jurisdictional area);
- (ii) National circumstances have changed such that rates of deforestation and forest degradation during the historical Reference Period likely underestimate future rates of deforestation and forest degradation during the Term of the ERPA.

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6].

no adjustment is requested or pertinent, so not applicable.

Ind 13.3 For countries meeting the eligibility requirements in Indicator 13.2, a Reference Level could be adjusted above the average historical emission rate over the Reference Period. Such an adjustment is credibly justified on the basis of expected emissions that would result from documented changes in ER Program circumstances, evident before the end-date of the Reference Period, but the effects of which were not fully reflected in the average annual historical emissions during the Reference Period. Proposed adjustments may be rejected for reasons including, but not limited to:

NA

- i. The basis for adjustments is not documented; or
- ii. Adjustments are not quantifiable.

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]

NA

### no adjustment is requested or pertinent, so not applicable.

Ind 13.4 An adjustment of the Reference Level above the average annual historical emissions during the Reference Period may not exceed 0.1%/year of Carbon Stocks

NA

[Explanation and justification of proposed upward or downward adjustment to the average annual historical emissions over the Reference Period, Quantification of the proposed upward or downward adjustment to the average annual historical emissions over the Reference Period 9.6]

no adjustment is requested or pertinent, so not applicable.

C 14 Robust Forest Monitoring Systems provide data and information that are transparent, consistent over time, and are suitable for measuring, reporting and verifying emissions by sources and removals by sinks, as determined by following Criterion 3 within the proposed Accounting Area

**Ind 14.1** The ER Program monitors emissions by sources and removals by sinks included in the ER Program's scope (Indicator 3.1) using the same methods or demonstrably equivalent methods to those used to set the Reference Level.

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]

The FREL and ER-PD period will use the same method: "The method for estimating emission removals (ERs) will be consistent with that used to estimate the Forest Reference Level (FRL), with all equations and emissions factors being consistent. The monitored activity data (AD) will be inputted into the estimation framework and ERs estimated based on the variation from the FRL" (p 132, ER-PD June 14 2019).

Three of the five input data for constructing the carbon saving are proxy data collected from the revenue service (logging) or self-reporting (harvest and planting of plantations). In response to TAP questions, Fiji has added a description of the process for review and sharing of these proxy data from the source to the REDD+ agency, and the quality control procedures.

The potential for nesting of REDD+ activities in the ER-P accounting area was unclear in previous drafts, but the Final ER-PD definitively states that no nesting will occur, and that the one Drawa Project that has produced tradable carbon tonnes will be excluded from the ER-P and not used in the calculating or reduction of emissions. All three or so pilot REDD+ projects will follow the eventual national nesting and accounting rules once generated by about 2022.

The indicator has been met.

Ind 14.2 Activity data are determined periodically, at least twice during the Term of the ERPA, and allow for ERs to be estimated from the beginning of the Term of the ERPA. Deforestation is determined using IPCC Approach 3. Other sinks and sources such as degradation may be determined using indirect methods such as survey data, proxies derived from landscape ecology, or statistical data on timber harvesting and regrowth if no direct methods are available

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 9.1]

Estimation of all activity data is done annually -- deforestation, reforestation, fires from satellite measurements and logging, replanting and harvesting are collected annually to the Forestry Ministry REDD+ unit. Reporting against the FREL will occur every 2 years so twice during the ERPA term.

The degradation and harvest data is collected now every 6 months and submitted to the REDD+ unit (p 148, ER-PD June 14 2019).

The indicator has been met.

Ind 14.3 Emission factors or the methods to determine them are the same for Reference Level setting and for Monitoring, or are demonstrably equivalent. IPCC Tier 2 or higher methods are used to establish emission factors, and the uncertainty for each emission factor is documented. IPCC Tier 1 methods may be considered in exceptional cases

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1]

The FRL was developed using a new data set for activity data as well as more refined National Specific emissions factors for above-ground biomass. The estimation methodology and data used for the development of Fiji's FRL for the ER-Program will be used in the national greenhouse gas inventory and the eventual UNFCCC submission.

Emission Factor data will be collected via permanent plots (page 149). Emission factors are to be estimated from a combination of national data, Permanent Sample Plots (PSP) and IPCC default values, so the emission factors likely will not change over the ER-PD period ER-PD June 14 2019).

**OBSERVATION**: If any updating does occur, presumably it would use the same methods, in order to be demonstrably equivalent to the original EFs. Otherwise, technical corrections should be applied to the Reference Level to ensure consistent emission factors.

# C 15 ER Programs apply technical specifications of the National Forest Monitoring System where possible

**Ind 15.1** ER Programs articulate how the Forest Monitoring System fits into the existing or emerging National Forest Monitoring System, and provides a rationale for alternative technical design where applicable.

YES

[Relation and consistency with the National Forest Monitoring System 10.3]

The Management service division (MSD), the REDD+ unit is part of this division, under the ministry of forestry is responsible for all MRV for ER-PD monitoring and NMFS (p 108). The MSD will also include new database and GIS functions that will be used in the NMFS (p 109). The new structure of the MSD is described in figure 9-2 (p 145, ER-PD June 14 2019).

The NMFS will be used for all international reporting (p 110).

The indicator has been met.

# C 16 Community participation in Monitoring and reporting is encouraged and used where appropriate

**Ind 16.1** The ER Program demonstrates that it has explored opportunities for community participation in monitoring and reporting, e.g., of ER Program Measures, activity data, emission factors, safeguards and Non-Carbon Benefits, and encourages such community participation where appropriate

YES

[Measurement, monitoring and reporting approach for estimating emissions occurring under the ER Program within the Accounting Area 10.1, 10.3]

The ER Program involves several community-based activities and community collection of data on harvesting, replanting, establishment of new forests and minimizing fire incidents (p 105). New protocols are developed for community monitoring and protocols with communities be established modelled on the established processes between MSD and the timber industry (Figure 9.1 & 9.3, p 148 ER-PD June 14 2019). This new community monitoring will be based on the experience with the reporting of the plantations and communities will be trained on GIS and map fire scars.

The indicator has been met.

#### C 17 The ER Program is designed and implemented to prevent and minimize potential displacement

**Ind 17.1** Deforestation and degradation drivers that may be impacted by the proposed ER Program measures are identified, and their associated risk for displacement is assessed, as well as possible risk mitigation strategies. This assessment categorizes Displacement risks as high, medium or low.

YES

[Identification of risk of Displacement 11.1]

On page 153, table 10-1 displacement risks are summarized (ER-PD June 14 2019). Total risk is low. Since the area of forest is marginally suited for agriculture, plantations are only allowed and approved by the government and land is owned by the communities the risk of large-scale conversion of new land is low. A few factors that could mitigate reduced deforestation is the popularity of Kava. Kava is a culturally important traditional root crop relaxant that seems to be an increasingly important crop widely discussed. Population is increasing. This potentially could lead to higher demand for land for Kava and may need to be estimated.

**OBSERVATION**: The Program may want to keep an eye on expansion of kava and other increasingly popular crops as a potentially expanding driver during the Program period.

**Ind 17.2** The ER Program has in place an effective strategy to mitigate and/or minimize, to the extent possible, potential Displacement, prioritizing key sources of Displacement risk.

**YES** 

[ER Program design features to prevent and minimize potential Displacement 11.2]

Mitigation strategies on displacement are shown in Figure 10-1, p 154 (ER-PD June 14 2019). Mitigation strategies are introducing District-level land use planning Component 1), forest law enforcement, an improved forest information system, improved livelihoods and several more strategies. Component 2 will focus on new harvest code for reduced impact logging, and community agreement on tree-planting and protection, implement strategies to reduce the possibilities of kava encroachment into forest, and establish community forest conservation agreements.

The indicator has been met.

**Ind 17.3** By the time of verification, the ER Program has implemented its strategy to mitigate and/or minimize potential Displacement

N.A

Only applicable at the time of verification.

**Ind 17.4** ER Programs are also invited to report on changes in major drivers in the ER Accounting Area, any Displacement risks associated with those drivers, and any lessons from the ER Programs' efforts to mitigate potential Displacement

N.A

Only applicable at the time of verification.

C 18 The ER Program is designed and implemented to prevent and minimize the risk of reversals and address the long-term sustainability of ERs

**Ind 18.1** The ER Program has undertaken an assessment of the anthropogenic and natural risk of reversals that might affect ERs during the Term of the ERPA and has assessed, as feasible, the potential risk of reversals after the end of the Term of the ERPA

YES

A long list of potential risks of reversal is given p 158, tables 11.1 (ER-PD June 14 2019) It also shows a list of mitigation factors for these risks 11.2. Reversal risks mentioned include: lack of stakeholder support (10%), lack of institutional capacity (10%), ineffective addressing drivers (5%).

increase demand for agriculture land, by crops and mining are not qualified as risks . Though both are mentioned as drivers in the document (mining e, g, page 9, 39, 42).

**OBSERVATION**: the possibilities of increase in mining and expansion of agriculture could be better documented.

The indicator has been met.

**Ind 18.2** The ER Program demonstrates how effective ER Program design and implementation will mitigate significant risks of Reversals identified in the assessment to the extent possible, and will address the sustainability of ERs, both during the Term of the ERPA, and beyond the Term of the ERPA

YES

[ER Program design features to prevent and mitigate Reversals 12.2]

The main issue mentioned for avoiding reversal during and beyond the lifetime of the ER Program is to develop a National Land Use Plan to ensure all future land use (including REDD+) are embedded in a regulatory environment (p 161, ER-PD June 14 2019). In addition, the potential lack of stakeholder support is mitigated since the ER-Program activities have been developed to support local land owners and has several sub-elements all aimed at increasing landowners and managers ability to maximize returns whilst maintaining or enhancing forest cover (p 127). So there is a low probability that smallholders would not be engaged and assist in reduced emissions over long time period.

