

# 2016 IMPACT REPORT





Bicycles help empower girls who might otherwise be vulnerable to boda boda operators, who offer motorcycle rides to school in exchange for a sexual relationship. With her Buffalo Bicycle, Dianah rides right past a motorcycle stand.

Dear Friends,

Greetings from Kisumu, Western Kenya and the banks of the great Lake Victoria.

In the past year, your support has made new programs, initiatives, and results possible. As Leah and I have spent this time in the field, I have been reminded that:

- There is bullheaded determination by students to get to school and learn in the face of tough odds.
- Listening closely to end users is the best way to inform innovation.

We believe that all answers are found in the field. By paying close attention and conducting rigorous monitoring and evaluation, we've been able to seize opportunities and proactively address issues before they become chronic or expensive.

Innovations serve to enhance the raw impact of a bicycle on the individual recipient. The realities in the developing world are tough. Economic, health, and cultural forces can conspire against the most vulnerable - girls striving to achieve an education. With bicycles, we've seen dramatic changes in the lives of girl students, who are now getting to school (and staying in school) while traveling safer on their routes. The results reinforce that quality bicycles are a transformative intervention often overlooked in the field of development.

In this report, you'll find stories and photos that will help you experience what I see in the field every day. I see lives changed, lives saved, and the futures of individuals and their families rewritten because of a simple heavy-duty, high-quality bicycle; this makes me wake up with my feet on fire. Read on and see why.

Your support in the last year impacted the lives of many people, some of whom are featured in the following pages. On behalf of everyone at World Bicycle Relief, I thank you for your belief in The Power of Bicycles.

With gratitude,

A handwritten signature in black ink that reads "F.K. Day". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

F.K. Day  
Co-Founder and CEO  
World Bicycle Relief

“With the bicycle, I feel safe. I cycle past the motorbike operators’ sheds, and I’m not worried about them stopping me.”

At WBR, we recognize the value in breaking down barriers for girls like Stella by distributing 70% of our bikes to girls. Gender equality progresses holistically when families and village leaders collectively commit to their girl students riding to school. With the help of our supporters, WBR helps facilitate opportunities for girls by sensitizing whole communities to the importance of their education.



# GIRLS RIDE TOWARD A BRIGHTER FUTURE

Story and Photos: Leah Missbach Day, Co-founder, World Bicycle Relief

## OVERCOMING BARRIERS

Three years ago, nineteen-year-old Stella’s educational future was in peril.

She gave birth to a baby girl just before she was expected to graduate from primary school. By being home all day with an infant, Stella’s future looked bleak. High school was 12km away, and she lacked the funds for school fees. And yet, Stella still dreamed of becoming a Kenyan diplomat, promoting Kenya’s business affairs. So Stella gathered the strength to take her examination, pass, and go on to secondary school at Our Lady of Peace in Muhoroni Township, Kenya.

## CONFIDENCE AND SAFETY

For Stella, a bicycle is more than just a means of transport, it’s a form of security.

In 2016, Stella was one of 150 Our Lady students to receive a Buffalo Bicycle. She still starts her day very early to care for her daughter and complete the household chores expected of all Kenyan girls. But she has gained two hours because her bicycle has dramatically reduced her commute time to school. More importantly, Stella now feels safe on her daily route. “My daughter can now confidently cycle past the sugar cane cutters who have the tendency of sexually harassing young girls and women who they come across,” Stella’s mother says. The threat of rape along school routes is a daily consideration for young girls in Kenya. A bicycle is an important tool in the fight to protect girls from violence, early marriage, and teen pregnancy.

## THE CASE FOR EDUCATING GIRLS

When girls thrive, whole communities thrive.

When adolescent girls become mothers, their opportunities for economic and educational growth are limited. According to UNESCO, educated girls have more employment opportunities, are more likely to close the gender pay gap, and are less likely to become pregnant as teenagers. An educated girl has a positive ripple effect on her family, community, and society as a whole (USAID).

## ELEVATING GIRLS IN THE COMMUNITY

Promoting girls’ and women’s decision-making power helps achieve gender equality.

