

Cargo Proa Prototype

Building Blog



May 2022

I arrived in Fiji 2 weeks ago and moved into a bure and office at the College of Appropriate Tech and Development (CATD) at Bau Landing, about 25 kms NE of Suva. The staff and students are lovely and very keen to help. They offered me use of their carpentry, plumbing and metal workshops and want input on how to include boatbuilding in the curriculum. We may build a mini cargo proa (foam, not ply) on weekends and evenings. They're also keen on swapping petrol outboard motor motors for electric.

Had dinner with the SSTI guys. They are enthusiastic and are making stuff happen. Several high up Govt people are interested and a World Bank report on how the Govt should instigate their sustainable agriculture agenda stated: "Key informants flagged domestic inter-island shipping as an area in need of development." and "There should be a push to work with the **Sustainable Sea Transport Initiative**, which is building a prototype of a sustainable inter-island vessel to provide services to more remote locations."

The first day here, I had a visit from the chief whose family owns a large chunk of Fiji, including the CATD site and several islands, one of which is Leleuvia which has a green resort on it. He is very keen on the cargo proa, asked me to spend the weekend at the resort and give a talk to 50 students from the International School who are there for a week.



Leleuvia is lovely. Had a fun talk with the kids, one of whom told me (nicely), I was wrong to advocate hydro power because of concrete dams, wiped out species etc. We decided small scale would be viable. The barman collared me to tell me the cargo proa was just what was required for his village, when could we start?

I went for a sail/paddle, not much wind in a plywood outrigger, 70 of which were built for an Amazon TV show. The guys who look after it are finishing their Env Eng degrees, offered to work on the Cargo proa over their holidays.

The most common comment from pre teen students, hotel staff and taxi drivers all the way to high up in the public service and Government is that everyone is talking about green shipping, but only the cargo proa is doing anything. Gratifying for me, not so much for the planet.

TAUTOKU!!! Fijian for marvelous. The first container arrived, an hour later it's unloaded and the contents in the shed, 100m down a dirt track. Amusing comparing my efforts with the car, trailer and tractor with 30 enthusiastic strong Fijians. Pick up the component, put it on their shoulders and take off down the track. Video [here](#). The long hull is being joined in a shed over an old slipway. Should be able to get the masts up and beams on to be sure everything fits, then remove them, launch it and reinsert them, then add the ww hull and the bits between the beams. Not quite a travel lift on a concrete ramp, but probably easier than the Pinjarra Creek scenario. Plus there are 80 students available for lifting and carrying. I am modifying the beam/mast attachment to enable the beams to be installed after the masts are up. There is a sunk sand barge on the slip. Removing it would make launching easier, but I am still trying to figure out how.

Yesterday was my birthday. I walked into the food hall for breakfast and 80 students and several staff sang happy birthday Rob, with far more enthusiasm than it has ever been sung before. The students are trades apprentices, but they sing wonderfully. First thing in the mornings and pre dinner, they perform. It's a great way to be woken in the morning.

The students and I have cleaned the small shed and got my stuff stowed. The middle section of the lee hull is on the slip, one end is ready to join, once I get some epoxy.

CATD owns a couple of 6m/20' pangas/banana boats/fibres which the students and I are going to repair and use for fishing. Solid csm glass, about 400 kgs weight, these things are everywhere and are a brilliant bit of 'situation suitable' design. Unfortunately, they require 40 hp outboards to get them planing and the fuel cost is prohibitive. Electrifying them, including installing solar power, is on the wish list.

Just had a visit from a World Bank funded reef clean up project about shipping waste plastic (a big problem) from villages to the recycling place in Suva. They looked at the boat bits scattered around the place and wanted to know how many cargo proas we could supply and when! The COO is a Swede with a lot of ocean sailing miles. Reckons the cargo proa is the 'most functional sailboat' he has seen. At the end of the meeting they asked how long I would be here. I answered that it is a beautiful place, the people are exceptionally friendly, I get better care than in a hotel, up to 80 enthusiastic assistants at my beck and call and I spend all day playing with boat ideas. I won't be leaving anytime soon.



Bau river



Bits along the track



Build shed



Buree front



shed 1



End 1 ready to join



shed 2



Launch ramp



Simplest bamboo boat



Slipway high tide 1



Slipway shed



Slipway high tide 2



Slipway shed 2