The indicator has been met.

# C 19 The ER Program accounts for Reversals from ERs that have been transferred to the Carbon Fund during the Term of the ERPA

**Ind 19.1** During the Term of the ERPA, the ER Program accounts for Reversals from ERs using one of the following options:

YES

- Option 1: The ER Program has in place a Reversal management mechanism (e.g., buffer reserve or insurance) that is substantially equivalent to the Reversal risk mitigation assurance provided by the 'ER Program CF Buffer' approach referred to in option 2 below, appropriate for the ER Program's assessed level of risk, which in the event of a Reversal during the Term of the ERPA will be used to fully cover such Reversals.
- Option 2: ERs from the ER Program are deposited in an ER Program-specific buffer, managed by the Carbon Fund (ER Program CF Buffer), and based on a Reversal risk assessment. ERs deposited in the ER Program CF Buffer (Buffer ERs) will not be transferred to the Carbon Fund. In the event that a Reversal event occurs during the Term of the ERPA, an amount of Buffer ERs will be cancelled from the ER Program

[Reversal management mechanism, Selection of Reversal management mechanism 12.3]

Fiji has selected Option 2.

Fiji has recalculated the reversal buffer (as quantified in Chapter 11) for the final June 26<sup>th</sup> ER-PD, and estimates a reversal risk buffer of 26% of the ex-ante emissions reductions, which would be deposited into the ER Programspecific buffer managed by the Carbon Fund. Fiji has selected option 2 above, page 162 (June 16 ER-PD).

The TAP calculated a slightly different buffer value and thus a slightly different savings and hence higher Emissions Reductions available to the FCPF in the earlier ER-PD versions.

Fiji has corrected several calculation issues in the Final June 16th ERPD. Although both the uncertainty and the non-permanence buffers appear merged in Table 13-1, they are derived from Table 13-2 which calculates each buffer independently. These corrections are now clear and very helpful.

The indicator now has been met.

<sup>1</sup> Criterion 22: 2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the following conservativeness factors for deforestation:

Aggregate Uncertainty of Emissions Reductions	Conservativeness Factor			
≤ 15%	0%			
> 15% and ≤ 30%	4%			
> 30 and ≤ 60%	8%			
> 60 and ≤100%	12%			
> 100%	15%			

For estimated emissions reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions

3. Set aside a number of ERs in the ER Program CF Buffer or other reversal management mechanism created or used by an ER Program to address Reversals. C 20 The ER Program, building on its arrangements put in place during the readiness phase and during the Term of the ERPA, will have in place a robust Reversal management mechanism to address the risk of Reversals after the Term of the ERPA Ind 20.1 At the latest 1 year before the end of the Term of the ERPA, the ER Program will have in place N.A a robust Reversal management mechanism or another specified approach that addresses the risk of Reversals beyond the Term of the ERPA Only applicable before the end of the ERPA term. Ind 20.2 If the ER Program has selected option 2 under Indicator 19.1, all or a portion of the Buffer ERs N.A of the ER Program, subject to a Carbon Fund review of the Methodological Framework and a decision of the parties to the ERPA in 2019, will be transferred to the mechanism identified in Indicator 20.1 at the end of the Term of the ERPA. If the ER Program fails to meet the requirements of Indicator 20.1, all remaining Buffer ERs in the ER Program CF Buffer will be cancelled Only applicable before the end of the ERPA term. C 21 The ER Program monitors and reports major emissions that could lead to reversals of ERs transferred to the Carbon Fund during the Term of the ERPA Ind 21.1 The ER Program Monitoring Plan and Monitoring system are technically capable of identifying Reversals YES [Monitoring and reporting of major emissions that could lead to Reversals of ERs 12.4] Details of the monitoring system, which appears capable of detecting reversals: (1) Deforestation will be detected by satellite data (Landsat 30m) and this system is deemed up to the task as is currently described. (2) Degradation data will be collected from the revenue service. There is a protocol on data reporting is lacking. (3) Reforestation is detected by satellite data and ground truth and high resolution satellite. (4) Harvest and planting plantations are self-reported by the plantation companies. There is a protocol for how these plantations will report to the REDD+ agency. During the ER Program, possible reversals of previously transferred ERs by the next monitoring event will be reported to the Carbon Fund within the timeline prescribed in the Carbon Fund Methodological Framework (p 128). A percentage of the potential emissions under the proposed ER Program will be used as insurance against the occurrence of any reversals in the Accounting Area included in the Program. The indicator has been met. Ind 21.2. The ER Program reports to the Carbon Fund within 90 calendar days after becoming aware N.A of any emissions in the Accounting Area or changes in ER Program circumstances that, in the reasonable opinion of the ER Program, could lead to Reversals of previously transferred ERs by the next Monitoring event. The ER Program explains how the potential Reversals would be addressed by additional ER Program Measures or by the Reversal management mechanism described in Indicator 19.1.

Only applicable at the time a reversal occurs and at the time of verification.

## C 22 Net ERs are calculated by the following steps:

- 1. Subtract the reported and verified emissions and removals from the Reference Level
- 2. Set aside a number of ERs from the result of step 1, above, in a buffer reserve. This amount reflects the level of uncertainty associated with the estimation of ERs during the Term of the ERPA. The amount set aside in the buffer reserve is determined using the conservativeness factors for deforestation listed in the MF. For estimated emissions reductions associated with degradation, the same conservativeness factors may be applied if spatially explicit activity data (IPCC Approach 3) and high-quality emission factors (IPCC Tier 2) are used. Otherwise, for proxy-based approaches, apply a general conservativeness factor of 15% for forest degradation Emission Reductions.
- 3. Set aside a number of ERs in the ER Program CF Buffer or other reversal management mechanism created or used by an ER Program to address Reversals

# [Ex-ante estimation of the Emission Reductions 14.3]

YES

The ER-PD of June 16<sup>th</sup> (section 13) estimates 2.5million tCO2 net ERs over 2020-2024. This estimate includes after a conservativeness factor of 8% for uncertainty in emissions from deforestation, afforestation and reforestation; 15% for uncertainty of the proxy approach to estimation of emissions from forest degradation; and a reversal risk buffer of 26% of ERs. Carbon Fund results-based payments are expected to contribute about USD \$12.5 million to financing the Program, at a price of \$5/tCO2.

Based on uncertainty analysis, 36% of the ERs will subtracted from the initial expected savings. 26% will be deposited in the Carbon Fund managed by the FCPF at the latest one year before the end of the ER-PA term. (P 163 ER-PD June 14 2019). If these values are correct, then the ER Program will have in place a robust reversal management mechanism or another specified approach that addresses the risk of reversals beyond the term of the ER.

The TAP finds that the indicator has been met.

C 23 To prevent double-counting, ERs generated under the ER Program shall not be counted or compensated for more than once. Any reported and verified ERs generated under the ER Program and sold and/or transferred to the Carbon Fund shall not be sold, offered or otherwise used or reported a second time by the ER Program Entity. Any reported and verified ERs generated under the ER Program that have been sold and/or transferred, offered or otherwise used or reported once by the ER Program Entity shall not be sold and transferred to the Carbon Fund

## (i) [Participation under other GHG initiatives 14.1]

YES

ER-PD now clearly describes the existence of two REDD+ projects being developed. One of the projects -- the Drawa Project -- already generated ERs. But the Nakauvadra Community Based Reforestation project does not intend to generate ERs for transaction (the project validation has been done following the CCB standard, and will not result in issuance of tradable climate, community and biodiversity benefits). Fiji also has implemented the Emalu REDD+ pilot project, but it is focused on carbon measurement and will not result in transactable carbon emission reductions.

The Drawa Project and the Nakauvadra Community Based Reforestation project descriptions and geographic locations are identified in Section 18.1 and 18.2, pp 248 to 251.

The Drawa Forest Project includes 4,120 ha forest, has a 30-year timeframe, and expects to sequester 35k tCO2e (TAP online review). It has been validated and verified in 2015 under the Plan Vivo Standard, and registered in May 2018 (http://www.planvivo.org/project-network/drawa-rainforest-carbon-project-fiji/nd). The Project has

already emitted and sold carbon credits in 2018 to the Swedish companies ZeroMission and OPUS Bilprovning (see project homepage http://www.nakau.org/blog/fiji-community-celebrates-countrys-first-sale-of-rainforest-carbon-media-release; ERPD p 225 Benefit Sharing section).

The Nakauvadra Community Based Reforestation Project has been developed by Conservation International, with funding support from Fiji Water. The project achieved Gold-level validation for the Climate Community and second Biodiversity (CCB) standard, edition, In October 2013 (http://www.climatestandards.org/2013/04/22/the-nakauvadra-community-based-reforestation-project/), but the project has not yet been verified against the CCB Standard (pp 250-251, Section 18.1). The project is located in Ra province on the island of Viti Levu and is comprised of 1,135 ha of reforestation plots and a 11,387 ha forest refuge that has been designed as a key biodiversity area for protection. An estimated 283,489 tonnes of CO2 will be sequestered over the lifespan of the project (30 years) as a result of project activities. However, it "will not be generating tradable carbon credits and is instead fully funded through a grant from Fiji Water" (accessible at: https://theredddesk.org/countries/initiatives/nakauvadra-community-based-reforestation-project).

The ERPD states that to avoid double counting (p 251) "...the MOF is developing a Nesting Guideline to establish a single national accounting framework within which projects can nest. A roadmap to develop the nesting guidelines has been established (Table 18.2). The main milestones in the roadmap are:

- Enactment of the Forest Bill 2016 which will lay the regulatory foundation
- Establish carbon trading regulations
- Development of a draft technical proposal for nesting that will incorporate consensus among stakeholders.
- Publish Nesting Draft Guidelines to enable projects to be nested in the national system and avoid double counting of reductions.
- Conduct a public consolation period for socialization and finalization of the guidelines
- Finalization and Adoption of the Guidelines.

