

BRIDGES TO MALAWI

SEPTEMBER 2020



- 
- ▶ **Brian Lisse, MD**
 - ▶ **Associate Clinical Professor,
Tufts University School of
Medicine**
 - ▶ **President and Founder, Bridges
to Malawi**

BRIDGES TO MALAWI

- ▶ **Massachusetts based nonprofit dedicated to improving the health and welfare of the people of the Kasungu East District in Malawi, one of the poorest countries in the world.**

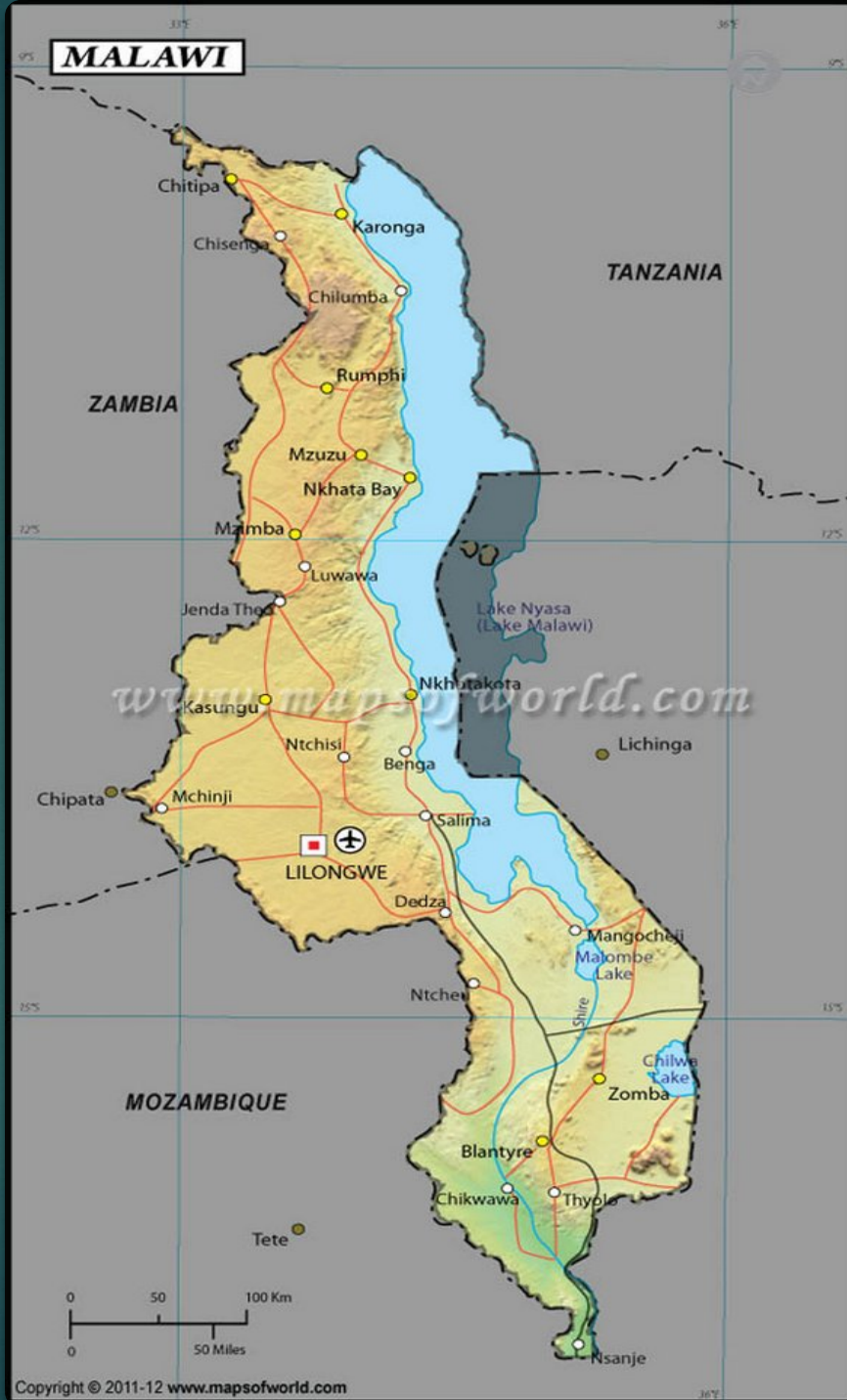


BRIDGES TO MALAWI

- ▶ **100% of all money raised by Bridges to Malawi goes directly to our efforts.**
- ▶ **All board members work for free and pay their own way to Africa**
- ▶ **All administrative costs are paid for out of the pockets of the board members**









