FORESTER In support of the 4 Million Trees in 4 Years, a Fiji Government Initiative, 2019



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Urban Forest, Healthy Cities



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Deforestation and forest degradation

n Fiji, we are contributing to the issues of deforestation and forest degradation through subsistence agriculture, intensive logging, infrastructure development, mining, population increase, demand for improvement of standard of living, demand for accessibility/mobility, and large scale agriculture.

And the question we need to ask is how much is enough for development or are we helping to reserve adequate forest areas in view of ongoing development.

Led by Geospatial Information Coordinator Mr Isireli Buwawa, selected GIS officers attended the Driver of *Forestation & Forest Degradation Workshop* that was held at the Peninsula Hotel on 27-28 January 2020 in Suva.

Forest degradation and deforestation can be classified as a transitional land use where carbon storage values are constrained.

The period of transition needs to be categorised into long-term or permanent reduction versus short-term reduction.

It would therefore be crucial to know if future initiatives to reduce deforestation and forest degradation are successful.

Assuming that deforestation and forest degradation can be defined and measured, the search for opportunities to reduce greenhouse gas emissions from these two sources raise interesting questions. Deforestation is defined as a land use change. It is necessary to ask who intended this change. Was it an explicit public or private choice? In this sense, deforestation and forest degradation are consequences of a number of explicit actions responding to the economic, political and social situations, distribution of wealth, information and political power within any country that also plays a critical part (FAO Forestry Paper No. 140. 2001)

The Workshop on the REDD+ Drivers of Deforestation and Forest Degradation (DoDD) was intended to raise awareness on the methods used to undertake spatial and economic modeling of DoDD, validate the DoDD Study and to validate the REDD+ strategy options.

REDD+ & The Fiji Project

Reducing Emissions from Deforestation and Forest Degradation (REDD+) is a climate change mitigation strategy gaining momentum with conservation organizations, project developers and governments in developing countries. Degradation and deforestation with its impact is one of the key issues that was addressed in the two-day workshop.

The Workshop introduced a new software package called Terrset IDRISI which was developed by Clarke University, USA. It is a Geospatial monitoring and modelling system with a range of in-built algorithms to produce targeted results. These include:

- 1- Land Change Modeller
- 2- IDRISI Image Processing
- 3- Habitat & Biodiversity Modeller
- 4- Ecosystems Services Modeller
- 5- Climate Change Adaptation Modeller

- 6- Earth Trends Modeller
- 7- GeOSIRIS
- 8- IDRISI GIS Analysis

The workshop primarily focused on using GIS techniques/ tools. ArcGIS and QGIS were used to collect, clean, arrange and Terrset to analyze the data to predict the future of vegetation cover. These GIS tools contain sets of toolboxes that can be used to link the numerical and geographical distribution of data to be used. All prepared data needs to be in raster format with the same number of pixels and same size for the imagery.

Objectives of the Workshop

- To identify the strategies and key interventions to address the drivers of deforestation & forest carbon stock enhancement.
- To determine land use and forest cover change trends and assess associated drivers.
- To gain forest degradation & barriers to forest conservation, sustainable management of forests & iv. To maintain a strong foundational understanding of predictive modeling and its use in REDD+ projects.
- To install appropriate/necessary software and provide information on how to access TerrSet in the future.
- To successfully create a LCM on your own computer
 - To ensure that all participants are able to create models independently in the future.



Chief Executive Officer Tevita Kuruvakadua

From the CEO's Desk

Ithough the year started on well but there was a lot of disturbance in March due to the impact of COVID-19.

This has brought a halt to our tree-planting initiatives in the midst of lockdown including the observation of the 2-metre social distancing and the restrictions on public meetings and social gatherings across the country.

COVID-19 is not enough to dampen the spirits of our hard working staff at TLTB.

We must keep the spirit up and work hard so that we can bounce back and started serving our landowners and tenants again.

As trustees of iTaukei land in Fiji, the landowners are looking to us in this time of crisis. They are and will expect their income from the Board just as they normally do.