The expected result of the nesting process is that by the end of 2020, a set of rules will be in place to standardize ER estimates, including the required use of the national monitoring system at the local and regional levels.

The ERPD outlines a potential model to be adopted to avoid double counting in the Drawa Project (p 250-251).

"...The estimated net annual emissions removals from the Drawa project represents 1.5% of the annual emissions reductions expected under the ER Program, representing a very small proportion. As such it is proposed to exclude the Drawa Project Area from the ER program accounting area to avoid double counting. Therefore, this project will operate independently for the period of the ERPA... Once the nesting guideline is established (see roadmap details below in Table 18.2) the Drawa project will be expected to align with the national methodology by 2025...."

The only other GHG Initiatives discussed include participation in the CCB, and implementation and reporting of national GHG inventory to the UNFCCC.

The TAP finds the indicator has been met. A nesting option has been chosen and an implementation plan drawn up (with a roadmap of how and when to produce and implement the plan.

# (ii) [Data management and Registry systems to avoid multiple claims to ERs 19.2]

YES

The ERPD now clarifies how the three existing REDD+ projects will be accounted for; provides details on them; clearly states it will use the World Bank / FCPF interim Central Registry . The Data management system early version is in place at the national level, and Registry system is beginning to be under design and development.

The existing Database Management System is operational, and was designed and is managed by the Management Services Division of Ministry of Forestry (as detailed in Ind. 37.2. The Database Management System will be upgraded during the implementation of the ER program, using a stepwise approach.

The indicator is met.

C 24 The ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+

Ind 24.1 The ER Program demonstrates through its design and implementation how it meets relevant World Bank social and environmental safeguards, and promotes and supports the safeguards included in UNFCCC guidance related to REDD+, by paying particular attention to Decision 1/CP.16 and its Appendix I as adopted by the UNFCCC

YES

[ Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]

The June 2019 Final ER-PD summarizes key findings of the SESA now in extensive detail (not the case in the previous version), and has been substantially improved. The SESA and ESMF processes have now produced final versions that are under review and due as final instruments on July 8<sup>th</sup>. Both final framework products have gone through a national public validation workshop May 28<sup>th</sup>, the TAP understands (Fiji reply document to CFP questions, June 7).

The ER-PD now includes detailed discussion of ownership, leasing and access; statistics on population composition, relative poverty; and the major Fiji national Poverty and Agricultural Sector strategies to address inequalities. It also identifies which WB social and environmental safeguards are applicable to the ER-P. It has entailed both qualitative and quantitative assessments of socioeconomic conditions occurring in the accounting area. This assessment included levels of forest dependence, poverty and livelihoods of the communities (separation into upland and lowland communities.) A general tendency exists in which lowland communities have lower forest dependence and more livelihood options than poorer upland communities. Land tenure and access to resources by both upland and lowland communities are also described. In view of these trends, the ER-PD recognizes and states that processes are needed to avoid, minimize and/or mitigate against the loss of land and resource access.

Regarding gender, the current Draft includes a comprehensive treatment of how gender issues were handled as part of the SESA process. The SESA has made recommendations to address gender inequality which are evident in Program design, and has proposed a Gender Action Plan with specific indicators as part of the ESMF to be finalized. The TAP has observed that the role of women in the REDD+ process, despite their traditionally marginalized status in decision making in Fiji (ranking 87<sup>th</sup> of 188 countries on the Gender Inequality Index of the UNDP), was well-recognized by their male counterparts. For instance, men observed that women have a more realistic approach on how possible carbon financial benefits should be utilized; and were more likely to stress payments that would enhance the collective welfare of a village community than men, who tended to prefer individual payments. In the ESMF being finalized, a Gender Action Plan with specific gender indicators has been prepared. Given its strong patrilineal culture, Fiji will need to pay special attention to gender issues, and work to provide opportunities and incentives for participation of women in REDD+ and the ER-P.

On Table 14-3 shows which World Bank policies on Safeguards are triggered by the proposed ER-P and describes for each policy triggered how they are addressed in the ER-P. Interestingly, safeguard policy OP/BP 4.10 on Indigenous peoples is not invoked. The explanation provided states that indigenous peoples in Fiji are the majority landowners, hence the entire program is about their land and their participation; an unusual situation for REDD+countries, but not surprising fact in the context of Fiji.

The UNFCCC Cancun safeguards (listed and discussed in Box 14-1 addressed practically under Tables 14.4 and also reference is made on how some aspects such as mitigation of the risk of reversals are addressed in Section 6 of the ER-PD. In general, more focus has been put on World Bank Safeguard Policies. This is based on Fiji's assessment that the World Banks's safeguards policies are generally consistent with Cancun Principles, and that the WB safeguard policies have more detailed guidance on procedural requirements, which Fiji will apply in addition its own national safeguard approaches. Fiji believes that supported by a system for information on safeguards (SIS) it will submit its ESMF to the UNFCCC as part of its reporting responsibility.

**OBSERVATION**: The TAP observes that Fiji and the ER-PD use previous WB Safeguards Standards (OPs) and not the current ESF (ESS, which is now mandatory), since the ER-PD was developed before the effectiveness date of new ESF, so the previous standards still are applicable. most of the material on Cancun safeguards exists in the document. FPIC appears to be in widespread use in the consultation process, though it is not highlighted (TAP observation during the Fiji mission, January 2018).

In sum, the TAP finds that Fiji and the WB staff have demonstrated a strong understanding of World Bank safeguard Policies and Operations in the Fiji context, has concluded a SESA process which has now produced an Advanced SESA Document and produced an improved ESMF that will be presented for public validation, and appears to be meeting the Cancun Safeguards.

This indicator has been met, based on the improvements made on the SESA Document and an ESMF supported by risk mitigation options in Tables 14.1 and 14.2.

Ind 24.2 Safeguards Plans address social and environmental issues and include related risk mitigation measures identified during the national readiness process, e.g., in the SESA process and the ESMF, that are relevant for the specific ER Program context (e.g., land tenure issues), taking into account relevant existing institutional and regulatory frameworks. The Safeguards Plans are prepared concurrently with the ER Program Document, and are publicly disclosed in a manner and language appropriate for the affected stakeholders

YES

[Description of how the ER Program meets the World Bank social and environmental safeguards and promotes and supports the safeguards included in UNFCCC guidance related to REDD+ 15.1]

On this indicator, Section 14.1 of the ER-PD and its 8 sub-sections describe World Bank Safeguard Policies triggered by the ER-P, the SESA and ESMF Process, legislative and policy measures for addressing safeguards, programs and activities targeting IPs, the anticipated social and environmental risks of the ER-P and proposed mitigation measures. In particular, Tables 14.1 and 14.2 on social and environmental risks respectively have been significantly improved compared to the previous version of the ER-PD. The tables have been expanded to show each mitigation option, its anticipated positive and negative impacts and associated mitigation measures to a fair amount of detail.

**OBSERVATION**: The TAP observed in its review of the Advanced Draft that much of the relevant material to address safeguards was presented in other sections, and in the current version of the ER-PD reference has been made to those sections.

Land tenure issues are one area that the ER-PD has thoroughly addressed in other sections, and is a strength of this ER-PD, given the unusually clear Fijian land tenure context. The FGRM and Benefit Sharing sections of the Draft detail how traditional governance and land use management methods are in place that should help minimize conflict over tenure.

In response to earlier TAP comments on poverty reduction among rural communities, Subsection 14.1.4 on measures supporting Indigenous People has been made clearer and recognizes the need for local communities to participate in commercial tree growing and other livelihood options.

**OBSERVATION**: The TAP notes that mitigation measures to guard against further encroachment and cultivation of fragile steep slopes are still not clearly addressed, and Fiji would benefit from giving this further attention as the Program advances. The ER-PD suggests that mechanisms such as wage employment and out-migration should be explored, since options for agricultural intensification on fragile hillslopes are quite limited.

Considering the significant improvements that have been made, the indicator has now been met.

C 25 Information is provided on how the ER Program meets the World Bank social and environmental safeguards and addresses and respects the safeguards included in UNFCCC guidance related to REDD+, during ER Program implementation

**Ind 25.1** Appropriate monitoring arrangements for safeguards referred to in Criterion 24 are included in the Safeguards Plans

**YES** 

[Description of arrangements to provide information on safeguards during ER Program implementation 15.2 and 6.1]

The document provides a very detailed description of how safeguard implementation would be monitored. Six steps have been identified in Table 14-4 p 152-153, from diffusion and capacity building over monitoring at the program and provincial level, on to independent monitoring of the REDD+ Registry. It seems that indicators to be monitored have not yet been defined, since as mentioned in Chapter 14.2, the M&E system itself is still being constructed.

The Draft proposes development of an Information System for Safeguards in Section 14.2, and states that compliance with the safeguard principles will be assessed by an independent monitoring team, via procurement by the Fiji REDD Office (Section 14.2.3). M&E steps and the processes to realize them, as well as identification of which agency or entity is responsible for each, is articulated in Table 14-4 pp 152-153.

The document draws the attention to the fact that for the time being the necessary knowledge on safeguards at all levels is still very limited and capacity building is therefore required (Chapter 14.2.5 p 154). As such a capacity building plan on safeguards, which could be part of an overall capacity building action plan for the entire ER-PD, is needed.

Overall, the ER-PD has demonstrated significant progress on the design and development of a safeguard monitoring system. Development of a SIS is underway, though not completed; and a procurement process for independent monitoring of safeguards will be undertaken. The indicator has been met.