WBR has begun to incorporate students, including girls, into our community-level program meetings; this helps set the stage for greater future participation in public decision-making. In a culture that prizes property ownership, a bicycle helps girls command respect from their community. In turn, this helps girls develop the confidence and self-esteem that propels them to success in other areas of their lives.

## MOVING FORWARD

Motivated by her dreams and powered by her bicycle, Stella is inspired to excel.

When Stella received her Buffalo Bicycle, she found immediate relief from the challenge of distance. But she still lacked the funds for school fees. Now, Stella is using her bike in innovative ways to earn money. She plans to start transporting and selling excess produce from her family’s garden and fetching water for her neighbors. Stella’s bicycle has empowered her to reenvision her future, which is now looking bright. “Going to school has become fun for me,” she says. “I never want to miss one day.”

# OUR 2016 GLOBAL IMPACT



48,259

BUFFALO BICYCLES DEPLOYED  
337,000+ deployed (2005–2016)



243

MECHANICS TRAINED  
1,684 trained (2005–2016)



9

PROGRAM COUNTRIES  
19 countries served (2005–2016)



241,295

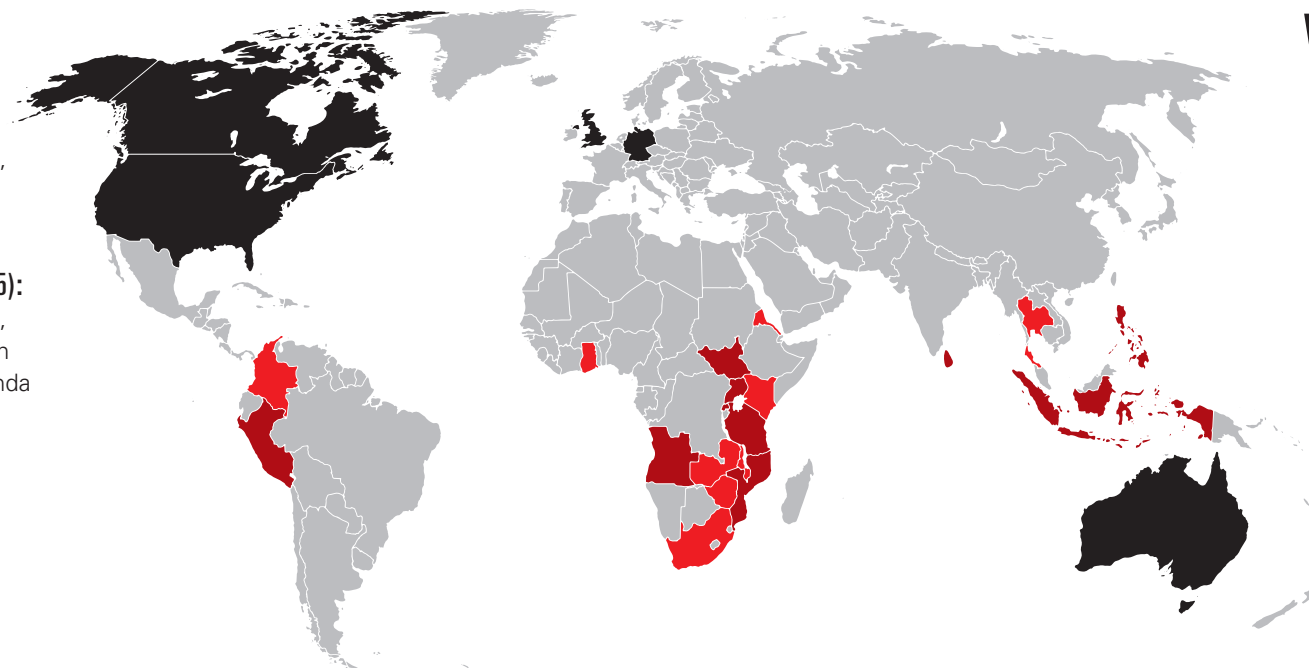
LIVES CHANGED

1,600,000+ lives changed (2005–2016)