On the other hand, some of them may be affected more severely than most of us, who are still enjoying full employment and regular pay.

On the back of this crisis, we are providing the assurance to the landowners that come what may, we will still be able to face the difficulties and still provide them with what is due to them.

On August 29, we got back to planting trees; organising our staff in all the four regions to prepare for the first corporate social responsibility (CSR) for 2020.

Our country-wide effort were undertaken by the Board in which more than 4000 plants of different tree species from pine to coconuts were planted in Nadroga, Naitasiri, Macuata and Ra.

We are also proceeding with our plan to engage our landowners to lease their own land for tree-planting purposes – the first for Fiji. \blacksquare

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Nadi re-plants at the Yalavou Beef Scheme site

he South-West regional team went up to Yalavou Beef Scheme site for tree planting. The Yalavou Beef Scheme was introduced back in 1978 to assist life in the highlands of Yalavou in Nadroga and was proven to be very challenging. This concept in beef development was similar in other parts of Fiji. Similarly, the Yalavou Beef Scheme was then established with Australian government assistance.

To date the land is barren as the scheme have been phased out more than a decade ago.

Team South-West have adopted and committed through its corporate social responsibility for this quarter to offer to these two matagali lands this tree-planting project and re-forest the site.

Manager South-West Ema Natadra said they came up with the idea to plant more trees to halt the desertification in the area and this involve planting trees where they had not grown for a while and also replacing recently lost tree cover.

Mataqali Navunuma and Mataqali Nadukece of Koroua, Sovi and Yalavou villages were approached in their respective villages in the Tikina of Koroinasau, Province of Nadroga to use part of the sites.

They gave up their land with their blessings for reforestation. Together with the assistance of the Sigatoka and Lautoka Forestry Officers we managed to take 1050 pine trees to plant over an area of approximately 15 acres. ■



Watisoni, Suli and Sikiti at the top of the mountains at Yalavou, Nadroga



What was once a breeding ground for cattle will now be things of the past



Staff enjoys being part of TLTB's corporate social responsibility

Waisali Forest Park now an environment education center in Fiji

he Waisali Forest Reserves is a 120 hectare reserve belonging to the Mataqali Waisali of Waisali Village, in Cakaudrove in Vanua Levu.

Vanua Levu mountain range and receives about 3000mm - 5000mm of rainfall every year. For this reason, the reserved forest area is mostly intact and undisturbed with *dakua*, *makadre*, *dakua* and *salusalu* as the dominating trees. Other trees in the area include *yaka*, *damanu*, *kaudamu* and *buabua*. Being one of the last areas of unexploited rainforest in Vanua Levu, the high diversity of the native plants and more so, of endemic species, makes Waisali one of the few managed parks in Fiji that comprises a unique and floral composition.

In addition is the diversity of commercially important timber species and the large number of seedlings and saplings which makes the park an important landmark in Fiji, specifically for the greater North. Protection of this forest park is aligned to the climate change measures of forest conservation and reforestation programme. The National Trust of Fiji (NTF) is entrusted with the care of Waisali Forest Park. It sees great potentials for the park and one of its plans is to develop an environmental educational centre for the local children in Vanua Levu. This will be similar to what is currently done at the Sigatoka Sand Dunes and Momi Battery Historic Park Information Centre, both of which are taken care of by the NTF. It is important that TLTB supports this initiative as the area is well stocked with native trees and has been well protected by the National Trust of Fiji. More so, we are supporting the sustainable management of native forest. Since the Board is an advocate of conversation, reforestation and afforestation leases, this is an avenue where we show our support for the environment and help mitigate climate change.

Waisali Forest Reserve is a protection forest leased by government through NTF since 1992. With rising impact of climate change, the National Trust of Fiji has been advocating that Waisali Reserve Park to become a green infrastructure for the region in support of resilient community that is better prepared to deal with disaster and impact of climate change. Request from the National Trust of Fiji for TLTB to support in provide funding of i \$15,000 for track development, interpretation and marketing resources for Waisali Forest Park has also been endorsed.