Ind 25.2 During ER Program implementation, information on the implementation of Safeguards Plans is included in an annex to each ER monitoring report and interim progress report. This information is publicly disclosed, and the ER Program is encouraged to make this information available to relevant stakeholders. This information is also made available as an input to the national systems for providing information on how safeguards are addressed and respected (SIS) required by the UNFCCC guidance related to REDD+, as appropriate.

N.A

Only applicable at the time of verification.

C 26 An appropriate Feedback and Grievance Redress Mechanism (FGRM) developed during the Readiness phase or otherwise exist(s), building on existing institutions, regulatory frameworks, mechanisms and capacity

**Ind 26.1** An assessment of existing FGRM, including any applicable customary FGRMs, is conducted and is made public. The FGRM applicable to the ER Program demonstrates the following:

- i) Legitimacy, accessibility, predictability, fairness, rights compatibility, transparency, and capability to address a range of grievances, including those related to benefit-sharing arrangements for the ER Program;
- ii) Access to adequate expertise and resources for the operation of the FGRM

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

The FGRM approach proposed (Chapter 14.3, p 217-222) builds on customary FGRMs, although it does not give a detailed description of them. These customary mechanisms are highly valued by the iTaukei population. The ER-PD-specific mechanisms seek to be a bridging solution between customary and newer formal FGRMs.

Seven classes of potential grievances are reviewed pp 217-218. A GRM already exists for the Drawa Block Forest Community Cooperative, one of the REDD+ pilot projects.

The Program/national FGRM scheme is planned to initially be implemented in the Emalu and other pilot REDD+ project sites, then gradually expand further during Program implementation. Thus FGRM will form an organic part of a wider national GRM scheme, although the public GRM structures would not be able to respond properly to the new demands. The FGRM would be "readily accessible to all stakeholders including [those] not competent in the use of Fijian language... to ensure "that all individuals and groups seeking grievance redress will be able to do so" (p 219).

A thorough discussion of the relationship between early project GRMs and the national public policy GRM is included, as well as the need to incorporate the ability to address grievances on WB safeguard issues as well.

Due to the demanding features of a FGRM system, the document states that at the beginning the system should focus on a few issues—not identified yet. Consideration of potential grievances or existing issues by the Fijian population of non-iTaukei descent, roughly 45% of the population, are now addressed in the text.

The Fiji REDD+ Feedback and Grievance Redress Mechanism (FGRM) Report on the Assessment and Recommendations of Existing Issues and Structures was posted on Fiji's Facebook page and its website April 22, 2018; and is hyperlinked as the only text in Annex 14.1. This public document reviews existing Fijian grievance structures, compares them, draws lessons from them for the more advanced FGRM to address REDD+ and how it links with other grievance mechanisms, etc.

This is a very detailed study, which significantly advances Fiji's work on its FGRM includes 10 core principles of the FGRM, a very detailed staffing structure and financing information, a thorough grievance flow graphic, timeframes for response, etc.

The TAP finds the Indicator is met. The traditional grievance methods, lessons from them, the major aspects of the FGRM and the current status of the FGRM development process are well summarized.

Ind 26.2 The description of FGRM procedures, included in the Benefit-Sharing Plan and/or relevant Safeguards Plans, specifies the process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by affected stakeholders. As relevant, the Benefit-Sharing Plan and/or relevant Safeguards Plans and/or ER Program Document describe the relationship among FGRM(s) at the local, ER Program, and national levels

YES

**YES** 

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

The description contained in the FGRM section is very detailed and allows the reader to visualize a complex system in which stakeholders and various village and national entities have clearly defined roles. The process to be followed to receive, screen, address, monitor, and report feedback on, grievances or concerns submitted by

affected stakeholders is clear, summarized in Table 14-6. The FGRM is designed specifically to avoid being overly costly or burdensome for poor, remote villages, or women.

**OBSERVATIONS**: The TAP observes that a crucial and demanding role will be played by the field-based officers of MoF who will be the first line of FGRM for the Program (Table 14-5 shows them receiving and registering grievances, and implementing some of the problem solving, depending on the type of informal to formal mechanism used). This approach places a big responsibility on these officers and will require training to develop necessary skills and capacities. Table 14-5 confers roles in the FGRM process to others as well, eg, Ministry of iTaukei Affairs, iTaukei village headsman, Provincial Office, etc.). Since some landowners may take issue with the way the Ministry of Forests is overseeing the implementation of the ER-P and even in the distribution of benefits, the dominance of the Ministry in FGRM issues carries risks to the people of Fiji. As such, Fiji could consider the use of a different independent agency or a structure and process in which the Ministry of Forests would not be the sole authority, and thereby provide a mechanism for impartiality in the hearing and resolution of grievances. Additionally, this section could be improved once finalization of the Safeguards Plan via the final ESMF and SESA to show linkages to them and place the FGRM arrangements discussed here into the full safeguards context.

While the section on the proposed Benefit Sharing Plan does not make specific reference to FGRM processes, it is reasonable to assume that a conflict arising out of benefit sharing will also be subjected to a FGRM mechanisms and any other relevant statutory instruments if deemed relevant. The role of WB safeguards and the FGRM is assessed in section 14.3.2. During SESA-related activities, "women and men and young and old were encouraged to assist in the design of the FGRM" in 15 SESA focus villages, providing "greater ownership at the village level, including importantly of non-iTaukei communities and thereby attenuating traditional conflicts between different ethnic groups". The text, tables and boxes describe the relationship among FGRM(s) at the local, ER Program, and national levels and how they would be coordinated. Table 15.1 shows the institutions that will be responsible for the delivery of benefits, Box 15.2 provides specifics on how benefits will be delivered and Box 15.3 describes how benefit sharing will be monitored and reported.

The TAP finds this indicator has been met.

**Ind 26.3** If found necessary in the assessment mentioned in Indicator 26.1, a plan is developed to improve the FGRM

YES

[Description of the Feedback and Grievance Redress Mechanism (FGRM) in place and possible actions to improve it 15.3]

Provisions for the improvement of the FGRMs are described and form the majority of the long text on FGRM. The existing FGRM is described, then the improvements to it for the Program and as a national system are laid out in detail, and the roles of each entity for each step are presented.

The improvement of the FGRM itself will be made by a participatory process, where the full range of stakeholders will be involved. A stepwise approach to evolution of the FGRM is being undertaken, starting with a few key issues and the REDD+ plot locations, and then evolving out from them. The overlap between ER Program and national and local GRMs is addressed in a page-long section stressing coordination and use of a new centralized database accessible by all REDD+ projects to record the receipt and resolution of all grievances. Despite the general lack of experience on FGRMs in the context of a complex REDD+ program, the TAP expects that improvements will evolve from Fiji's obvious commitment to testing the proposed mechanisms.

The role of mediators and facilitators, as well as all the other entities involved is defined for each of the 5 steps in the FGRM process in Table 14-6. Coordination with the UNREDD program is also noted.

The TAP finds the indicator has been met.

C 27 The ER Program describes how the ER Program addresses key drivers of deforestation and degradation

**Ind 27.1** The ER Program identifies the key drivers of deforestation and degradation, and potentially opportunities for forest enhancement.

**YES** 

[Analysis of drivers and underlying causes of deforestation and forest degradation, and existing activities that can lead to conservation or enhancement of forest carbon stocks 4.1]

Six key drivers of deforestation and forest degradation are discussed at length, indicating which areas are affected, the process of drivers affecting land conversion to other uses, major companies or government agencies or traditional land users driving conversions of land, and estimated numbers of hectares involved. The deforestation drivers are: forest conversion to root crop production; forest to pasture for livestock; poorly planned infrastructure development. Forest degradation drivers detailed are: conventional logging; and impacts of traditional land uses.

The relative importance of each driver is shown by the 3 ER Program major islands in Table 4-1 p 46-47.

A solid drivers assessment is provided, discussing the importance of agricultural drivers like the expansion of the root crops kava and cassava as well as livestock. The selection of ER Program interventions is now better linked to the analysis of drivers than in the early draft.

While the range of drivers in the ER-PD is well defined, land resource tenure can be complicated especially when it involves unplanned agriculture development by land-owning communities on their own communal land, since there is no clear legal instrument to stop such development outside an unleased development site. Thus, the planned intervention to develop Integrated District Land Use Planning (IDLUP) to promote more sustainable long-term integrated landscape management (Sub component 1.1) will be an important intervention to ensure sustainable land management of drivers in a much broader landscape. The proposed IDLUP interventions are well described.

The TAP finds the indicator is met.

**Ind 27.2** The ER Program identifies currently planned ER Program Measures and how they address the key drivers identified in Indicator 27.1, and the entities that would undertake them

YES

[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]

[Institutional and implementation arrangements 6.1]

The overall design of the Program measures to be undertaken and their linkages to key drivers of land use change are well identified in Chapter 4. Eg, Figure 4-3 links drivers to the 3 main Program components and their subcomponents. Tables 4-3 to 4-14 list key activities, indicators, agency to implement the measure and funding type for all subcomponents.

The initial ER-PD draft stressed the central role government/private companies like Fiji Pine and Fiji Hardwoods Cooperation Ltd. would play in Component 2 Promoting Integrated Landscape Management in plantation establishment and harvesting, using the vast majority of funding.

In response to TAP questions about whether this largely would be Business as Usual, the Program team revised the proposed activities, so that plantations no longer dominate. Linkages between drivers and activities have been majorly written. The Theory of Change offers details showing Outputs and Outcomes of the activities selected. Each Program activity subcomponent has sections that address: Expected Outcomes, Description and Justification, Drivers Impacted, and Action for the Intervention. The Final ER-PD proposes a funding level of \$42m, about 40% of the original level, and greatly reduces the govt. companies' role.

The TAP finds that this indicator has been met.