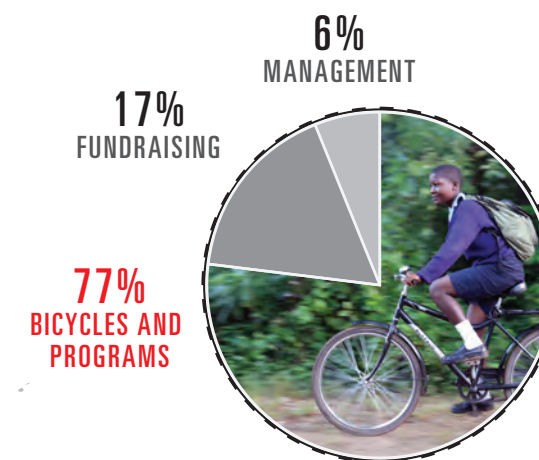
Based on the average family size in our program countries,  
1 bicycle changes the lives of 5 people.

## WHERE WE WORK

- PROGRAM LOCATIONS (2016):**  
Colombia, Eritrea, Ghana, Kenya, Malawi, South Africa, Thailand, Zambia, Zimbabwe
- PROGRAM LOCATIONS (2005–2015):**  
Angola, Indonesia, Mozambique, Peru, Philippines, Rwanda, South Sudan, Sri Lanka, Tanzania, Uganda
- FUNDRAISING OFFICES (2017):**  
U.S., U.K., Germany, Canada, Australia



## WHERE YOUR DONATION GOES



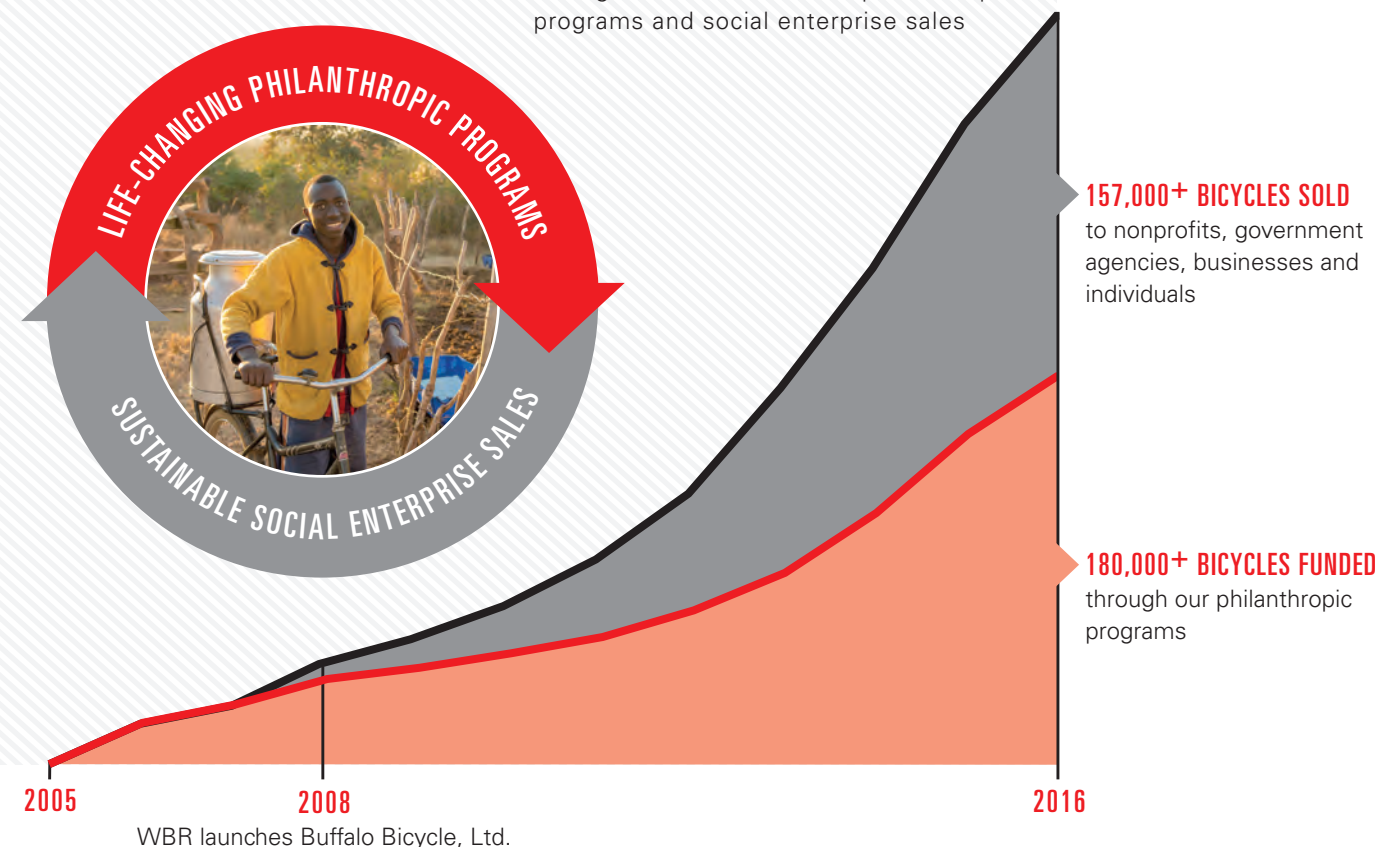
## OUR INNOVATIVE MODEL MULTIPLIES YOUR IMPACT