Other approval given by the Board as a way include:

- TLTB to support the development of Waisali Forest Park into Environment Education Centre.
- Provide one-off financial assistance of the sum of \$15,000 to National Trust of Fiji in promoting climate change mitigating measures.
- Undertake a variation of lease to National Trust of Fiji lease in future if NTF generates more income from sightseeing and educational activities whereby 69% of the income to be distributed to landowners.

REDD+ Journey with TLTB – to the signing of Emission Reduction Program Agreements

EDD+ is a mitigation measure, a soft approach under the management of climate change impacts, is to keep trees on the ground mostly and to plant new trees where possible. By keeping carbon in trees and not letting it out to the atmosphere, is called sequestration of carbon or carbon sinking, which according to the IPCC sponsored under the UNFCCC, will cool down the atmosphere. By letting out too much carbon in the atmosphere causes global warming up to a level that upsets the ecosystem and the environment causing sea level rise. And sea level rise will threatened low lying islands and areas around the world from flooding exacerbated by extreme weather anomalies in frequent and severe heavy rainfalls and hurricanes. Fiji, being the TLTB's Chair and Prime Minister, was a former chair of COP 23 under the UNFCCC, where most nations of the world made commitments to keep global warming below 1.50 Celsius to pre-industrial era (mid 1700s) and hopefully will prevent sea level rising from rising above one metre. If sea level rises above 1 m, there will major alteration to towns, cities, villages and settlements and lifestyles in low-lying areas or islands

TLTB has been working with the Ministry of Forestry through its REDD+ Steering Committee, technical committee, several workshops and consultation with stakeholders including the landowners, in advocating REDD+ objectives in Fiji, as most of its initiatives will involve itaukei land.

REDD+ Readiness programs has set platforms for the 2011 REDD+ policy, SESA, Reference levels, Safeguards, Grievances Mechanism, Drivers of Deforestations and Forest Degradations, Benefits Sharing Mechanism, Emission Reduction Program (ERP), REDD+ strategy and now moving to sign ERPA. All these aligns to the UNFCC framework, Paris Climate Agreements, Conferences of Parties and Fiji National Development Plan 5 – 30 years (2017 – 2035). In 2019, TLTB was part of the Government Delegation to Washington to present in ERP Document World Bank and the Forest Carbon Partnership Facility (FCPF). Fiji was accept to FCFF unconditionally to both Tranche A and B facilities.

REDD+ mitigation is basically keeping carbon in trees hence we have to keep trees standing and plant more trees since we have remove a lot of trees for agriculture, housing, land development, tourism, infrastructure development, logging, etc. These activities that removes trees are called drivers of deforestation and degradation. Hence, we must plant many trees and government has set a target to plant 35 million trees by 2030. TLTB is right into the mix by planting tree, mostly under its CSR programs, perhaps to include tree planting as one on its corporate output. Other activities required under the REDD+ ERP are smart agriculture, demarcating and preserving protected areas, agro forestry, reviving traditional knowledge, integrated land use planning and capacity building for communities including the landowners.

One of the benefits of REDD+ is carbon trading, where carbon sequestered in the trees will be measured and gauge against reference level and the differences will be traded by government to the FCPF. Fiji's nationally determined commitment is 3,000 carbon/ metric tonne to sell in 4 years' time. Such payment will come through government and filter down to the landowners under the REDD+ benefit sharing mechanism.

TLTB has been pro-active in the planting and so far has planted over 4,000 trees under its CSR program. Further, it is encouraging the landowners to protect their forest and lease out for REDD+ purpose or lease degraded and deforested lands and plant trees. TLTB pays the rent for the first 5 years for planting, and hopefully for the landowners to take the responsibilities from then on, when they start receiving carbon credits. We are progressing well with our regional master land use plans and now with our integrated districts land use plans. The process of REDD+ from the ground to market and vice versa is shown below:



In Redd+ there are "no regrets", even if the payment is not sufficient, landowner still owns the land and the trees; good investments for their future, keep our environment clean and safe, preserve our water system and more oxygen to the air, breed healthier people and produces a strong and productive country.

