Ghana Bamboo Bikes Initiative

ABOUT THE GHANA BAMBOO BIKES INITIATIVE

The Initiative, which is the brainchild of the Bright Generation Community Foundation based in Kumasi, Ghana, is the story of a big idea which started from very little beginnings. Those little beginnings cultivated and nurtured that big idea which has become even bigger over the years and has travelled very far indeed, from Ghana to South Korea! And along the way, the big idea has lifted countless spirits and brought the joy of mobility to many hearts. In the process, it has assumed a global stature.

I am proud to say that the original idea which gave birth to our bamboo bicycle initiative was big because I relate it to the immense natural resource which was only waiting to be put to good use. However, though Ghana is endowed with abundant bamboo, especially in the forest zones, the resource is underutilized because of ignorance about its socio-economic and environmental importance. As a result bamboo is subject to deliberate destruction and indiscriminate exploitation.

The initiative designs, develops, and markets bamboo bikes and frames and related products and services as a means of addressing the quadruple problems of climate change, poverty, rural-urban migration and high unemployment amongst the youth by creating employment opportunities and sustainable livelihood job skills. These are intended for unemployed school leavers and the youth in general. They are trained as bamboo bike builders to build high quality multipurpose bikes that are suitable for the country’s rough terrain and purposeful for local needs using native bamboo. From this perspective, the project seeks to promote the use of bamboo as...
an environment-friendly, community-based alternative transportation option and livelihood activity for rural development.

It was initiated by the Bright Generation Community Foundation - as a commitment project of President Clinton’s Global Initiative University - when we realized that most rural dwellers in Ghana lack the skills and the knowledge necessary to create wealth from the bamboo that grows abundantly in the wild and goes unutilized. We thus engage these rural folk as partners in development and build their capacity to appreciate the value of these natural resources by enhancing their value to create wealth and employment opportunities. It is our means of reducing poverty in the rural communities as part of our contribution towards achieving the Millennium Development Goals.

Apart from establishing a social enterprise that empowers rural people to manufacture bamboo bikes and frames thus providing employment to people who would otherwise be out of a job or live below the poverty threshold, the initiative addresses the need for greater access to inexpensive, multi-purpose transportation in rural areas through the building of safe, reliable and all-purpose bamboo bicycles. As stated above, our bikes are suitable for the rough terrain in the rural areas and geared towards local needs using native bamboo. Our bikes can carry big loads and cope with rough roads, even in rainy conditions. Moreover, they are configured to be not only affordable, but also maintained and repaired locally.

The Initiative supports the promotion of a healthy, non-polluting form of alternative transport and strengthens the role of non-motorized transport to meet growing mobility needs whist addressing the perennial problems of climate change, environmental degradation, poverty, and high unemployment amongst the youth in Ghana.

Through our membership of the Global GEF-NGO network, we are currently working with the Global Environmental Facility for the implementation of a demonstration project in one of our districts but we have a much more ambitious goal of creating a viable venture and production of more assorted bamboo bikes in numbers that are at scale, using a mode of production where both economies of scale can be created. This we hope will truly make a difference.
Below are the different models of bamboo bikes that we are coming up with to contribute our quota to the development process of the country.

VISION
It was founded with a vision to be part of a green movement, a desire to have a positive impact on the environment and to provide the freedom to choose alternative forms of transportation that are innovative, affordable, functional, relaxing and responsible.

ECONOMIC IMPACT
The products of the Ghana Bamboo Bikes Initiative have the potential to improve the lives of many Ghanaians not only by delivering a sustainable and affordable form of transportation that not only satisfies local needs, but also creates employment opportunities. Eventually our bamboo bikes bring about needed economic growth. High quality, handcrafted bamboo bike frames are also built for the export market as our contribution towards improving the country’s perennial balance of payments deficit.