Supplying bicycles into WBR's philanthropic programs created strong local demand for our quality Buffalo Bicycle. In 2008, we formed Buffalo Bicycle Ltd., our wholly-owned for-profit subsidiary, to sell Buffalo Bicycles to nonprofits, businesses and individuals to meet this market demand.

Our unique business model of combining philanthropic programs with social enterprise sales has multiple benefits:

- Increased impact from more bicycles in the field
- Economies of scale lower philanthropic program costs
- Profits from Buffalo Bicycle, Ltd. fund WBR programs
- Best business practices applied to development
- Customer informed product development and innovation

337,000+ TOTAL BICYCLES DISTRIBUTED  
through the combination of philanthropic  
programs and social enterprise sales



**FIELD PARTNERS** AMREF • CARE • CATHOLIC RELIEF SERVICES • CHAI • ELIZABETH GLASER  
INNOVATIONS FOR POVERTY ACTION • JHPIEGO • PATH • PATHFINDER INTERNATIONAL • PLAN

PEDIATRIC AIDS FOUNDATION • FAO • FHI360 • GOVERNMENT OF ZAMBIA • HEIFER INTERNATIONAL  
INTERNATIONAL • POSTOBÓN • WORLD VISION • UBS OPTIMUS FOUNDATION • UNDP • UNICEF > MORE AT [WORLDBIKCYCLERELIEF.ORG](http://WORLDBIKCYCLERELIEF.ORG)

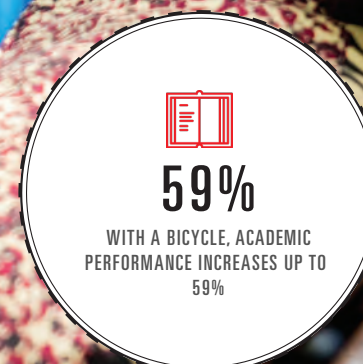
# FIELD-LED INNOVATIONS DRIVE SUSTAINABLE IMPACT

We continuously look to the field to learn how we can improve. Dialogue with our end-users, field mechanics, teachers, dealers and partners in development and government is crucial to our work. We listen carefully to better understand their needs. Whether addressing bicycle product development, program design or aftermarket support, we are continuously striving to improve.

Based on our learnings, we are:

- Strengthening the community-based Bicycle Supervisory Committees to take greater ownership in selecting and monitoring bicycle recipients
- Deepening training for bicycle recipients on riding skills, preventative maintenance and repairs
- Extending BEEP's "Study-to-Own" student contracts through graduation to encourage retention and academic achievement
- Reinforcing the bicycle fork design and including front-wheel hand-brakes for BEEP bicycles
- Expanding the training programs and increasing the number of trained WBR Field Mechanics to better support the communities where we work
- Investing in Buffalo-branded shops and dealer networks to create greater access to spare parts

Girl students on Bicycle Supervisory Committees have the chance to take leadership roles in BEEP rollouts, elevating their profiles in the community.



