**BURN Cookstoves**

Designers: Paul Means, Peter Scott, BURN Design Lab (Vashon, Washington, USA), Burn Manufacturing (Ruiru, Kenya)

Peter Scott launched BURN Design Lab to design the world’s best cookstoves. BURN manufactures and designs its super-efficient Jikokoa Xtra in Kenya. Their design process incorporates user input at each step—from cook tests using prototypes to multi-week home placements—combining the science of combustion and heat transfer with the challenges of cooking with wood and charcoal. BURN’s stoves burn less fuel, emit less smoke, and last longer for a lower cost.

**HarassMap**

Designers: Rebecca Chaio, Sawsan Gad, Engy Ghozlan, Hadeer Mohamed, Alia Soliman (Cairo, Egypt)

After experiencing sexual harassment on Egypt’s streets, four women launched an online crowd-mapped anonymous reporting system. Anyone can share via text message individual incidents, noting the location, date and time, personal and witness accounts, and any interventions, which are aggregated to reveal hotspots. In 2016 the team expanded their reach to engage academic, civic, and private organizations to take a collective stand against the epidemic of sexual harassment and assault of women.
Heart Strings
Designers: Mother Health International (Atiak, North Uganda)

The United Nations reports that 1,000 women die every day while pregnant or giving birth. Inspired by a string of beads women use to track menstrual cycles in relation to the moon, two midwives working in Uganda designed a low cost color-coded bracelet that allows traditional midwives, who cannot read or write, to monitor fetal heart tones and the pulses of pregnant women and infants. World Health Organization studies show that pregnant women who receive intermittent fetal monitoring have dramatically reduced rates of infant mortality.

LifeStraw
Designers: Vestergaard (Lausanne, Switzerland)

More than 3 million people die each year from water-related diseases. LifeStraw was designed to turn any surface water into drinking water. Approached by The Carter Center with an aim to eradicate Guinea worm disease, Vestergaard designed a plastic pipe filter to strain out Guinea worm larvae. In 2005 the first version of the LifeStraw was created, which removes over 99 percent of waterborne bacteria, including E. coli and salmonella; waterborne protozoa, including Giardia and Cryptosporidium; and microplastics.
Map Kibera
Designers: Erica Hagen, Mikel Maron, GroundTruth Initiative with Kibera community members, OpenStreetMap contributors (Kibera, Nairobi, Kenya)

In 2009, Nairobi’s densely populated informal settlement Kibera appeared as a blank spot on official maps. Map Kibera evolved as a crowd-sourced community-mapping project. GroundTruth Initiative collaborated and trained area youth to survey their neighborhoods, and with community members they layered information to create the first digital map of the settlement. Community meetings verified the information, while the Voice of Kibera platform enabled residents to share and geo-locate news, videos, and SMS messages directly on the map.

Maya Pedal
Designers: Maya Pedal (San Andrés Itzapa, Guatemala)

Maya Pedal designs, manufactures, and distributes over 20 different models of bicimáquinas (bike-machines) made from recycled bicycles in Guatemala. Its first designs were human powered agricultural machines, and later expanded to include a broad range of applications, from a bomba (water pump) that supplies water to local neighborhoods to a bicilicuadora (blender) used to make shampoos. The Guatemalan workshop supports micro-enterprises, energy independence, and sustainable development to improve the environment, health, productivity, and the economy of local families.
SAFE AGUA Peru
Designers: ArtCenter College of Design (Pasadena, California, USA) with the Cerro Verde community (Lima, Peru)

SAFE AGUA Peru is a multi-disciplinary design studio where students from California’s ArtCenter College of Design live with families in Cerro Verde, a 30,000-person informal settlement perched on the hillsides that surround Lima, Peru. Students co-create products and services to improve access to safe water directly with community members.

SmartCane
Designers: AssisTech Laboratory at Indian Institute of Technology Delhi and Saksham Trust (Delhi, India)

People who are visually-impaired in countries like India face challenges—including low-hanging wires or signage with inadequate head clearance along narrow foot paths. Designed in India, the SmartCane detects obstructions between a person’s knee and chest up to ten feet away. Sensors emit and receive ultrasonic waves that trigger haptic vibrations when a physical hazard is detected, using various patterns to differentiate obstacles and distances.
**ShelterBox**  
*Designers: ShelterBox (Cornwall, United Kingdom)*

Overwhelmed by the number of disasters around the world, the head of the Cornwall, England chapter of Rotary, the international service organization, sent out over 100 aid boxes to begin ShelterBox. An alternative to less humane communal shelters, the singular shelter-in-a-box gave people space for families to rebuild hope. Pre-deployed to 20 locations around the world, the design enables multi-modal delivery—from camel to helicopter—to the most remote locations.