C 28 The ER Program has undertaken and made publicly available an assessment of the land and resource tenure regimes present in the Accounting Area

YES

Ind 28.1 The ER Program reviews the assessment of land and resource tenure regimes carried out during the readiness phase at the national level (i.e., SESA) and, if necessary, supplements this assessment by undertaking an additional assessment of any issues related to land and resource tenure regimes in the Accounting Area that are critical to the successful implementation of the ER Program, including:

- I. The range of land and resource tenure rights (including legal and customary rights of use, access, management, ownership, exclusion, etc.) and categories of rights-holders present in the Accounting Area (including Indigenous Peoples and other relevant communities);
- II. The legal status of such rights, and any significant ambiguities or gaps in the applicable legal framework, including as pertains to the rights under customary law;
- III. Areas within the Accounting Area that are subject to significant conflicts or disputes related to contested or competing claims or rights, and if critical to the successful implementation of the ER Program, how such conflicts or disputes have been or are proposed to be addressed; and
- IV. Any potential impacts of the ER Program on existing land and resource tenure in the Accounting Area.

The ER Program demonstrates that the additional assessment has been conducted in a consultative, transparent and participatory manner, reflecting inputs from relevant stakeholders

[Description of land tenure systems, analysis of laws and regulatory framework 4.4 and 4.5, stakeholder consultation process 5.1]

The ER Program has reviewed the assessment of land and resource tenure regimes at the national level, paying special attention to issues related to land and resource tenure regimes in the Accounting Area that are critical to the successful implementation of the ER Program.

The ER-PD describes in detail the range of land and resource tenure rights (including legal and customary rights of use, access, management and ownership of the iTaukei people that represent 89.9% of the ER-PD area).

The ER-PD details the tree land categories present on the ER-PD area, presenting clear tables and description of those categories. Eg, see Table 4.15 below:

Land Tenure Categories	Closed Forest	Open Forest	Total Forest Area	% Total Area of Forest
iTaukei Land	528,100	326,268	854,368	89.9%
State Land	27,737	12,756	40,493	4.3%
Private Freehold Land	31,958	23,172	55,130	5.8%
Total	587,795	362,196	949,991	

The ER-PD also describes the 3 categories of rights-holders present in the Accounting Area, and the legal status of such rights, related to State Lands (owned and managed by the national State), Private Lands (Freehold Lands – owned by the private holders and managed in accordance the private and state regulations), and finally iTaukei Lands (owned by the ITaukei people and managed under the host country legal models – eg, the TLTB and Land Bank agencies).

The ER-PD states in a clear way the applicable legal framework, and the rights of iTaukei people under the customary law (see references below). The ER-PD also defines with legal clarity the situations and potential types of areas within the Accounting Area that could be subject to conflicts or disputes related to contested or competing claims or rights. It notes that such conflicts are not usually present in the country, due to the existing clear system of land ownership; and notes that if a conflict of boundaries of land occurs, such conflicts or disputes are addressed by the customary structure inside the iTaukei Land Regulations and also by the national legal system in place.

Potential impacts of the ER Program on existing land and resource tenure in the Accounting Area are clearly addressed, The iTaukei land structure reserves to Native iTaukei Fijians specific areas in their lands designated as

Native Reserves, and assures them the right to access, manage and harvest if necessary these Reserve lands for their specific needs. These Reserve areas are separated from the areas designated for other kinds of management – such as sustainable management, conservation, or commercial uses within the legal management models of the TLTB and Land Bank (lease legal models) already applicable in the country. Those models assure in principle the consultation and consent of the Native People by applying the 60%/40% consensus rule.

**OBSERVATION**: Subcomponent 1.1 Integrated District Land Use Planning (IDLUP) to promote sustainable long-term integrated landscape management is highly relevant and must be driven by the local people with support from the government land agencies. The plan is relatively inclusive and will also need to be strategic in order to address the short, the medium and the long term need of all the key stakeholders. Furthermore, proper validation and endorsed by the local authority including the village, the district and the provincial forum. The main challenge to District land use planning is the issue of agreement from the Land-Owning unit or *mataqali* who may have to willfully give out their communal land to be used for village, district or even public goods without clarification on future compensation for opportunities foregone. It will be important for Free Prior and Informed Consent (FPIC) standard procedures in Fiji to be followed (as they appear to be thus far in the REDD+ process in Fiji); and to strengthen and use the existing Yaubula Management Support Team (Natural Resource Management Team), established through the Provincial Office under the Ministry of iTaukei Affairs (MTA).

The indicator has been met.

(Legal references: Fiji 2013 Constitution – Section 28; Environment Management Act (2005); Forest Decree 1992; the future Forest Bill no. 13 of 2016 (unsigned); iTaukei Land Trust Act (Cap. 134); Agricultural Land and Tenant Act (ALTA), 1976 (Cap. 270); Land Use Decree 2010; Water Authority of Fiji Promulgation 2007; National Trust of Fiji Act (Cap 265), and others.)

Ind 28.2 The ER Program explains how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s). If the ER Program involves activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, the relevant Safeguards Plan sets forth an action plan for the legal recognition of such ownership, occupation, or usage. Beyond what is required for the successful implementation of the ER Program, the ER Program is encouraged to show how it can contribute to progress towards clarifying land and resource tenure in the Accounting Area, where relevant.

[Assessment of land and resource tenure in the Accounting Area 4.4]

[Description and justification of the planned actions and interventions under the ER Program that will lead to emission reductions and/or removals 4.3]

The vast majority of Program interventions would occur on iTaukei lands under customary land tenure, so it is important to fully understand how traditional tenure works, and implications it has for the implementation of activities, and transfer of title to the Carbon Fund. The ER Program explains in considerable detail how the relevant issues identified in the above assessment have been or will be taken into consideration in the design and implementation of the ER Program, and in the relevant Safeguards Plan(s).

The ER PD takes in account the existing legal natures of Land Tenure in the ER Program Area and address each one in terms of the recognizing of the legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied: Analysis and Information were sought among iTaukei landowners and lease tenants on all types of land including native, state and freehold land in the ER Program Area, taking in consideration several important aspects:

- Nature and Type of Lands: Crown/State Lands; Freehold Lands (Private Lands); iTaukei (Native Lands)
- The range of land and resource tenure rights and categories of rights-holders present in the Accounting Area, for the three types of tenure above

YES

- Registration of customary land
- Traditional forest tenure and use rights
- Traditional social structure and legislation related to the iTaukei structure, ownership, use of forest and related legal procedures to lease and address conflicts.

The information inserted on the ER PD consequently provides a logical and integrated pathway to the relevant Safeguards Plan and address in a detailed way the legal recognition of such ownership, occupation and secular traditional usage by the Native ITaukei people in the host Country.

Taking the above into consideration, the indicator has been met.

**Ind 28.3** The ER Program provides a description of the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund

YES

[Transfer of Title to ERs 18.2]

The ER Program provides a detailed description of the implications of the land and resource regime assessment for the ER Program Entity's ability to transfer Title to ERs to the Carbon Fund. It analyzes the three different types of land ownership and land tenure present in the ER-PD area: Crown/State Lands; Freehold Lands (Private Lands), and iTaukei (Native lands).

The ER-PD defines the Ministry of Economy as the Entity with competence to sign the ERPA and to transfer future title of ERs to the CF. However, the formal procedure that will allow such transfer to occur is likely to depend on legal issues within each one of the land ownership types below:

- (i) Crown/State Lands are State Owned and consequently are directly owned and managed by the Sate itself without the need to involve other stakeholders;
- (ii) Freehold Lands (Private Lands) are Privately owned and privately managed, but must be in harmony with national regulations. In principle, the transference and negotiation by the state of the ERs generated under private lands will demand a procedure of law and/or a contractual agreement between the state and the Private Landowners to address the ability to transfer the Tittle to the Carbon Fund;
- (iii) ITaukei (Native lands) owned by the iTaukei People, fully 89.9% of the ER Program area. This type of land will require a legal procedure and contractual agreements. The main contractual models are already established in the country legal framework, and have been used since 1940 to manage ITaukei lands rights through the TLTB agency, and more recently through the Land Bank, by using "lease contractual models". This is one option that could be used to structure the benefit sharing arrangements per Section 15.

The TAP finds the indicator is met, given the advanced stage of the legal framework respecting land ownership and land tenure, and especially the unique and sophisticated lease models used for iTaukei Lands. (However the country's ability to transfer title is more complex and is assessed differently below in C36.)

C 29 The ER Program provides a description of the benefit-sharing arrangements for the ER Program, including information specified in Indicator 30.1, to the extent known at the time.

Summary: Despite the fact that a Benefit Sharing Plan has not been produced and is expected to be completed by December 2019, a comprehensive analysis has been done and presented in the current version of the ER-PD. Notably, existing institutional mechanisms for benefit mechanisms (e.g. responsible institutions, existing Benefit Sharing (BS) models, examples of BS in REDD+ and Forest Conservation Programs and elements of a BS Mechanisms) have been described, the elements of the envisaged Benefit Sharing Plan (objectives, principles, allocation models, eligibility criteria etc.) have been proposed. In addition the legal context for benefit sharing, which also recognizes the traditional iTaukei systems has been described in detail.

How current REDD+ pilot projects in Fiji address BS is now very thoroughly laid out in section 15.1.2 (previously absent), as part of the foundation on which the ER-P will build BS. Proposed benefit-sharing arrangements now are presented in great specificity in 15.1.3 Elements of the Benefit Sharing Mechanism. Thorough discussion includes consultation process, identification of categories of beneficiaries, modalities, monitoring of the BS mechanism, and the legal basis of the BS arrangements.

The major elements of Indicator 30.1 that should appear in an eventual Benefit Sharing Plan are described in detail, even though the Benefit Sharing Plan is not yet due. Policy and practice platforms exist that the Program is building upon for REDD+ benefit sharing.