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Grown up trees in Sawani on the mataqali Naduruvesi land

Tree planting and landowners involvement in Emission Reduction Program

he REDD+ program is the mitigation component of the Climate Change under UNFCC relating to reducing emission from deforestation and land degradation.

The plus (+) in REDD denotes incentives payment of ecosystem services. REDD+ has three overarching components and they are:

- a) Reducing emission from deforestation,
- b) Reducing emission from forest degradation, and
- c) Conservation of forest carbon stocks, sustainable management of forest and enhancement of forest carbon stocks.

Fiji's main REDD+ program objectives are to:

- Reduce deforestation and forest degradation;
- · Improve conservation, and,
- Improve sustainable livelihood options and climate smart agricultural practices of forest dependent communities by facilitating appropriate REDD+ policy, financial and land tenure incentives.

TLTB as administrator of the majority of land in Fiji, plays a major role in ERP-D as it manages 91% of itaukei land where deforestation and land degradation are occurring. All the ERP-D activities directly impact TLTB land management practices and the livelihoods of the itaukei landowners.

For instant, landowners will be involved in planting 30 million trees on their own land in fifteen years and can benefit from payment for carbon payments in the future. At the same time the trees still belong to them.

The tree varies from fruit trees to economic trees. TLTB as part of its Corporate Social Responsibility (CSR) has been engaged with landowners in planting their degraded and deforestation land with trees.

Tree planting is one of the activities for REDD+ supporting mitigation measures for climate change. For TLTB, tree planting has been organized through Regional Offices and Departments which also aligns to the Ministry of Forestry target of planting 30 million trees in 15 years. i.e. 2 million trees in a year.

Consultation has been ongoing with landowners to lease their land and rental shall be paid by TLTB in first five years to assist in driving the incentive of tree planting exercise on degraded and deforested land that have been identified.

These are good opportunities for landowners to utilize idle land. The Board has endorsed the incentive for leasing and further awaits their approval on the cost of processing leases by respective Regional Offices.

Below are the details of tree planting sites that have been identified.

Particulars	NW Region	SW Region	CE Region	Northern Region	Tourism
Land Name	Vudiya (part of)	Yalavou (Part of)	Namaralevu (part of)	Galoa	Namatamata (part of)
Location	Off Vitawa village	Yalavou Road	1.5km off Driti village	Along the Galoa village road	Opposite Vunitogoloa village
Area	33.9050 Ha	80.9371 ha (200 acres)	2.0302 ha (5 acres)	20.235ha (50 acres)	5.1675 Ha (12.77 acres)
Landowners	Mat Matawaqa	Mat Navunuma	Mat Namaralevu	Mat Raranimeke	Mat Qilaqila
Village	Vitawa	Koroua	Driti	Galoa	Vunitogoloa
District	Raviravi	Naqalimare	Dawasamu	Macuata	Raviravi
Province	Ra	Nadroga	Tailevu	Macuata	Ra
No of Trees Planted	650	New site	2000	New Site	2,384
Varieties of Trees	Teak		Sikeci & Fruit trees		<i>Damanu,Dakua</i> Teak, <i>Tavola</i> <i>Yasi, Vesi,</i> Mahogany
Lease Detail					
Lease Purpose	Afforestation	Afforestation	Afforestation	Afforestation	Afforestation
Term	99 yrs	99 yrs	99 yrs	99 yrs	99 yrs
Annual Rental	\$365.00	\$870.00	\$22.00	\$217.00	\$55.00

Who can participate in REDD+ and Why?

SOURCE: fijireddplus.org

he Emissions Reduction (ER) program of Fiji will focus on the islands of Viti Levu. Vanua Levu and Taveuni with an area totalling about 1,685,742 ha (about 90% of Fiji) of critical terrestrial biodiversity. The ER-P accounting area has a population of approximately 734,307 people (86% of the total population). The islands are generally hilly, and the population is often concentrated on coastal plains and undulating rolling hills of peri-urban areas.

