

MAKERERE

P.O. Box 7062



UNIVERSITY

Tel: (Gen) +256-414-545029

Fax: +256-414-532

Website://<http://www.cedat.mak.ac.ug>

E-mail: principal@cedat.mak.ac.ug

**COLLEGE OF ENGINEERING, DESIGN, ART AND TECHNOLOGY
(CEDAT)**

OFFICE OF THE PRINCIPAL

1st August, 2011

PRESS RELEASE

MAKERERE DEVELOPS LOCALLY MADE HELMETS FOR BODA-BODA CYCLISTS

Makerere University, through the College of Engineering, Design, Art and Technology, has partnered with Design without Borders (DwB), Richiencoy, and Injury Control Centre Uganda (ICC-U) to develop a helmet that is low priced, attractive and readily available for motorcycle riders and passengers.

The helmet, named 'B pro' has been designed to suit the East African climate, and fit within the local production capabilities at an affordable price of just US\$20,000/=. The aim of this project is to encourage more frequent helmet use among cyclists/ boda-boda riders and passengers. The other goals are; development of the Ugandan economy by local production of safety equipment, and development of local technological/manufacturing capability. The commercial production and testing of the helmet to be undertaken by Richiencoy Services Ltd will commence in September, 2011.

Before the designing and development of this helmet, field research was conducted to understand the problems and the challenges that the new helmet would address. Research was also carried out in Kigali-Rwanda, to understand how they have succeeded in making both passengers and riders wear helmets. Additionally, a focus group of 4 local boda-boda riders was created and consulted throughout the year. They gave input on everything from technical solutions to aesthetics.

Helmet use amongst boda-boda riders and passengers in Uganda is low. Low percentage of helmet use is one of the reasons why motorcycle riders and passengers make up 75% percent of injuries reported in hospitals in Kampala.

“A helmet can substantially reduce head and neck injuries to motorcycle riders. A 40% reduction of the risk of fatal crashes and a 30% drop of the risk of severe injury is achievable”, Eng. Dr. Bernard Kariko-Buhwezi, the Principal Investigator of the project remarked.

According to the World Health Organisation (WHO), the injury rate and head injury severity is less by almost 75% when a helmet is worn, yet ownership of helmets amongst boda-boda riders in Uganda is estimated at only 70%, and less than half of these helmets are actually used. Furthermore, passengers are rarely seen wearing helmets.

In addition to the studies already carried out by the ICC-U, boda-boda riders and passengers were surveyed at over 40 stages in Kampala and Mbale. The survey revealed some of the reasons for non-use of helmets among riders and passengers as: The high cost (up to US\$100,000) of internationally approved helmets vis-à-vis the low daily income of the riders; The riders seldom own motorcycles and often hire both helmet and machine from their owners; Riders prefer brand-new to used second-hand motorcycle helmets; Helmets available on the local market are uncomfortable and ill-fitting; Helmets are poorly ventilated and easily heat up; For health reasons passengers do not want to wear a used helmet; Riders often have difficulty hearing directions with helmets on and therefore lose customers.

It is these concerns that the project set out to address by designing and producing a helmet that is affordable and tailored to meet both environmental and customer needs.

For more information please contact;

1. Betty Kyakuwa, Communication Officer, College of Engineering, Design, Art and Technology, Makerere University. +256-772-697500, Email: pr@cedat.mak.ac.ug, Website: www.cedat.mak.ac.ug
2. Eng. Dr Bernard Kariko-Buhwezi, Project Principal Investigator, College of Engineering, Design, Art and Technology, Makerere University, +256-772-422354, Email: bernard@tech.mak.ac.ug, Website: www.cedat.mak.ac.ug