**OBSERVATION**: The TAP observes that the Program has provided abundant detail on its eventual BS arrangements, which should well position Fiji to finalize and codify BS arrangements in the eventual BS Plan going forward with all the detail required under the separate Ind 30.1.

The indicator is considered met.

C 30 The Benefit Sharing Plan will elaborate on the benefit-sharing arrangements for Monetary and Non-Monetary Benefits, building on the description in the ER Program Document, and taking into account the importance of managing expectations among potential beneficiaries.

**Ind 30.1** The Benefit-Sharing Plan is made publicly available prior to ERPA signature, at least as an advanced draft, and is disclosed in a form, manner and language understandable to the affected stakeholders for the ER Program. The Benefit-Sharing Plan contains the following information:

N.A

The categories of potential Beneficiaries, describing their eligibility to receive potential Monetary and Non-Monetary Benefits under the ER Program and the types and scale of such potential Monetary and Non-Monetary Benefits that may be received. Such Monetary and Non-Monetary Benefits should be culturally appropriate and gender and inter-generationally inclusive. The identification of such potential Beneficiaries takes into account emission reduction strategies to effectively address drivers of net emissions, anticipated implementers and geographical distribution of those strategies, land and resource tenure rights (including legal and customary rights of use, access, management, ownership, etc. identified in the assessments carried out under Criterion 28), and Title to ERs, among other considerations.

Criteria, processes, and timelines for the distribution of Monetary and Non-Monetary Benefits.

Monitoring provisions for the implementation of the Benefit-Sharing Plan, including, as appropriate, an opportunity for participation in the monitoring and/or validation process by the Beneficiaries themselves

[Description of benefit-sharing arrangements 16.1]

The TAP finds this indicator is Not Applicable.

The Benefit Sharing Plan (BSP) is not yet available, but is not required before ERPA signature. TAP assessment of the likely elements of BS arrangements – laid out in detail in the ER-PD -- is provided in Indicators 31.1 and 33.1 below.

C 31 The benefit-sharing arrangements are designed in a consultative, transparent, and participatory manner appropriate to the country context. This process is informed by and builds upon the national readiness process, including the SESA, and taking into account existing benefit-sharing arrangements, where appropriate

Ind 31.1 The Benefit-Sharing Plan is prepared as part of the consultative, transparent and participatory process for the ER Program, and reflects inputs by relevant stakeholders, including broad community support by affected Indigenous Peoples. The Benefit-Sharing Plan is designed to facilitate the delivery and sharing of Monetary and Non-Monetary Benefits that promote successful ER Program implementation. The Benefit-Sharing Plan is disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program

YES

[Description of stakeholder consultation process 5.1]

[Summary of the process of designing the benefit-sharing arrangements 16.2]

The Benefit Sharing Plan (BSP) is not required before ERPA signature, so it is not now possible to assess how the final Plan has been consulted on and what it addresses.

However, a full BS Plan is now clearly in design. The elaboration of BS arrangements is now highly detailed and results from a long process of stakeholder consultation, detailed studies published and recently publicly available, and government decision-making.

The ER-PD highlights the involvement of different stakeholders at early discussions and consultations on Benefit Sharing arrangements and in REDD+ projects. Eg, BS arrangements in existing pilot projects like the Sovi Basin Protected Area were developed with villagers deciding how funds from the community development plan would be used; the REDD+ Drawa Project uses a cooperative model to develop and manage it, including deciding on distribution of carbon and non-carbon benefits, and includes a women's group and a youth group; and the Nakauvadra Community Based Reforestation REDD+ project used traditional meeting structures to provide oversight of decisions on how benefits would be distributed (section 15.1.2). BS design meetings and consultations are occurring in traditional liTaukei communities in Fijian and English languages, as appropriate, and elsewhere.

These projects clearly are built on wide community participation in decision making for the project design and especially for how benefits will be distributed. Beneficiaries are identified and will fall into three categories, identified as owners of the land, community trusts created via collaboration among villagers for communal use of natural resources, and smallholder farmers. Both monetary and non-monetary benefits are being widely discussed in the pilots, among stakeholders in the ER-P process, and by the government, and an eventual monitoring approach.

BS arrangements for pilots to date have been disclosed in a form, manner and language understandable to the affected stakeholders of the ER Program—since most are within iTaukei traditional communities, using customary governance systems to develop the project benefits discussions and proposals.

The structure of the eventual formal BS Plan is discussed in detail, including the results of an in-depth study of how the BS mechanism will be structured, including: principles for the BS Plan; identification of beneficiaries; eligibility criteria for beneficiaries; the types of benefits that would be produced and how they would be allocated among beneficiaries; how coordination across agencies and communities would occur; conditionality of benefits and who would be responsible for managing them; a process for delivery of benefits; how disclosure of benefits would proceed; detailed discussion in new work on the legal context; M&E and reporting arrangements.

The TAP finds that the indicator has been met, given the strong evidence of stakeholder involvement to date in the Readiness process and pilot projects, and impressive background studies and draft decisions on BS arrangements as related by the ER-PD text.

## C 32 The implementation of the Benefit-Sharing Plan is transparent

**Ind 32.1** Information on the implementation of the Benefit-Sharing Plan is annexed to each ER Program monitoring report and interim progress report and is made publicly available [16.1]

N.A

Only applicable at the time of verification.

## C 33 The benefit-sharing arrangement for the ER Program reflects the legal context

Ind 33.1 The design and implementation of the Benefit-Sharing Plan comply with relevant applicable laws, including national laws and any legally binding national obligations under relevant international laws

NO

[Description of the legal context of the benefit-sharing arrangements 16.3]

The ER-PD now contains an entirely new section 15.3 that describes the legal context, but not all, since the benefit sharing arrangements are still in development and the BS mechanism has not yet been selected. It does not have an explicit discussion of the legal context, although it does review: 6 models of BS in Fiji, and identifies the legal or regulatory authority for each model; the agencies responsible for delivery of different kinds of benefits; a process for delivery of benefits (new Box 15-1); refers to the key acts, regulations and the Constitution sections regarding legal authority for BS arrangements; reviews forest licenses; and the role of beneficiaries in trust deeds.

Deeply rooted traditional models of achieving management of Native ITaukei lands through the iTaukei Land Trust Board (TLTB, a national agency) and the Land Bank legal models (assuring the consultation and consent of the Native iTaukei people) are described. Decision-making on leasing of or harvest of forest on iTaukei lands requires formal consensus via a well-established governance process. Different rules apply to the two types of iTaukei Lands: ie, Native Reserve Lands that follow the 60/40 consent legally defined process (if 60% or greater of community members over age 18 support, then the community accepts the lease or whatever); and Native Lands, a pool of land held in reserve that can leased through the TLTB and Land Bank Models, via lease contracts.

The TAP finds that a description of any legally binding national obligations under relevant international laws is important addition to this section that is currently missing.

Thus the TAP finds that this indicator has not yet been met. The TAP finds that the full legal context has not yet been laid out; and that a description of any legally binding national obligations under relevant international laws is an important addition that is needed.

## C 34 Non-Carbon Benefits are integral to the ER Program

Ind 34.1 The ER Program outlines potential Non-Carbon Benefits, identifies priority Non-Carbon Benefits, and describes how the ER Program will generate and/or enhance such priority Non-Carbon Benefits. Such priority Non-Carbon Benefits should be culturally appropriate, and gender and inter-generationally inclusive, as relevant

YES

[Outline of potential Non-Carbon Benefits and identification of Priority Non-Carbon Benefits 17.1 in the reviewed ER-PD of 15 January 2016]

The document states the importance of non-carbon benefits (NCB), both tangible and intangible, in section 16. It reviews three types of NCB: social, environmental and local governance sets of NCBs.

Thirteen types of NCBs are presented in Table 16.1, which provides extensive information on what the future NCBs produced and the desired outcome would be (eg, forest women better understand the value of various natural resources), the tools or programs needed to implement each type of NCB, and who the potential beneficiaries would be.

**OBSERVATION**: The TAP notes that far more extensive information was presented in earlier drafts, that would be useful to capture in a final revised Annex. (Eg, an approach for sharing information about NCBs, how they were addressed in the Emalu REDD+ project; a detailed example of social and cultural NCBs for three communities in the province of Ra, etc.).

The TAP finds that this indicator is met.

**Ind 34.2** Stakeholder engagement processes carried out for the ER Program design and for the readiness phase inform the identification of such priority Non-Carbon Benefits

YES

[Description of stakeholder consultation process 5.1]

Inputs to design of the ER Program derived from the stakeholder engagement processes are alluded to repeatedly, Eg, descriptions of about 20+ examples of NCBs from existing activities in Fiji are listed in Annex 16-1's table in the Advanced Draft ER-PD, and the experiences of how two major REDD+ pilot projects -- Nakauvadra Reforestation Project of CI and the Emalu pilot -- contributed experience on NCBs during the Readiness phase and to the design of the Program are presented.

**OBSERVATION**: The TAP notes that significant discussion and evidence of stakeholder engagement was present both in the initial draft and in the Advanced Draft by Fiji. However most of that evidence is not retained in the Final ER-PD ,nor in the Annex 15-2 extensive discussion and tables summarizing detailed design work on NCBs and how they would addressed. The process used for identification of NCBs during Readiness or for the ER-PD is not explained, even though there is evidence cited above that engagement did occur. The TAP would welcome the ER-P team developing and posting online a brief overview of the consultations conducted in the field, any concrete suggestions collected from stakeholders that are relevant to defining NCBs for the Program, various stakeholders' particular interests, and any gender-related issues that could be targeted during Program implementation.

The indicator is met, though minimally, since there is evidence that consultation did take place. In a minor nonconformity, the actual stakeholder process used is not explained.