▶ ACCOMPLISHMENTS

IRS Ended in 2018



**Over 52,000 People
Protected from malaria via
Indoor Residual Spraying
(IRS). Malaria rates
decreased by 85% in 18
villages**

COVID-19 PREPAREDNESS

- ▶ Constant communication between Peter Minjale and me about our preparations and experiences with COVID-19, including recommendations for how to prepare
- ▶ **\$8100** sent for purchase of PPE and handwashing stations.
- ▶ About **5399** cases, **168** deaths (as of Aug 24, 2020)
- ▶ 1st case April 3







GOAT PASS-ON PROGRAM

- ▶ **526** goats donated 2014-2018
 - ▶ As of March 2020:
 - ▶ Over **3,200** farm families representing
 - ▶ More than **22,000** people
 - ▶ Have over **15,700** goats




PHOTO 3: BTM is changing families lives through women empowering by goat-pass-on program. Above is a family of Awali and Julita Anusa with their children from Kapinya village in Kasungu, rural Malawi posing following receipt of goat with support from BTM.

More reports on goat-pass-on project with support from BTM are yet to come.

Regards,

Peter.

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- ▶ A goat yields **10** times its body weight in **Milk** in a year
 - ▶ Providing **1 ton** of **Protein** for its family
 - ▶ As well as
 - ▶ **Manure**
 - ▶ **Transport?**
 - ▶ And ultimately **Meat and Hides**

DAIRY COOPERATIVE PROJECT

Kadsikizi Malawi

- ▶ **2019:**
- ▶ 1) Constructed Milking Parlor
- ▶ 2) Constructed Kraal
- ▶ 3) Dug Borehole (well)
- ▶ 4) Plumbed system with solar powered pump to ensure regular supply of water for cattle
- ▶ 5) Established Dairy Cooperative of 24 local farmers
- ▶ 6) Initiated training in best dairy practices
- ▶ **Cost: \$68,741**

MINJALES VISIT MASSACHUSETTS AND WISCONSIN DAIRY FARMS







Kraal under construction



Leon and Adeline Kochman; Morris, Allan, and Kitty Lisse Kraal



5000 Liter Water Tanks



Ernest and Alma DeRuyter Milking Parlor





Dairy Project Solar Power



Dairy Cooperative Project

Kadsikizi, Malawi

- ▶ 2020:
- ▶ 1) 30 Open Heifers (26 Holstein which produce 20-30 Liters of milk/day, 4 Friesian, which produce 10-15L milk/day) all Malawi born and raised purchased near Blantyre and transported to their new home at Kadsikizi
- ▶ 2) All animals vaccinated
- ▶ 3) Dairy Cooperative farmers trained in best practices and artificial insemination

AI

4) Liquid Nitrogen cans and frozen semen “straws” purchased

5) Artificial insemination begins:

- ▶ A) 1st attempts not successful
 - ▶ B) 2nd attempt ongoing; 7 cows inseminated so far.
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- ▶ Total Cost Dairy Cooperative 2020: \$ 63,350

Artificial Insemination Training Seminar













DAIRY COOPERATIVE PROJECT 2021 AND BEYOND

- ▶ Initial Target is **180 COWS**
- ▶ Milk Chiller: **\$7,500**
- ▶ Pasteurizing Unit: **\$16,000**
- ▶ Yogurt Maker: **\$16,000**
- ▶ Plumbing and building for above, back-up generator, etc: **\$31,902**
- ▶ **Cost: \$71,400**
- ▶ Through this project we hope to improve per capita income from **\$250** to **\$325** for hundreds of people by providing economic opportunities that currently don't exist in the area as well as increased nutrition to thousands by making milk more affordable and available.

Boniface Chikufenji, Malawi Government Veterinarian

- ▶ “Honestly speaking, I have personally witnessed, implemented and monitored various Livestock Development programmes in Malawi but this particular one at Mtunthama under K-2 TASO especially the dairy project under Mr Minjale is and has been brilliant in design, implementation as well as monitoring. I have no doubt whatsoever that this will bring great impact than any other Livestock projects I have seen in Malawi.”