## MEASURING OUR PROGRAM IMPACT

**Discovering the effectiveness of our programs is essential for creating deeper impact where we work.**

In 2016, we launched "Wheels of Change: Impact of Cycles on Female Education and Empowerment in Zambia." It is a research project designed and funded by a collaboration among Innovations for Poverty Action (IPA), WBR, and UBS Optimus Foundation. WBR program data from Zambian communities show that distance influences both school attendance and performance. Girls living 10km from school are likely to:

- Miss 5 more days of school compared to girls living 1km from school
- Score 15 points lower on exams compared to girls living 1km from school

This randomized control study will examine the sustainable impact of our Bicycles for Educational Empowerment Program (BEEP) on girls in the Monze and Mazabuka districts of Zambia. In 2016, we completed the study design phase. The baseline data collection and bicycle distribution will occur in 2017. We expect the final report in early 2019. The details of the study include:

- Approximately 4,000 bicycles distributed to students (70% girls, 30% boys)
- 100 intervention and control schools to be targeted
- Study to measure attendance, academic performance, retention, and empowerment

**"We have a unique opportunity in Zambia to study key topics related to empowerment and mobility. With positive results, the policy implications will be broad."** – NISHITH PRAKASH, LEAD STUDY RESEARCHER, UNIVERSITY OF CONNECTICUT, IZA, CReAM & HICN

## PARTNERING FOR GREATER SUCCESS

**Customized programs and unique approaches through our corporate partnerships allow greater benefits for all.**

ING Bank partnered with WBR to develop a 5-year, sustainable transportation relief program in accordance with their corporate values: The ING Orange Bike project. The initiative has tapped into employee engagement to yield impressive results in the Philippines, Indonesia and Thailand.

- 788 bikes for Thai students in 2016
- 3,200 bikes distributed since 2014 as part of a larger 5,000 bike initiative
- \$75,000 raised in 2016 by employee fundraisers

Recipient schools have seen beneficial changes for students, including improved class attendance, transportation fee savings, and increased participation in extracurricular activities.

# DEEPENING OUR COMMITMENT

We continue to build upon our sustainable Bicycles for Educational Empowerment Program (BEEP) in our focus program geographies. By investing resources and engaging community members, we strive to develop a sustainable ecosystem for the whole community. As ridership expands, bicycle infrastructure grows. Between 2009 and 2016, we mobilized 126,104 students through BEEP.

## CHANGING GIRLS' LIVES IN ZIMBABWE

The Improving Girls' Access through Transforming Education (IGATE) program is an innovative, DFID Girls' Education Challenge project with a multi-layered approach to improving educational outcomes for girls in Zimbabwe. IGATE operates with the involvement of partner organizations, each of which is vital to making a deep investment that impacts more girls.

- 4,684 total bicycles distributed in 2016, completing the grant commitment and deploying more than 29,500 bicycles in partnership with IGATE over 3 years
- 55 Field mechanics trained in 2016 to service students' bicycles
- Distributions made in 10 districts in 4 provinces

**"Who would have thought that a bicycle had the power to 'rescue' a girl?"** – SARAMINE MUKETE, SENIOR PHILANTHROPY EXECUTIVE, WORLD VISION UK

## SUPPORTING STUDENTS IN ZAMBIA AND SOUTH AFRICA

Continued collaboration with corporate partners UBS Optimus Foundation and ZF Friedrichshafen AG helped us make a huge impact in both Zambia and South Africa. The UBS and ZF BEEP deployments in Zambia and South Africa resulted in:

- 2,920 bicycles distributed
- 15 field mechanics trained
- 70 community members and field staff trained
- 18 schools impacted

Over the two-year program (2015-2016), data from BEEP schools in Zambia show that for students with Buffalo Bicycles:

- Academic performance increased 17%
- Missing 10+ days decreased 35%
- There were far fewer dropouts (5) as compared to non-beneficiaries (112)

## PROVIDING PATHS IN KENYA

In 2016, WBR rolled out several BEEP initiatives in Kenya. Partnering with Plan International, Child Fund, and World Vision allowed us to reach more people within the community.