**Ind 35.1** The ER Program proposes an approach utilizing methods available at the time to collect and provide information on priority Non-Carbon Benefits, including, e.g., possibly using proxy indicators. If relevant, this approach also may use information drawn from or contributed as an input to the SIS

YES

[Approach for providing information on Priority Non-Carbon Benefits 17.2]

A general description of the proposed methods for monitoring and reporting of non-carbon-benefits is provided, section 16.2, including both qualitative and quantitative information. It will be structured around formal semi-annual and annual reporting of NCBs linked to the overall Program M&E system; would be compared to a NCBs baseline collected as an element of the SESA process underway; and feature a multi-stakeholder consultative and transparent approach. Data collection of both quantitative and qualitative nature is proposed. The M&E information collected will be compared to the SESA baseline data to assess change in delivery of benefits.

**OBSERVATION**: The section is adequate, but could be strengthened, since this reporting's relationship with the overall SIS system is not explicit; specific indicators are not mentioned; and the text is silent on the issue of existing capacities and capacity building related to this topic. By providing new details of how this information collected

will be included in the various M&E system components, by whom, and the linkage to the eventual SIS system, this section would be significantly strengthened.

The indicator is met.

**Ind 35.2** Information on generation and/or enhancement of priority Non-Carbon Benefits will be provided in a separate annex to each ER Program monitoring report and interim progress report, and will be made publicly available

N.A

Only applicable at the time of verification.

## C 36 The ER Program Entity demonstrates its authority to enter into an ERPA and its ability to transfer Title to ERs to the Carbon Fund

**Ind 36.1** The ER Program Entity demonstrates its authority to enter into an ERPA with the Carbon Fund prior to the start of ERPA negotiations, either through:

NO

- i. Reference to an existing legal and regulatory framework stipulating such authority; and/or
- ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority.

[Authorization of the ER Program 18.1]

The ER Program Entity has not yet fully demonstrated its authority to enter an ERPA with the Carbon Fund prior to the start of ERPA negotiation.

The Program entity designated is the Ministry of Economy. The Ministry of Economy is the entity that signed the LOI with FCPF (as documented in Annex 4 of the ER-PD). And the ER-PD states expressly that the Min. of Economy is the entity with competence to sign the ER-PA and consequently with the ability to transfer future title of ERs to the CF; and that the Ministry is simultaneously:

- a)"the legal representative of Government of Fiji:
- b) the national focal point for UNFCCC (with the authorization to communicate on the title and transfer of ERs), and
- c) the institutional body empowered to enter into international legal and commercial transaction on ERs on behalf of the Government of Fiji."

However, there is still no legal evidence in the text of the ER-PD that the Ministry of Economy has the authority to represent the host country, to negotiate and enter into international commercial agreements (such as the ER-PA), and specifically to act in the name and representation of the private land owners and the ITaukei Native land owners. The ER-PD brings a Cabinet Decision endorsing REDD+ and supporting Ministry of Economy in Annex 17-1: "Cabinet Decision endorsing REDD+ and supporting Ministry of Economy", but the attached Decision addresses only the initial procedure of the LOI signature: dated 13/09/16 (September,13,2016) and does not refer specific to the signature of the ERPA and future transfer of Title of the ERs. The ERPD brings also the information that a future legal and regulatory dispositions are on the process of development, specifically a New Forest Bill, but the ERPD doesn't annex the draft text of the referred Bill, it brings only a resumed explanation and some excerpts of the future text of the law (see page 244 and 245):

The draft Forest Bill will make provisions for:

- Forest Carbon Trading, which registers and allows the trading of the carbon title under the Emission Reduction Program Agreement;
- Emission Reduction License, with the following conditions:

- Is issued to the Carbon Title Holder to participate in the allowable ER activities, and complying the procedures and standards under the Emission Reduction Program Agreement;
- Empowers the MOF to enter into such land on which the ER activities are being conducted to monitor, validate, verify and report on the standards under the National Emission Reduction Program Agreement. "

Currently there is no regulatory framework stipulating such authority; and/or In the form of a letter from the relevant overarching governmental authority that supports the ability to transfer Title to ERs.

The TAP made an online survey and was not able to identify such authority by accessing the official website of the Ministry of Economy: (accessed June 10, 2019 at: <a href="http://www.economy.gov.fj/about-us.html">http://www.economy.gov.fj/about-us.html</a>), nor by consulting the legal provisions and definitions in each section of competence of the Min. of Economy ((i) Administration; (ii) Financial and Asset Management; (iii) Budget; (iv) Procurement and (v) Internal Audit and Good Governance Division). The TAP notes that the Ministry of Foreign Affairs is the entity "responsible for maintaining and promoting diplomatic relations, international cooperation and external trade with foreign nations through its headquarters in Suva and its Embassies, High Commissions and Consulates throughout the world" (homepage of Ministry of Foreign Affairs, accessible April 10, 2019 at <a href="http://www.foreignaffairs.gov.fj/">http://www.foreignaffairs.gov.fj/</a>). The TAP would like to access the legal/regulatory provision that attributes the authority and competence to the Min. of Economy.

In accordance with the Methodologic Framework, this authority can be demonstrated through either:

- i. Reference to an existing legal and regulatory framework stipulating such authority; and/or
- ii. In the form of a letter from the relevant overarching governmental authority (e.g., the presidency, chancellery, etc.) or from the relevant governmental body authorized to confirm such authority.

At this moment in time, Fiji does not yet have a specific legal framework that internally establishes the ownership of the ERs. An extensive interpretation of the existing legal framework is likely to form the basis for the Program to address ownership of ERs, however the legal procedures need to be identified and elaborated. With regards to Native and private lands, the legal contractual models and covenants need to be created, adopted and implemented, as stated by the host country (see page 245 and 246).

(The TAP country expert notes that while the use of other legal instruments, such the leasing arrangement through the TLTB Act, has already provided a legal path for trades of emissions reductions transferred to a third party in the Drawa REDD+ Model. That path involves a land owner or entity would to get a lease from TLTB, get the License from the Ministry of Forestry, and be a registered Carbon Title holder.)

The TAP finds the indicator is not met. This is a MAJOR non-conformity with the Meth. Framework, since the evidence provided is insufficient and could lead to breakdown in the systems delivery, since ERs could not be transferred to the CF without this work being satisfactorily completed. The necessary information can be assessed and input into a Final ER-PD version.

Ind 36.2 The ER Program Entity demonstrates its ability to transfer to the Carbon Fund Title to ERs, while respecting the land and resource tenure rights of the potential rights-holders, including Indigenous Peoples (i.e., those holding legal and customary rights, as identified by the assessment conducted under Criterion 28), in the Accounting Area. The ability to transfer Title to ERs may be demonstrated through various means, including reference to existing legal and regulatory frameworks, sub-arrangements with potential land and resource tenure rights-holders (including those holding legal and customary rights, as identified by the assessments conducted under Criterion 28), and benefit-sharing arrangements under the Benefit-Sharing Plan

[Transfer of Title to ERs 18.2]

NO

ER Program Entity does not demonstrate its ability to transfer Title to ERs to the Carbon Fund at this stage. The ER-PD describes in a detailed way the legal nature of land ownership and land tenure in the host country, the implications regarding the land and resource tenure rights of the potential rights holders, including Native iTaukei

People, in the Accounting Area. The ER-PD bases the adopted legal position on an extensive legal interpretation of the existing legal framework, and concludes that carbon rights can be included into the existing legal ownership framework as an extension of the "intangible interests" of the Land Title (details below).

"This is confirmed under the current legal system in that a landowner in the context of iTaukei land, Crown Land and Freehold land owns the forest growing naturally and therefore by implication, must also own forest carbon rights. This position is founded on existing definition of land ownership and includes interest in land, even if that interest is a right of exclusive possession of land and its inheritance by heirs." (page 175 – Sections 17.1 and 17.2).

"Legal examination of carbon ownership articulates the current position, which by implication confer ownership to the owner of the land that removes emphasis on the forest trees alone. As it is and in the absence of clear legislation that creates carbon as a property, where forest plantation are specifically concerned, carbon ownership can transfer to the owner of the forest trees by agreement through clear articulate terms with landowners. Without affecting underlying ownership, and on the premise of clear agreement, any transfer of ownership of subsisting carbon rights can also be facilitated further by way of sub leasing and eventual trade. With proposed clear and specific legislative framework, the Ministry of Forestry in collaboration with the Ministry of Lands and iTaukei Land Trust Board will define and confer property rights to carbon and its modes of transfer" (page 176 – Section 17.1 and 17.2).

Thus, Fiji recognizes that a legal procedure and/or contractual agreements will be necessary to operationalize the transfer of carbon rights and consequently of ERs. Eg (pp 176-177):

..." Proper and expedient legislative review and process must be facilitated to ensure drafting and passage of the proposed specific carbon rights legislation to capture the smooth process, in defining and recognizing carbon as property and conferring of its title ownership to enable protection of carbon rights, its transfer and the facilitation of trade. However, this necessitates parallel amendments to current Leases and Licenses Regulations to TLTB, which must also be facilitated as an initiative of relevant Ministries for gazettal and timely implementation

The ER-PD does not clarify if carbon rights and/or ERs concepts can be created by simply doing an extensive interpretation of the existing legal framework and adapting the contractual models Fiji uses to manage iTaukei lands.

However an action plan has been put in place to create such a new legal and regulatory framework. It would especially promote the submission and future approval of the new Forest Code Bill - 13 (2016 draft) that introduces new concepts critical to achieving the future ability to transfer title of ERs. These concepts include: "carbon" means chemical element present in all organic matter which contributes in the form of various greenhouse gases, for example carbon dioxide and methane to climate change; "forest carbon" means carbon stored in forest biomass; "carbon credit" is a generic term for any tradable certificate or permit representing the right to emit one tonne of carbon dioxide or the mass of another greenhouse gas with a carbon dioxide equivalent ( $tCO_2e$ ) to one tonne of carbon dioxide.

