An innovative energy solution brings light to communities
Spotlight on Burundi

Issue
Burundi is one of the most energy-impoverished nations in the world. After years of war and economic challenges, only 3% of its people have access to the electricity grid. As a result, 8.5 million Burundians are forced to come up with their own source of energy. The shortage of electricity not only limits work efficiency, but also hinders children’s development. After sunset, children enter a world of sheer darkness, and must use candles when studying at night. The lack of electricity means that families burn kerosene, wood and even dry gas to keep warm; these fuels put children at risk of respiratory infections and burn-related injuries. Indoor air pollution from smoke is responsible for major health problems in children. Almost 50% of pneumonia deaths among children under five are caused by particulate matter inhaled from indoor air pollution.

Action
Providing Burundi’s children with safe, clean and low-cost lighting is an urgent matter for UNICEF. UNICEF’s Innovation Lab launched Project Lumière, which was piloted in 14 rural communities in approximately 400 households in each community—and is now being implemented in 40 additional communities. Project Lumière enables community groups to purchase a pedal-powered generator and fast-charging LED lights to sell within their community. The LED lights, powered by the bicycles, provide light for a household for up to 10 days. UNICEF is working to test and scale other programs that will combat Burundi’s energy crisis. UNICEF is also partnering with a local micro-finance NGO to help develop a national social enterprise to manage, procure and distribute rechargeable lights, and, in the future, other affordable micro-energy technologies, including solar. Project Lumière is providing a quality and affordable solution for the users, and at the same time, creating a sustainable sources of income for many families and new jobs linked to renewable energy.

Results
Project Lumière has reduced the use of kerosene and firewood candles in homes, while also providing more time for children to study. Project Lumière helps families save money, reducing the amount of kerosene and other energy sources needed. The LED lights also enable women and girls to use the bathroom at night with light and, thus, to be safer. The reduction in exposure to contaminated air improves the health and wellbeing of Burundi children and has improved children’s living standard. UNICEF’s sustainable technology innovation also reduces threats to the climate, while providing a model of renewable energy for some of the world’s most vulnerable children.

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