

Report 15/08/09

Industrial designer in Kampala Vanja Steinbru

Short background story/

Boda boda started out as a bicycle taxi in Busia, Uganda, and the expression comes from English and means border to border.

The boda-boda culture started in the 1960s, between the Kenyan and Ugandan border. The name originated from a need to transport people across the “no-mans-land” between the border posts without the paperwork involved with using motor vehicles crossing the international border.

Even though the boda-boda bicycle is still spreading to other areas, especially in cities in Kenya and Uganda, the bicycles are more and more replaced by motorbikes. The motorbike-taxis have taken the name bodaboda as well. In 2004 it was estimated that more than 200 000 men in Uganda were working as bicycle bodaboda and already almost 90 000 as motorized motorbike bodaboda. (1)

Field trip to Mbale/

Arrival: 23.08.09 22:00

Departure: 25.08.09 11:00

Coworkers: Issac Etyang and Abraham Osan

Mbale is a small town, with an estimated population of 86,642 (2) people. It's a busy town and there is a lot of boda boda traffic. There is a bigger number of the bicycle boda's than in Kampala, probably because the traffic is less heavy, less people and the hills are not as great as in Kampala. Earlier it has been suggested to develop helmets also for bicycle bodas and not only motorcycle bodas.



<http://www.hobotraveler.com/b-photos01/211-431-boda-boda-taxi.jpg>

From the questionnaires, we found that people board boda boda's because it's cheap and convenient. All the asked passenger boards a boda at least twice a week. It looked like in the answers from the questionnaires, that people usually used their helmets, but when observing bodas riding around, there were less riders using the helmet than riders without any helmet. This can be the fear the riders have for sanctions if they answer they don't use it. In the fewest cases the riders offer their helmets for the passengers, but a majority would have accepted because of safety. The ones who would not accept says it's because of deceases. No passenger owns their own helmet, and when asked if they would like to bring their own or borrow from the boda rider, the answers were equally divided.

The boda riders in Mbale answers that they do the job because of an daily income. Majority did not bring their helmet. The ones bringing it were using it, but the ones not bringing it says it's because of inconveniency and it makes the job more difficult. Most of the riders would change the glass of the helmet if they could change

1 From Wikipedia, the free encyclopedia

2 From Wikipedia, the free encyclopedia



anything. Almost none carry a helmet for the passenger, but they say sometimes passengers ask for one. When asked about what price they would be willing to pay for a helmet, it varies between 10 and 30,000 ugsh /=. The boda riders work 6 to 7 days per week and in average 12 hours per day. They also say that the usual speed they drive in is 50 kmph.

When driving at the main roads leading to Kampala, I have myself seen boda riders driving for at least 80 kmph, so these results can be out of fright of getting sanctions.

After this field trip we headed back to Kampala, and I started working on the fibers.



Fiberfacts/

“Fibers or fibres is a class of hair-like materials that are continuous filaments or are in discrete elongated pieces, similar to pieces of thread. They can be spun into filaments, thread, or rope. They can be used as a component of composite materials. 2009 is the International Year of Natural Fibres. The United Nations General Assembly declared 2009 as the International Year of Natural Fibres”. (3)



“The IYNF is intended to cover a wide range of natural fibres, of animal and vegetable origin, and with uses ranging from luxurious apparel to traditional and non-traditional industrial uses. The IYNF is expected to raise the profile of natural fibres. Observance of the Year will be based on cooperation among producers all natural fibres and will emphasise the positive qualities of natural fibres”. (4)



“Tentatively, the objectives of the International Year of Natural Fibres would be:

- To raise awareness and stimulate demand for natural fibres
- To encourage appropriate policy responses from governments to the problems faced by natural fibre industries
- To foster an effective and enduring international partnership among the various natural fibres industries;
- To promote the efficiency and sustainability of the natural fibres industries”. (5)



<http://en.wikipedia.org/wiki/File:Hemp-rope.jpg>



Extracting of banana fibers

Babu Talik has been helping to extract banana fibers, and showed me how they get them in length. This is a fairly simple method of extracting, and the fibers comes out well.

Donald in Faculty of Arts has been helping on doing the weaving of the fibers. He has been doing a lot of research on a fiber called raffia, so we tried out weaving with that as well. Since Raffia is not that common in Uganda, I believe it's better to focus on other fibers.

Why we tried to weave:

Simply adding short fibers to resin would not make the shell strong enough, so we want to try to make the fibers long enough to hold the resin better. The short fibers we tried out was sugar fibers.

Outcome of the weaving:

Natural fibers are difficult to weave, cause they brake easily. What we have tried out is banana fibers and raffia. Weaving every textile by hand is a time consuming and difficult process, whereby we believe it will be better to try to weave by machine. By machine we need fibers that are strong enough to be made into a thread. What we want to try out next is to spin sisal to a thread and use it as a base, and weave with banana fibers. Sisal is one of the strongest natural fibers known in this area.

Weaving of the fibers



Meetings/

Babaluku foundation about promoting the helmet, and getting help for the graphic design part.

Michael Thornton and Michaela about working together on this project. Michael offered to send over an engineer from engineers without borders to help on the most technical parts of the helmet.

Other activities/

We finally got an office where we can be based. This relieved the work a lot.

Thoughts/

Things are moving in a slower pace than I had expected. I have also been sick for over a week, so that also slows down the project. It would help to have someone else working with me on the project, so that any time something comes up, the project won't have to get to a hold.

Next months goal/

September 15th to October 15th

Make 2 prototypes to be tested out

Find out different types of resin, what is more eco-friendly than others

Calculate costs of making fiber mats

Field trip to Rwanda

Spinning of Sisal

Making a fiber mat on a machine.

Contact Toby about starting the graphical profiling of the helmet.



Short diary /

20.07.09 sketching	19.08.09 Installing in office, installing internet and beginning prototyping with hønsetting
21.07.09 sketching	20.08.09 working from home and planning how to go further
22.07.09 sketching	21.08.09 meeting with industrial designer and sales personel. michael Thornton
23.07.09 Testing of fiber	23.08.09 Fieldtrip Mbale
24.07.09 Bying of new resin, testing of fibers	24.08.09 Fieldtrip Mbale
27.07.09 Sick day	25.08.09 Fieldtrip Mbale
28.07.09 ICC office, sketching Home prototyping with papmache	26.08.09 Resyme from fieldtrip Meeting with Michael Thornton
29.07.09 Testing of paper helmet	27.08.09 Extracting of bananafibers Resyme of fieldtrip
30.07.09 Meeting with Alex about helmet	28.08.09 working on ??
31.07.09 Trip to resin people Meeting with babaluku	31.08.09 Weaving of bananafiber and other type
03.08.09 - 10.08, holiday	1.09.09 meeting with berhard about the student assignment
11.07.09 Meeting with Bernhard about visa Mailing	2.09.09 weaving
12.08.09 Visa work	3.09.09 weaving
13.08.09 sketching meeting with alex on brainstorming for conceptnames	4.09.09 weaving
14.08.09 Handing over sugar fibers and resin to Muzaasi Meeting with ICC on planning mbale fieldtrip	7.09.09 trying out resin and fibers
15.08.09 Meeting with Michael and planning project together	8.09.09 research on different fibers
17.08.09 Prototyping helmet meeting with baboo, sjekke navn, he will call when someone can help	9.09.09 ordering of head
18.08.09 Got an office in Makerere	10.09.09 ordering of head
	11.09.09 riots
	14.09.09 Writin of report 14th - 20th home with illness.