- 4,145 students and teachers received bicycles
- 67 mechanics trained
- 55 schools impacted

WBR also partnered with Plan International as part of their Wasichana Wote Wasome (Bikes for Students) program. The program seeks to build a strong support system for marginalized or at-risk girls by improving access to education. In 2016, we laid the groundwork for future Bikes for Students program distributions in five coastal counties of Kenya:

- 1,000 program bicycles to be distributed in 2017
- 21 mechanics to be trained in 2017

**"We are now able to keep all of the girls in school and prevent early pregnancies and marriages. Once the students are educated, we will get more doctors, nurses - the whole community will come up."** – MONICA MUDONIDONGO, VICE PRINCIPAL OF BUKHAYWA SECONDARY SCHOOL, KAKAMEGA, KENYA

# BRINGING BICYCLES TO MALAWI

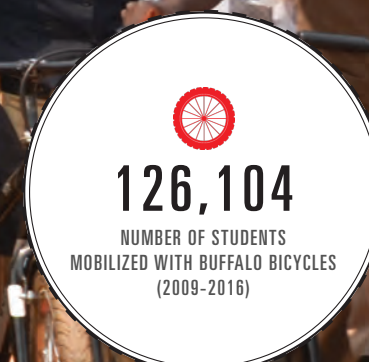
The goal of BEEP is to improve the quality of life for targeted children, households, and communities. Data on local poverty levels, educational attainment, and gender inequality inform our decision to launch BEEP initiatives in new countries.

The children of Malawi, one of the poorest countries in the world, face major challenges. Many Malawian students, especially girls, are unable to access education due to the barrier of distance. In fact, opportunity cost and long distances mean that 57% of Malawians do not finish primary school. In 2016, we launched BEEP in Malawi:

- 1,500 students and teachers received bicycles at 8 schools
- 16 field mechanics trained
- Additional 1,500 bicycles to be distributed in 2017



Students at Manyambe Primary School in Mulange District, Malawi celebrate the arrival of their Buffalo Bicycles. Until this moment, some of these students would spend as many as 5 hours per day walking to school.



# IMPROVING HEALTHCARE OUTCOMES WITH TWO WHEELS

In rural Africa, medical professionals are overworked and in short supply. Community healthcare workers deliver services designed to improve maternal, newborn, child, and adult health. These caregivers require reliable, inexpensive transportation to reach as many patients as possible.

WBR's wholly-owned subsidiary, Buffalo Bicycle, Ltd., sells bicycles to nonprofits and government agencies, who then distribute the bikes to various rural districts, clinics, and hospitals, for use by community healthcare workers. Research shows that these workers can reach 45% more patients by bicycle than on foot.

Quality bicycles result in higher quality care and healthier communities. In 2016, 10,489 Buffalo Bicycles were purchased by more than 15 nonprofits to help support the success of their programs.



Frances is a community healthcare worker in Kenya. It used to take her an hour to walk to the clinic each day; with a bicycle, it's just a 10-minute ride. Her bicycle allows her to treat up to 150 people per day.

## SUPPORT FOR REMOTE COMMUNITIES IN ZIMBABWE

In 2016, the United Nations Development Programme (UNDP) facilitated the purchase of 3,000 Buffalo Bicycles on behalf of the Ministry of Health in Zimbabwe for the National AIDS Council. The bicycles were a key element of a comprehensive HIV education program in remote areas of Zimbabwe, a country that has been hit hard by the AIDS epidemic.

## INCREASING CAPACITY FOR CARE IN KENYA

The Nilinde Project strengthens support systems for Orphans and Vulnerable Children affected by HIV and AIDS using innovative, evidence-based approaches. In 2016, the Nilinde Project purchased 269 Buffalo Bicycles to help caregivers care for and protect girls and boys.

## ELIMINATING THE DISTANCE TO HEALTHCARE IN ZAMBIA

The Clinton Health Access Initiative, Inc. (CHAI) uses a solution-oriented approach to saving the lives of those diagnosed with HIV and AIDS in developing countries. Improving access to healthcare is an essential element of their approach. In 2016, 526 Buffalo Bicycles helped connect patients and community healthcare programs.

## IMPROVING ACCESS TO PATIENTS IN KENYA

AMREF is an organization that's committed to improving the health of people in Africa by training health workers and strengthening community health systems. In 2016, AMREF purchased 200 Buffalo Bicycles for community health workers in Kakamega County, Kenya.

