

Is Sustainable Development Possible in Africa?

Source: "An Inexpensive Handcart Catches On in Malawi, Where Women Have Long Used Their Heads," by Robert F. Worth, *The New York Times*, September 14, 2002, p. B1



Arnold Wendroff demonstrates use of handcart.

Is Sustainable Development Possible in Africa? Dr. Arnold Wendroff says "Yes." Dr. Wendroff is a Brooklyn resident who has worked in Africa as a member of the Peace Corps. He noticed that in rural villages many African women carried heavy loads, including a family's daily water supply, on their heads. There were few roads, and even if there were roads, people could not afford to own cars.

Dr. Wendroff invented a handcart that can be made entirely from wood and bicycle parts. These materials are readily available in most of Africa and they are not that expensive. The carts are also larger and more stable than wheel barrels. They allow African women to safely transport heavier loads and to be more productive. The handcarts are already being used in the central African nation of Malawi to remove garbage in the capital city and bring sick people to the hospital.

The design of the handcart is based on sketches Dr. Wendroff saw in a book he bought at the Brooklyn Botanic Garden. What makes them affordable and easy to build that they have no metal axle. Instead, two bicycle wheels are independently attached to a wooden frame. Dr. Wendroff has trained a number of Malawian carpenters to make the carts. They cost about \$40 each, which is a lot of money in a country where the annual per capita income is \$190. But an ox cart, without the ox, costs about \$400.

To learn more about the handcarts and to join his campaign to make them available to more women in rural African villages, visit Dr. Wendroff's website at www.malawihandcartproject.org.

Information About the Republic of Malawi

Source: Time Almanac 2001, p. 812

Malawi is a small country about the size of the state of Pennsylvania. It is located in southeastern Africa and is completely landlocked. In 2000, its population was a little over 10 million people. Much of the country is covered by mountains and a high plateau.

British explorers visited the region in the 1850s and it became a British colony in the 1890s. It became an independent country in 1964.

Malawi has a highly diverse population with nine different African ethnicities and small Asian and European minorities. About 75% of the population is Christian and 20% is Islamic.

Malawi is largely an agricultural nation and most people live in rural areas. The country produces and exports tobacco, sugarcane cotton and tea.

Malawi is a poor country. Per capita income is less than \$1,000 a year, there are high birth (38.5 per 1,000) and infant mortality rates (122.3 per 1,000) and less than half of the population is considered literate.