*The term wheelchairs is used to represent all types of wheeled mobility and other mobility rehabilitation devices, including wheelchairs, tricycles and supportive seating.*

**Introduction**

Wheelchair users are amongst the poorest and most marginalised people in society, with only 2% of people who live in low income countries able to access such mobility support. Mobility is a basic human right and the catalyst to disabled people exercising the range of basic human rights, including participation, education, healthcare support services and employment.

**Needs**

Rehabilitation services in low-income countries are estimated to reach only 2-3% of people yet accessing an affordable and appropriate wheelchair can provide independence and confidence, as well as a life of dignity. Global statistics indicate that there is a colossal need for appropriate wheelchair support that is not being met. The World Health Organisation (WHO) estimates that 20-25 million people worldwide who need a wheelchair are unable to access one.

**Role and Effect on Disability and Low-Income Countries**

Throughout low income countries worldwide, there has been a dependency upon donated or imported wheelchairs which have been designed for a developed environment. They are frequently distributed at ‘shows’ which focus more on the needs of the donor than the wheelchair user. This reflects a commitment by the donor to the charity model of disability, where the size and design of the wheelchair is decided by the product provider and not by the user. Historically most wheelchair provision has focused on the product in isolation from the individual user; their specific impairment, size, lifestyle and living environment rarely taken into consideration which often leads to serious illness from infection owing to pressure sores.

The majority of donated wheelchairs are totally unsuitable for the users’ needs and often provide them with greater dependence upon others and continued immobility. Many such wheelchairs are unable to withstand the harsh unpaved terrain and cannot be repaired locally.

The main supplier of wheelchairs to low-income countries is the Wheelchair Foundation, who produce one design of 4 wheel wheelchair through a network of partner organisations. The focus is on delivery of a high number of chairs.

**Education and training**

In the past decades, organisations including Handicap International (HI), Whirlwind Wheelchair International (WWI) and Motivation have worked with local partners in low-income countries to establish local wheelchair production. An emphasis has been on producing designs appropriate to the local environment and needs in recognition of the unsuitability of the majority of imported and donated wheelchairs.

Training has invariably been conducted informally, with organisations working with teams of staff from a particular workshop. This approach has had different levels of success in different regions. In some countries, local production of wheelchairs is thriving, and disabled people are being provided with wheelchairs suitable for the local environment at a low cost. In other places, production remains at a very low level and quality standards are not consistent. This approach has delivered a relatively small number of wheelchairs compared to the global need.

The first more formalised, structured training course was established at TATCOT in 2000. The one year course in Wheelchair Technology has now been accredited by the International Society of Prosthetics and Orthotics (ISPO). The course trains 10 students each year and to date students have graduated to eight countries of Africa to establish local services.

ISPO are working with the WHO, Motivation, WWI and CIR to develop a set of standards in wheelchair products, services and training, which will be presented at the first Wheelchair Consensus Conference, scheduled to take place in November 2006.

**Appropriate Approach**
For a wheelchair service to be effective it needs to be participatory and comprehensive: not only to provide wheelchairs, but to provide assessment and prescription services that can make the difference between receiving a good wheelchair and developing life-threatening complications such as pressure sores or scoliosis. Collectively we endeavour to enhance the quality of life of disabled people through their greater access to mobility.

Regular wheelchair congresses in Africa have helped to develop an appropriate approach to wheelchair provision in the region, and the 2003 congress participants formed the Pan African Wheelchair Builders Association (PAWBA) as an internationally representative, non-governmental, network organisation to facilitate learning exchange and to provide practical guidance and professional support to its membership across Africa and internationally.

Efforts have been made to increase local wheelchair and tricycle production, but poor infrastructure, lack of information and low wages, especially for disabled people, have made both the production and purchasing of wheelchairs and tricycles a huge challenge.

Locally made wheelchairs can be more appropriate because they often cost less, are repairable locally and designed to meet the real needs of their users. In addition locally made wheelchairs support the local economy. However, there are initiatives that are looking at exploiting the economies of scale of large scale production, whilst ensuring appropriate and responsible distribution locally.

Further Information