## MONITORING MALARIA IN ZAMBIA

Akros establishes data-driven systems that improve the health of disadvantaged communities. One aspect of their work includes malaria surveillance, prevention, and eventually, eradication. In Zambia, Akros helped design and scale a groundbreaking malaria surveillance system—and they purchased 50 Buffalo Bicycles in 2016 to help deploy it.

# PURPOSE-BUILT BICYCLES KEEP ENTREPRENEURS MOVING

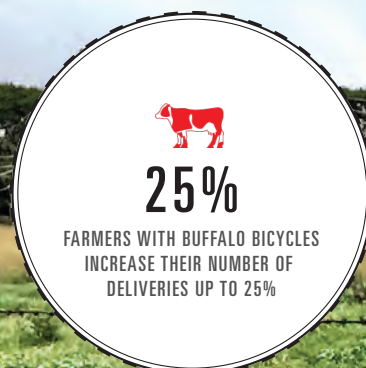
Mobility is vital for anyone running a business or seeking a livelihood. In the areas where WBR works, walking or poor-quality bicycles are often the only transportation options. Owning a reliable, durable and affordable Buffalo Bicycle increases access and productivity.

Over the years, we've piloted and learned from several economic development initiatives aimed at getting Buffalo Bicycles into the hands of entrepreneurs. We've found the extension of payment terms or access to 3rd-party credit through microloans to be the most impactful models that also maintain economic integrity.

We've pioneered an Employee Purchase Program (EPP) that allows individual employees to pay for a bicycle over a period of months through pay deductions. This program has yielded compelling results in the dairy, agriculture, floriculture and security sectors.

In 2016, individuals, nonprofits, and businesses purchased 11,483 Buffalo Bicycles to help them achieve mobility and thrive.

The Buffalo Bicycle's sturdy rear rack can carry more than 200 lbs, allowing dairy farmers to carry more milk. The bikes also allow farmers and their families to more easily access education, healthcare, and social activities.



## IMPROVING FOOD SECURITY IN ZAMBIA

An ambitious project sponsored by the Food and Agriculture Organization of the United Nations (FAO) and the European Union (EU) aims to improve food security, nutrition, and income through the sustainable use of natural resources in Zambia. The Conservation Agriculture Scaling Up (CASU) project purchased 4,500 CASU-branded bicycles for small-scale farmers. WBR's assembly and delivery procedures were scaled to deliver all 4,500 bicycles in just 31 days.

## SUPPORTING IMPROVED EMPLOYEE TRANSPORTATION IN KENYA

A Kenyan flower farming organization, Oserian Development Company, purchased 50 Buffalo Bicycles for an Employee Purchase Program (EPP) targeted to female employees. The purpose of the EPP is to encourage freedom of movement and better health for both the rider and the planet, in keeping with Oserian's sustainable values.

## IMPROVING FAMILIES' SELF-SUSTAINABILITY IN ZIMBABWE

Heifer International aims to end world hunger and poverty by helping families sustain themselves. To support their effective programs, WBR sold 78 Buffalo Bicycles to Heifer International in 2016.

## HELPING EMPLOYEES IMPROVE THEIR COMMUTES IN ZIMBABWE

Longtime partner Safeguard Security administers an Employee Purchase Program (EPP) for its employees in Zimbabwe. In 2016, Safeguard Security purchased 621 Buffalo Bicycles to support their EPP. Since 2014, the organization has purchased 2,176 bicycles for the program, to help employees get to work more easily and reliably.

## MEASURING RESULTS

Our Palabana Dairy Cooperative Research Study examines the impact of Buffalo Bicycles on dairy farmer productivity and quality of life.

READ THE FULL REPORT AT [WORLDBICYCLERELIEF.ORG](http://WORLDBICYCLERELIEF.ORG)



# CREATING ACCESS TO SPARE PARTS: THE HUB & SPOKE MODEL

A critical aspect of promoting sustainability for the Buffalo Bicycles and our programs is facilitating access to quality spare parts. With standardized sizing, we've designed the Buffalo Bicycle for compatibility with locally-available spare parts. The challenge is that these spares can be of poor quality and degrade the lifespan of the Buffalo Bicycle. Our end-users have created a market demand for genuine, high quality Buffalo brand spare parts.