Keynote Speakers
One of the main reasons for giving the World Economic Development Award (2012) to the Ghana Bamboo Bike Initiative was its being adjudged an inclusive business model. This stems from the fact that the initiative builds bridges between business and the poor for mutual benefit. The benefit for business goes beyond immediate profits and higher income. In this case, the initiative as a business venture, exhibits qualities that include innovation, building markets and strengthening supply chains.

And for the poor, our initiative’s actions include access to essential goods and services, higher productivity, sustainable earnings and greater empowerment. The bamboo bikes initiative therefore fits into the classic pattern of an inclusive business model in that both demand side and supply side amply benefit from the economic viewpoint.

**ENVIROMENTAL BENEFITS**
The increased cultivation and use of bamboo as an alternative to wood is helping the preservation and rehabilitation of Ghana’s dwindling forests. Bamboo bicycles have positive impact on the environment in both the early and late stage of production. It has a number of environmentally friendly qualities and a lower negative environmental impact than metal bicycles. Bamboo helps improve air and water quality in areas where it is cultivated. The initiative supports the promotion of a healthy, non-polluting form of alternative transportation to meet growing mobility needs. For this season, it meets are of the criteria for being classified as an inclusive model. The initiative’s environmental impact, at a minimum does not have major negative environmental impacts and, at best, contributes directly to environmental sustainability (eg. by saving resources, reducing carbon emissions and conserving biodiversity).

Since 2010 we have planted more than 15,000 bamboo seedlings which have removed over 10,000,000 kgs of CO2 to offset carbon emissions. A family of four would essentially require 1100 to 1250 kg of oxygen every year for breathing which is made available by only 3 bamboo trees grown organically. Our aim is to grow 200,000 bamboo seedlings in the next five years to make the community where we operate from become carbon neutral.

This Initiative was founded with a vision to be part of a green movement, a desire to have a positive impact on the environment and to provide the freedom to choose alternative forms of transportation that are innovative, affordable, functional and responsible. Environmental benefits take place in both the early and late points of production. Growing bamboo helps prevent soil erosion, purifies water and air and generates little waste, while production does not use harmful chemicals. Bamboo does not leach many nutrients from the ground, as it pulls silica from the soil.
Bamboo bike production is a labor-intensive but low-energy consuming process. Less electricity is needed to build a bamboo bike hence our resolve to use solar powered appliances. During the production of a steel frame, about 5 kg CO2 are emitted; an aluminum frame leads to even higher emissions. Whereas bamboo can be directly recycled, steel and aluminum require additional energy-inputs for recycling.

AWARDS
The Ghana Bamboo Bikes Initiative has won the following international awards since its inception:

- UN Habitat/Dubai International Award 2014
- Momentum For Change Light House Activity Award 2013
- UN Habitat/Dubai International Best Practice Award 2012
- 2012 International Road Federation InARoad Awards
- Samsung/Generations For Peace Impact Award 2012
- World Business Development Award 2012
- GIZ Impact Business Award 2011
- The 2011 ImagineNations Business Plan Competition Award
- The 2010 UNEP SEED Initiative Award

SHORT TERM PLANS 2014-15
- Scale up our production and establish a bamboo bike factory in Kumasi for producing bamboo bike frames, bicycles and carts.
- Establish a bicycle assembling plant for assembling multi-purpose cargo steel bikes
- A bamboo charcoal production for producing bamboo charcoal
- A hire purchase fund that will provide micro financing on hire purchase basis for the purchase of our bikes.
- Establish a 25 acre bamboo plantation

MID TERM PLANS 2016-2017
- Diversify our production to include bamboo flooring and handicrafts
- Establish a 100 acre beema bamboo plantation
- Diversify production to include motorized bamboo bike ambulances, pedicabs

Keynote Speakers
Bamboo bike builders at the workshop

Male mountain bike with rack

UN Boss Ban Ki and UNFCCC Boss Christiana Figuerero riding our bamboo bike

Bamboo cargo bike