ER program sites have been selected through stakeholder participatory meetings and validated by the REDD+ Steering Committee. There was unanimous agreement to target existing forest area and to select 20 districts with areas at high risk of forest loss and degradation; areas with large communities/settlements at the forest edge; area with high poverty and known biodiversity hotspots. A representation of 20 districts in the ER-P accounting area include. In Viti Levu the districts include the following:

- **Ba** Province
- District of Nalotawa, Savatu and Tavua
- Nadroga/Navosa Province
- Districts of Namataku, Noikoro and Tuvu

- Ra Province
- District of Saiyou
- Naitasiri Province
- Districts of Lutu, Nagonenicolo and Naboubuco
- Serua Province
- District of Serua

For Vanua Levu the areas include:

- Bua Province
- Bua District
- Cakaudrove Province
- Districts of Vaturova, Saqani, Tunuloa and Taveuni Macuata Province
 - Districts of Dreketi, Seaqaqa, Wailevu and Labasa

The 20 districts in the ER-P accounting area have been selected for specific interventions however this does not limit areas outside the priority districts. All areas that are part of the accounting area may be included in the ER-P activities. All participants in the ER-P activities are expected to register with the Ministry of Forestry as the focal point for REDD+ implementation in Fiji.



Senior Estate Officer (Central Eastern Region) Mr Isoa Kasainaseva lead the discussions at the REDD+ Journey workshop in Suva

Landowners supporting TLTB's tree-planting exercise

he initiative by the iTaukei Land Trust Board (TLTB) for the landowning unit (LOU) of Qilaqila in Nanukuloa in Ra be issued with a lease over the tree-planting sites has been well received by the landowners.

Two consultations were conducted in 2019 and they seems to be clear with the objective of the Board and the purpose of obtaining a lease as joint contribution of the LOU in mitigating the impact of climate change.

Obtaining a re-afforestation lease becomes an asset to the LOU and part of their long term investment. Lease offer will be paid by the Board and they will pay rental at minimal rate from the second year onwards. And with valuable trees grown on the subject lease land will indeed tag a higher value on it.

Valuation of these valuable trees after five years will provide indicative commercial value which they can utilize as security for other business and/or investment while these trees are left to grow in maturity. At the same time once the lease is registered under the carbon-trading register the LOU can also have access to the revenue that comes out of the carbon trade which is distributed based on the volume of carbon calculated from their land.

Since it's all part of the national initiatives towards mitigation of climate change, minimal rental will be levied with normal fees and cost to TLTB for administering the lease but no premium will be levied.

All the above information were disseminated to the LOU during the consultation made by the Tourism Department and was well received and appreciated by the elders and members present.





Staff from the Tourism Department in Nadi with landowners of Qilagila in Ra

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Head Office and Central Eastern Region's tree planting team at Sawani, Naitasiri

Head Office, Central Eastern staff plant trees in Sawani

he first tree planting activity for the iTaukei Land Trust Board (TLTB) was held on Saturday 29th September 2020. In Suva, the bus left Head Office at 7:00am and slowly made its way along the busy Kings Road towards Sawani Village – another tree planting site identified by the Business Excellence (BE) Committee.

With the support from the Ministry of Forestry and its hard working staff, the event was held in support of the tree planting programme that was launched by the President of Fiji early last year.

However, due to the restrictions brought about by COVID-19, the BE Committee was not able to organise any tree-planting activity in the first and second quarter of the year because of the lockdown and restrictions on public gatherings.

In Sawani, Mataqali Naduruvesi land was chosen and very well received by members of the landowning unit who also taken time out to join our Head Office and Central Eastern Region staff for this corporate social responsibility (CSR) activity of the year.

"This is one course of action where the Board increases its visibility," said CEO Mr Tevita Kuruvakadua. "It is important that we touch base with our stakeholders, especially with our landowners, at the same time supporting our government initiatives" he added.