We have approached the market with a "Hub & Spoke" model to help ensure greatest efficiency and lowest prices for our customers. The "hubs" are Buffalo-branded retail shops in locations with heavy Buffalo Bicycle concentrations. The shops serve as a direct-to-consumer channel for retail sales of spares and bicycles. Overlaid with a network of existing and new dealer distribution channels, we can reach further into the market - the "spokes." There are multiple benefits to this model:

- Improved access to quality spare parts to support our programs, field mechanics and bicycles
- Direct consumer feedback on product quality and demand
- Greater pricing controls through discount mechanisms with dealers
- Increased awareness of the Buffalo Bicycle brand

Early results for these shops have been promising, but we will continue to monitor and measure the improved access to spares and the return on investment.



Clement, at right, tunes up a community healthcare worker's bicycle. Routine maintenance makes it possible for Merinzia, on left, to visit patients and even transport them to health centers on the back of her bike.

## WBR'S PASSIONATE CHANGE MAKERS

### PRINCELY NYANDEBVU

**Princely is a Quality Monitor and Mechanic Trainer in Zimbabwe.**

Originally hired as an assembler, Princely is enthusiastic to WBR's cause. His dedication has helped him rise through the ranks. Today, he leads the training sessions for new field mechanics in Zimbabwe and around the continent of Africa. Princely's dream is to help all bicycle riders in Africa discover the durability of the Buffalo brand so that every bike stays in service as long as it's needed.



### PETER WECHULI

**Peter is a BEEP Program Officer in Kenya who sees education as "the great equalizer."** A teacher with interest in education development programs, Peter has seen increased demand for BEEP bicycles among local communities. He attributes the increase in interest to strong program results, robust and clear program strategies, and the ease of bicycle maintenance. As a Program Officer, Peter has seen BEEP implementations empower communities to take charge of their own processes and develop solutions locally.



### ADEMA SANGALE

**Adema Sangale is WBR's new Vice President-Africa.** Throughout her career, Adema has focused on improving educational access and outcomes, particularly for girls and women. While at Procter & Gamble, Adema was responsible for a global campaign that made sanitary pads more affordable for African girls, helping keep those girls in school. She is looking forward to using her corporate background and insights to help WBR expand across the continent of Africa and develop more innovative mobility solutions that empower women.





Thanks to more rigorous riding and safety training, these smiling Kenyan students are able to cycle confidently from the day of the BEEP distribution.

Dear Friends,

After 9+ years building our operations in Africa, I returned to the U.S. as President of World Bicycle Relief in 2016. I couldn't be more excited to take what I've learned this past decade in the field and build on it. Together with our team, partners, and supporters we will create innovative, collaborative solutions that generate greater sustainable impact.

At WBR, we know that bicycles are cross-cutting tools that can improve access to education, healthcare, and economic opportunities. In the past 11 years, with support from donors and partners like you, we've been able to achieve expanded mobility for whole communities. The need is massive; in the tens of millions, by conservative estimates. But we are poised to scale significantly in the years to come. Because of your investment, we are building a robust supply chain of spare parts, a sustainable network of trained field mechanics, and an effective model of partnership to propel us forward.

Please join us in sharing World Bicycle Relief's story and activating your network of family and friends. Together, we can change the world with The Power of Bicycles.

Dave Neiswander  
President  
World Bicycle Relief

**WORLD BICYCLE RELIEF  
MOBILIZES PEOPLE THROUGH  
THE POWER OF BICYCLES.**

**WE ENVISION A WORLD WHERE  
DISTANCE IS NO LONGER A  
BARRIER TO INDEPENDENCE AND  
LIVELIHOOD.**

Selected by Fast Company as one of the "World's Most Innovative Companies." Our work has also been recognized by the World Economic Forum, Barron's, and The Schwab Foundation. Our innovative model, including our proprietary Buffalo Bicycle, has been featured by Forbes, Global Citizen, The Guardian, The New York Times, Philanthropy Age, Rodale, Spiegel, Monocle, CNN, BBC, Arte, The Wall Street Journal, and The Economist among many other outlets.



**WORLD BICYCLE RELIEF®**

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