The ER-PD includes a 3-step Roadmap for Carbon Title and carbon covenant, in Fig. 17-2:



Contractual Arrangements with Private Land Owners and Lease Contractual Agreements with the iTaukei are based on the legal presumption that under the common law principles, the land owner owns all the rights attached to the forest and carbon sequestrated by the trees.

In the context of regulatory procedures, it is important to consider that the right to issue an emission reduction doesn't arise simply from the ownership of the land, but also by the full accomplishment of the activities undertaken under a specific CF Methodological Framework. Hence land ownership is one of the multiple items (together with safeguards, reference level, monitoring and others) necessary to obtain the verification report and the ability to issue and/or claim for an ERs.

The TAP finds the indicator not met. This a MAJOR non-conformity, since the evidence provided to prove conformity is insufficient and would lead to the incapacity to transfer title of ERs to the FCPF.

Ind 36.3 The ER Program Entity demonstrates its ability to transfer Title to ERs prior to ERPA signature, or at the latest, at the time of transfer of ERs to the Carbon Fund. If this ability to transfer Title to ERs is still unclear or contested at the time of transfer of ERs, an amount of ERs proportional to the Accounting Area where title is unclear or contested shall not be sold or transferred to the Carbon Fund

NO

[Transfer of Title to ERs 17.2]

The ER Program Entity does not demonstrate its ability to transfer Title to ERs to the Carbon Fund at this stage.

The ER-PD Programs describes in detail-the legal nature of land ownership and land tenure in the host country, and the implications respecting the land and resource tenure rights of the potential rights-holders, including Native iTaukei people in the Accounting Area. The government bases its potential ability to transfer title based on an extended interpretation of the existing legal framework common law principles, which lack the legal concepts of carbon rights and of ERs. The ER-PD does provide an activity plan that identifies the intention to submit and approve new legislation – The Forest Code Bill 13 (2016) -- with the critical legal concepts to address the transfer of title of ERs and in a subsequent step the creation of contracts or covenants that will define the relations with the iTaukei and private land owners.

The TAP finds the indicator is not met, taking in consideration the absence of a clear legal framework that addresses the legal nature of carbon rights and ERs, and the fact that the legal interpretation in the ER-PD recognizes the need to obtain those new legal procedures.

This is qualified as a MAJOR non-conformity, since the evidence provided is insufficient and will lead to the incapacity to transfer title of ERs to the FCPF if not properly executed.

C 37 Based on national needs and circumstances, the ER Program works with the host country to select an appropriate arrangement to avoid having multiple claims to an ER Title.

Ind 37.1 Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own comprehensive national REDD+ Program and Projects Data Management System, or instead to use a centralized REDD+ Programs and Projects Data Management System managed by a third party on its behalf. In either case of a country's use of a third party centralized REDD+ Programs and Projects Data Management System, or a country's own national REDD+ Programs and Projects Data Management System, the indicators below apply

YES

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

The ER Program host country has decided to maintain its own comprehensive national REDD+ Program and Projects Data Management System. The ER-PD states the intention to be compliant with the indicators of the CF's Meth. Framework.

The TAP finds the indicator is met.

**Ind 37.2** A national REDD+ Programs and Projects Data Management System or a third party centralized REDD+ Programs and Projects Data Management System needs to provide the attributes of ER Programs, including:

YES

- i. The entity that has Title to ERs produced;
- ii. Geographical boundaries of the ER Program or project;
- iii. Scope of REDD+ activities and Carbon Pools; and
- iv. The Reference Level used.

An ER Program for the Carbon Fund should report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&Is

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

The national REDD+ Programs and Projects Data Management System intends to record the attributes of ER Programs, including among them:

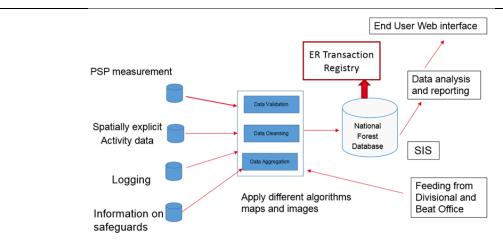
- i. The entity that has title to ERs produced;
- ii. Geographical boundaries of the ER Program or project;
- iii. Scope of REDD+ activities and carbon pools; and
- iv. The Reference Level used.

A REDD+ Database Management System has been established under the Ministry of Forestry. It uses open-source software and includes functionalities for data input and web-access, and can be adapted to new requirements over time. Figure 18-2 shows a screen shot of the current database system (pp 179-181).

Fiji's REDD+ Data Management System and a web-based portal are intended to be operational and will provide the following information (pp 179-181):

- National Forest Monitoring System database: The database will provide information related to carbon accounting which includes activity data, carbon pools, Emission/Removal Factors, average annual emissions of the reference period, auxiliary data, background report, and metadata. Likewise, the NFMS database will provide an estimation of emissions and removals of an accounting period, archive of land use change maps and data on national forest inventory, and data related to permanent sample plots."
- REDD+ program and projects database: "The existing Database Management System designed at the Management Services Division of the Ministry of Forestry has a provision to store data and information related to REDD+ programs and projects such as project boundary, project locations, implementation entity, forest reference level and monitoring and reporting and confirms to the requirements of the indicator 37.2 of the FCPF CF Methodological Framework. Using a stepwise approach, the Database Management System will be upgraded and is expected to [be] operational during the implementation of the ER program..
- Monitoring of results data and Standard Operating Procedures (SOP) have been prepared for maintaining the system.

The system's architectural design is shown in Fig. 18-1 of the ER-PD:



Finally, the ER Program will report its activities and estimated ERs in a manner that conforms to the relevant FCPF Methodological Framework C&Is.

The TAP finds the indicator is met.

Ind 37.3 The information contained in a national or centralized REDD+ Programs and Projects Data Management System is available to the public via the internet in the national official language of the host country (other means may be considered as required).

NO

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

The information contained in the national or centralized REDD+ Programs and Projects Data Management System is not yet available to the public via the internet in the national official language of the host country, as stated on page 180.

The TAP finds the indicator is not met. This should be qualified as a minor non-conformity, due to the fact that the evidence provided to prove conformity is insufficient but does not lead to breakdown in the systems delivery.

**Ind 37.4** Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; and an audit of the operations is carried out by an independent third party periodically, as agreed with the Carbon Fund

YES

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

Administrative procedures are defined for the operations of a national or centralized REDD+ Programs and Projects Data Management System; as stated at the ER-PD text:

Section 18.1 – Page 181 Standard Operating Procedures (SOP) on maintaining and operating the data management system: have been prepared; and arrangements for third party audit are proposed in compliance of the indicator 37.4 of the FCPF CF Methodological Framework.

A screenshot of the Data Management (Fig 18-2 p 180) has been added to the ER-PD.

The ERPD states clearly that "the data and information of the ER program will be available to the public in the official language (English) of Fiji" (p 181, Section 18.1).

Taking in consideration the explicit statements, the TAP finds the indicator is met.

C 38 Based on national needs and circumstances, ER Program host country selects an appropriate arrangement to ensure that any ERs from REDD+ activities under the ER Program are not generated more than once; and that any ERs from REDD+ activities under the ER Program sold and transferred to the Carbon Fund are not used again by any entity for sale, public relations, compliance or any other purpose

**Ind 38.1** Based on national needs and circumstances, the ER Program host country has made a decision whether to maintain its own national ER transaction registry, or instead to use a centralized ER transaction registry managed by a third party on its behalf

**YES** 

[Data management and Registry systems to avoid multiple claims to ERs 18.2]

The ER Program host country has made a decision to use a centralized ER transaction registry managed by a third party on its behalf. As stated in the ER Program: "There is no REDD+ registry system currently in the country. The GoF has decided to use the FCPF centralized ER Transaction Registry thereby meeting the requirements of the indicators 38.1, 38.2 and 38.3 of the FCPF Carbon Fund Methodological."

The TAP finds that the indicator is met.

**Ind 38.2** The national or centralized ER transaction registry reports ERs for the Carbon Fund using the accounting methods and definitions described above in the MF

N.A.

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

The ER Program states: "There is no REDD+ registry system currently in the country. In the future, it is proposed to add a registry function to the Data Management System" p 181, Section 18.2.

The registry system is expected to meet the domestic and internationally carbon accounting and reporting requirements, and is expected to track ER transfers produced from the ER program or any other initiative and record them in the system.

The TAP considers this indicator not applicable at this moment.

**Ind 38.3** An independent audit report certifying that the national or centralized ER transaction registry performs required functions is made public.

N.A.

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

The ER-PD doesn't address in the text if an independent audit report certifying that the national or centralized ER transaction registry performs the required functions would be made public. This issue should be addressed in the future. Given that the host country has decided to use a centralized ER transaction registry managed by a third party on its behalf, the TAP finds that this indicator is not applicable at this time.

**Ind 38.4** Operational guidance exists, or is in advanced stage of preparation, that clarifies the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules for operation of the registry.

N.A.

[Data management and Registry systems to avoid multiple claims to ERs 19.2]

The ER-PD recognizes there is no REDD+ registry system currently in the country, and that the host country has decided to use a centralized ER transaction registry managed by a third party, World Bank. In the future, Fiji proposes to add a registry function to the Data Management System.

The text does not reveal if operational guidance exists, or is in an advanced stage of preparation, that would clarify the roles and responsibilities of entities involved in the national or centralized ER transaction registry, as well as rules for operation of the registry.

The TAP finds that this indicator is not applicable at this stage, however. This is an important issue that will need to be addressed in the future.