



## **Zambulance and Zamcart Bolt Kits**

**WHERE:** Uganda, Zambia, and Taiwan

**ORGANIZATION:** Akerfa  
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### **PROJECT SUMMARY:**

In order to combat problems with affordability with the poorest entrepreneurs and clinic patients who could benefit from resources such as a Zambulance or Zamcart, Akerfa's consultants will go to Asia to arrange the sourcing and shipment of Bolt Kits to be distributed. Distribution will begin in Zambia and Uganda, but once proven through initial pilot phase, Bolt Kits will be distributed through surrounding regions and through international partnerships with other organizations (beginning with Catholic Relief Services, World Vision and Seeds of Hope).

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## **WHO WE ARE**

Akerfa exists to raise awareness and directly support start-up bicycle social enterprises in developing countries with capital and professional consultancy until sustainability is attained. But it is not just a bike. Bikes provide the means to acquire better jobs, the ability to provide for one's family, affordable transportation and access to education and medical care.

Akerfa and its first bicycle social enterprise based in Zambia, Zambikes, have had many successes this past year, including:

- Completing the distribution of more than 2,500 bicycles
- 650 Zambulance (bike ambulance trailers) and Zamcarts (bicycle trailers) distributed
- Employment of 50+ workers in Lusaka, Zambia
- Completion of the Zambikes Assembly Facility, Caretaker's house, and Zambikes Community Center

## **BACKGROUND**

To date, Akerfa's affiliate, Zambikes, has been welding Zambulances and Zamcarts in country, providing many jobs and producing more than 650 trailers to be distributed. But with the increased popularity of the carts by the World Bank, Catholic Relief Services (CRS) and many others and recognition of the burden of the current price point of these carts to the end user, there is a need to find a way to make these carts in larger quantities for a cheaper price.

The World Bank, through their research using the Zambulances in the field, discovered that each cart was saving on average one to four lives per day. Catholic Relief Services used the 200+ carts they purchased this past year in their projects throughout Zambia and have realized their need for similar carts in many of the nearly 100 countries they serve.

However, there are some problems with doing steel production in Zambia and all over the developing world. Raw materials come at more than double the price of other parts of the world and level of quality is often sacrificed.

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This puts costs on the end user at a much higher price point (\$200 or more) than most can afford. Also, with the need for greater quantities of Zambulances, the capacity to weld these products in country becomes much more limited and much more taxing on Akerfa and its affiliates.

## **SOLUTION**

In order to provide the relief Akerfa believes that bicycles and bike trailers and ambulance trailers are capable of and to get them in the hands of more people, Akerfa proposes to create Zambulance and Zamcart Bolt Kits in Asia.

These kits will be built in Taiwan and then assembled in the final destination. Each kit will come with all parts for the cart, a tool kit with instructions to build it, spare parts and extra tubes for the tires.

## **BENEFITS**

- *Price:* 50% cost cut to end user (would now only cost a little over \$100)
- *Quantity:* Produce and send out more carts in more places
- *Impact:* Save more lives and produce more jobs
- *Quality:* Added features to the carts without added cost (stronger, lighter material, extra railings, handles and holding stands)
- *Partnership:* Will be able to partner with more organizations to help meet their needs
- *Financial Gain for Affiliate:* Zambikes will be able to put more manpower behind their export of bamboo bicycles

## **COST BREAKDOWN**

Initial investment for this project is \$60,000 that will be broken down as follows:

\$36,000 Sourcing: Will include the purchase of initial 300 trailers to be sent to Zambia and Uganda for final field testing.

\$9,000 Ambulance and Cart Extrusions: Molds and jigs will be set up for the aluminum cart parts. This needs to be made

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because no product like this has been done on such a large scale before.

\$15,000 Travel Expenses: Will include multiple trips for consultants and founders to Asia to arrange the design and sourcing of the products.

### **IMPACT**

With the initial investment of \$60,000, according to the World Bank, the first 300 ambulance carts and trailers will be able to save up to **9,000 lives per month** (300 lives per day x 30 days per month) and will allow for *increased job creation and income* for those that are served daily by Akerfa, it's affiliate Zambikes and all their partners in Zambia and Uganda.