One thousand (1,000) coconut and yasi seedlings were provided by the Ministry of Forestry which consists of native and fruit trees which were all panted within three hours. \blacksquare



Landowners came out in numbers to support our team in Sawani



Coconut is also part of the many tree species

Tree planting at Vorovoro



s part of the Board-sanctioned corporate social responsibility (CSR), Team North chose to travel across the sea to go and plant trees on Vorovoro Island, Mali, Macuata.

The island is located in the north-western part of Vanua Levu which s about 30 minutes travel by boat from Malau Jetty.

They planted 1,000 trees of different species on that day:

- a) Palm trees (Arecaceae)
- b) Vesi (Merbiau) 10
- c) Moli (Citrus) 200
- (d) Yasi (Sautalum Yasi) 200
- (e) *Tavola* (Terminalia catappa) 20
- (f) Passion fruit (Passiflora edulis) 1
- (g) *Dilo* (Callophylum inophylum) 100

A total of 21 staff with some family members, were present along with the support of two Ministry of Forestry officials.

Tree planting was done on Mataqali Davetalevu's land and Team North are grateful to the landowning unit for their support, especially in the providence of transportation to and from the island.

This has always been a great initiative that creates team bonding for the staff and their families. It is also an avenue whereby the staff can contribute to the increasing of carbon sink and enhances the efforts of conservation and helps mitigate climate change in Fiji, specifically in the North. ■



Finance Officer Ratu Josefa Lalabalavu unload the seedlings at Mala



First trip ready to leave for Vorovoro Island

North-West corporate social responsibility

ike all the other regional offices, the North-West Region also planted trees on Saturday the 29 August as part of TLTB's corporate social responsibility (CSR).

This tree planting activity had taken place at Nayagoyago in Naikabula in Lautoka - the land belonged to the mataqali Ketenatukani of Vitogo Village.

About 25 staff from Lautoka Office turned up for the tree planting exercise, where 1000 pine seedlings were successfully transplanted.

The landowning unit were so touched by this act kindness by what the North-West Team had done on their land, that they had presented a tabua (whales' tooth) to the team as a token of appreciation of their effort, hard work and commitment on their land. ■



TLTB staff planting trees to convert barren land into a forest





Vunitogoloa is a big tree-planting project in the Western Division for our TLTB staff in Lautoka, Ba and Rakiraki

Landowners agree to continue tree planting at Vunitogoloa

eam Sustainable from the Tourism Department in Nadi led by Manager Tourism Mr Isoa Tuwai continued with TLTB's 4-Million Trees in 4-Years planting initiatives as required under the Strategic Corporate Plan 2020-2022 at Vunitogoloa in Ra.

Mr Tuwai said that the trees were vital as they give us oxygen, store carbon, stabilize the soil and give life to the world's wildlife. They also provide us with the materials for tools and shelter. The team also conducted their tree plant audit to see those plants that have grown and those that have died so that they can be replaced.

The Forestry Department in Rakiraki assisted the team in supplying 120 mahogany plants which was planted by the staff with the assistance of some members of the landowning unit. Mr Tuwai said it was satisfying to see that all that were planted since 2019 had all grown well. The team also consulted the landowners who have given the green light for the continuation and extension of their CSR site on the village land.

CSR Date: 27th June 2020 CSR Venue: Vunitogoloa Village, Rakiraki, Ra. Activities for the day:

- Plant auditing
- Continue with tree planting 120 mahogany trees
- · Consultation with the LOU on the leasing of the site



Vunitogoloa flats will soon have its own forest cover

CORPORATE SOCIAL RESPONSIBILITY ORGANISING TEAM : 2020

National CSR Coordinator: APO Ms Salanieta Baleisuva Team Leader (Head Office): CEO Mr Tevita Kuruvakadua Team Leader (South-West): RMSW Ms Ema Natadra Team Leader (North-West): RMNW Mr Soloveni Masi & MTD Mr Isoa Tuwai Team Leader (North): A/RMN Mr Josaia Waqairatu

Logistic & Support Team: Business Excellence Committee, Regional & Sub-Regional Champions, TLTB Staff & Families

