

Bamboo Cargo Bike - Changing the World, One Bike at a Time

Supervisor: Dr. Eral Bele

L. Durand, K. Lee, L. Nguyen, S. Nishino, K. Pisavaria, J.G. Tan, U. Turkucu



Bamboo Cargo Bike



The Problem

Poor transportation limits the total income of the farmers due to the limited quantity of produce that could be transported. Furthermore, products could be damaged during the journey using conventional methods.

The Solution

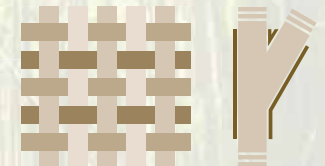
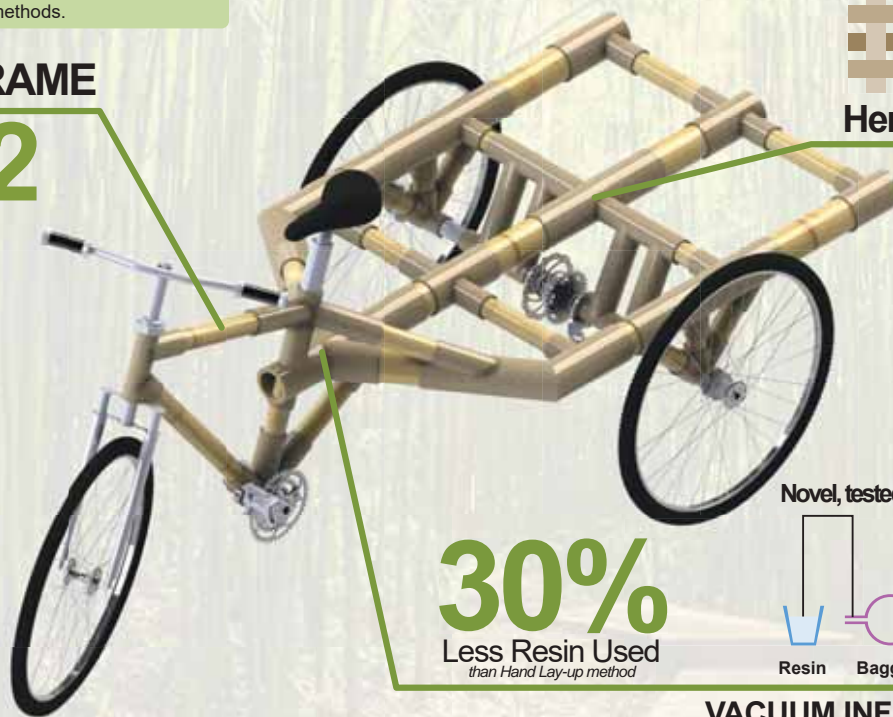
The cargo bike aims to replace head portage, which is severely limited in load capacity, donkeys, which incur high maintenance costs, as well as motorcycles, which are very expensive. The cargo bike is designed with customers' needs in mind, with a load capacity of 150 kg.

Business Plan

On-site Production: the setting up of a production line, sourcing materials and components from local bamboo farms and other local businesses. The local assembly ensures the quality of the product, thus ensuring the health and safety of the users, whilst boosting the local economy.

BAMBOO FRAME

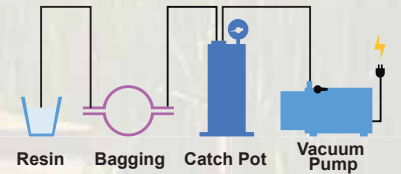
SAFETY FACTOR **2**



Hemp Fibre & Resin
JOINTS

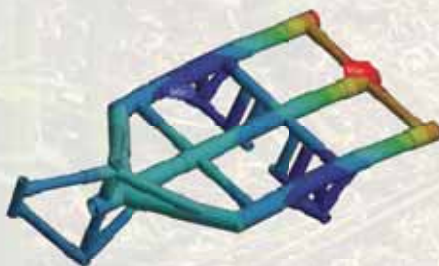
30%
Less Resin Used
than Hand Lay-up method

Novel, tested and applied on our Joints



VACUUM INFUSION PROCESS

Engineered to last
5 YEARS



Rear Loading Design

For more stability and less complexity



150 Kg Cargo Capacity

To carry coffee beans, cereal and other crops



Rear Differential

For improved traction



Hemp-Resin Composite

Strong, tough and lightweight



7-Speed Gearing

Comfortable and versatile cruising



Sustainable & Green

Less Carbon footprint than a traditional bike

PARTNER & SPONSOR



EVENT — **CONTACT**



- @Pedal_progress
- @Pedalprogress
- pedalprogress@gmail.com
- pedalprogress.bike

