

**An appeal for donations of workshop equipment to be shipped from Kelowna/Vancouver to build life-saving 'bicycle ambulances' in Namibia**

# Rural Namibia:

*Where emergency medical treatment is only 17 hours away*

While Angelina Jolie showed the world that it is possible to receive first world medical treatment in Namibia, the specialists monitoring her every palpitation in the luxurious surrounds of her lodge on the Atlantic coast remain inaccessible to the majority of people here.

Most Namibians live in scattered villages in the north of the country and are engaged in subsistence agriculture. The erratic rainfall means this is a necessarily a marginal existence. This year the rains came too late and too forcefully, with cereal crops in many regions damaged by waterlogging, to the extent that Namibia will need to import around 82 000 tons of cereal this year.

Added to the problem of food insecurity is one of Southern Africa's highest HIV/AIDS infection rates. Prevention information was slow to penetrate isolated and traditionally superstitious rural communities, and came only after the first waves of infection had taken hold. Now remote communities carry the burden of a 20 to 30 percent adult HIV/AIDS infection rate, a staggering number of AIDS orphans and limited access to even basic healthcare.

Despite the grim backdrop and the limited government capacity to deal with the problem, Namibia's response to the HIV/AIDS crisis is heartening. Every day, thousands of Namibians, over ninety percent

of them women, walk to local coordinating centres and clinics to collect bags of basic medication and sanitary supplies, condoms and updates on counselling techniques. They then travel to the traditional thatch and mud houses of people living with the disease to monitor their health, give assistance around the home, counsel family members, and provide medication and instruction in its use. They ensure basics like soap are supplied and used to prevent the spread of other diseases, and provide feedback on clients to their coordinating organisations.

The motivation for these women is simple: their people are dying and they are the only ones who can do something about it. They receive no pay and often walk huge distances between clients in searing heat, slotting the work into their care-giving roles in their own families. There is no such thing as public transport between villages, passing pick-up trucks are infrequent and car ownership is unthinkable for most.

For the past year a new non-profit organisation, the Bicycling Empowerment Network Namibia (BEN Namibia), has been providing bicycles to home based care volunteers across Namibia. The bikes are secondhand donations from charitable organisations in the UK, US and Canada, and arrive by the container load. Each bike is fully refurbished by young trainee mechanics and adapted for use in re-



*Testing a prototype bike ambulance with home based carers from TKMOAMS, a grassroots volunteer network in Oshakati, northern Namibia.*



*Some of the 50 bicycles BEN Namibia has supplied to the HIV/AIDS home based care programme in the village of Okathitu in northern Namibia, and the few of the AIDS orphans the programme supports.*

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remote communities, for example mountain bikes are stripped of their gears and converted to easy-to-maintain singlespeeds.

Monitoring of the way that the bikes are used has shown that volunteers see more clients and spend more time with each. But it has also revealed a serious implication of the transport problems in remote areas: access to health services for critically ill people. With clinics and hospitals often 20 kilometres or more from their homes, people incapacitated by a serious illness can either wait for motorised transport to arrive, hope that their condition improves, or die.

In some cases, the carrier racks of the bicycles are used as passenger seats, but for someone lapsing in and out of consciousness this is not a satisfactory solution. BEN Namibia has identified a solution to the enormous need for emergency transport in remote areas: bicycle ambulances.

These simple devices have been used with great success in other African countries like Kenya, Uganda and Malawi. They are basically a bicycle trailer with a built-in stretcher that attaches to a conventional bicycle. They can transport a critically ill person to a hospital, clinic or motorised transport junction for 40 kilometres or more. In villages in Uganda that use bicycle ambulances, for example, marked decreases in infant mortality have been recorded, as women experiencing birth complications have been able to be transported to clinics in relative comfort.

BEN Namibia has begun developing prototype ambulances, and these have been tested by women from remote villages. The response has been resoundingly positive, and the need to start design refinement and production is urgent. In October 2006, BEN Namibia will commence a project that will lead to around 100 ambulances being produced within 12 months. It will also make its designs publicly available in the hope that other groups, both within Namibia and around the world, will be able to produce these life-saving devices.

To date the project has support from the American Jewish World Service, which is sponsoring the transport costs of the project's volunteer coordinator from the US. It also has pledged to pay for ambulances from donor organisations and private sponsors. What is still required is the workshop equipment to make the ambulances, and funding for the materials to develop prototypes and pay for workshop space until the first ambulances can be paid for by donors.

*BEN Namibia is appealing to individuals and businesses for donations of the equipment it needs to commence this project. Our partner organisation in Canada, Bicycles for Humanity, will be loading a container of bicycles from Kelowna, BC, in July. Space will be available in the container to fit any donated equipment. See contact details and a list of equipment required on the following page.*

# Project outline

**Commencement date:** October 2006  
**Coordinator:** Aaron Wieler  
(See Aaron's CV online at <http://mors.hampshire.edu/%7eafw01/portfolio/>)  
**Trainee:** Jonas Lazarus (currently a BEN Namibia bicycle mechanic,  
read Jonas' page at <http://www.benbikes.org.za/namibia/jones.htm>)  
**Location:** BEN Namibia warehouse, Windhoek.  
**Prototyping phase:** October-December 2006  
**Production phase:** January 2007-ongoing

## Equipment requirements

Oxy-acetylene torch (for brazing)	Hacksaw and blades
Cutting torch for oxy-acetylene	Wood handsaw
MIG/Stick combined welder	Cutting fluid
Bender: 3/4" tube diameter, 2 or 2.5" radius	Vertical band saw (steel cutting)
Half-round metal files	Fire bricks for brazing
Flat metal files	Safety glasses
Drill press	Ear protection (external muffs)
Tube mitering attachment for drill press	Thick and thin leather gloves
Bench grinder	Clear dust goggle
Bench vice (4" or so)	#5 eyeshade for gas welding/brazing
Drill bit set	#10 shade mask for arc welding
Measuring tape (+-5 metre)	Wire cutters
Center punch	Locking pliers
Ball peen hammer	Welding jacket
Vernier Caliper	T-square (for drafting)
Protractor	30-60-90 square (for drafting)
Square	Scale ruler
Adjustable spanner	Steel ruler
Spanner set: 6mm-17mm	

*Please note that secondhand equipment is welcome, however it needs to be workshop quality and in good working condition.*

## Contact

To arrange donations in Canada contact:



**Pat Montani**  
**Bicycles for Humanity**  
276 Clifton Rd. N.,  
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For more information about BEN Namibia,  
contact **Michael Linke**  
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