CHICKEN PASS-ON PROGRAM

- ▶ **2019:**
- ▶ **210** Chickens donated at a cost of **\$1,000**
- ▶ **250** more Chickens have resulted from this since
- ▶ **2020:**
- ▶ **475** Chickens donated at a total cost of **\$2650**
- ▶ This means we are providing extra protein and income for about **230** families, a total of approximately **1600** people.





Wello Water Wheel



Wello Water Wheel



Wello Water Wheels

- ▶ **700** shipped from near Mumbai to Dar Es Salaam, Tanzania
- ▶ Then on to Mtunthama, Malawi.
- ▶ Cost: **\$27,500** (\$25 per Water wheel, includes shipping costs and import duties)
- ▶ Container the Wellos are coming in was purchased for **\$2,000** and will be used as a combination of storage facility, office space, and ?hydroponic system.

Hyundai Bangkok



Water Wheel Future?

▶ Factory in Malawi?

IRRIGATION/BOREHOLES

- ▶ **3** Boreholes drilled in 2020, including **1** at Chambwavi, where we just finished the girls' dorm
- ▶ **2** more planned for this year.

Bamboo

- ▶ **6,000** saplings transported from Zambia for donation
- ▶ Cost: **\$15,000**
- ▶ The future: A bamboo plantation? Can propagate from cuttings or root clump division of existing plants.







Essential Oils?



REFORESTATION

- ▶ **2019:**
 - ▶ **80,000** trees planted
- ▶ **2020:**
 - ▶ **200,000** trees planted at a cost of **\$6,500**









Artemisia annua

- ▶ Imagine that you could grow a plant in your garden that would prevent you from getting whatever disease scares you the most...
- ▶ Diabetes, cancer, heart disease, whatever...

Artemisia

- ▶ Be pretty amazing, wouldn't it?

Artemisia

- ▶ Well there is such a plant for malaria.
- ▶ *Artemisia annua*
- ▶ Its leaves have more than 20 antimalarial compounds, 1 of which is the source of the current go to drug to treat malaria



Artemisia

- ▶ In 2019 we planted **1500** of these Artemisia plants in Malawi
- ▶ All the farmers had to do was once a week drink tea made from the crushed up leaves of the plant.
- ▶ And their chances of getting malaria went way down!

FAMINE PREVENTION

- ▶ Only a matter of time before the next drought and consequent famine.
- ▶ Remember **80%** of the people of Malawi are subsistence farmers
- ▶ Currently shopping for 2 more containers to be used as grain storage facilities.
- ▶ Should cost about **\$2500** apiece

MICRO-CREDIT BANK

- ▶ **2019:**
- ▶ **\$2200** donated to increase capitalization
- ▶ **670** individual farm families (representing **4690** people) have benefited from a loan of up to a maximum of **\$25**.
- ▶ Our payback rate is **98%**, and most loans are paid back within **3** months.
- ▶ This program has enabled countless impoverished children to attend secondary school, a heretofore unattainable goal.





LAND LEASE

- ▶ Poor farmers are given about **\$9/ month** over **12 months** plus another **\$10** worth of seed and farm tools
- ▶ In return they are asked to grow high protein/nutrition crops instead of maize and tobacco
- ▶ And to practice conservation agriculture techniques (mulching for example)

LAND LEASE

- ▶ **2020: 45** farmers (about **315** people)
- ▶ Estimate over **640** farm families (**4200** people) helped since program began.
- ▶ Over **80%** of beneficiaries have been able to purchase their own land
- ▶ **94%** have graduated from the program because they no longer need assistance

LAND LEASE

- ▶ Peter says one farmer got 9 watermelons off a single plant, averaging 12-17 kgs per melon(26-37.4 lbs).
- ▶ He says that no one else is growing watermelons in the Kasungu East District besides our beneficiaries, but there is a great market and farmers can sell these for about \$3-\$4 apiece.
- ▶ This is just one crop and one example of how we're helping these poorest of the poor farmers.



Seed packet donations



Watermelon from US seed



OTHER ONGOING PROGRAMS

Free Care Fund to help defray medical expenses (**\$60/quarter**)

Medication Donation (**\$500/quarter**)

Medical Supply Donation: (**over \$8000 in 2020**)

IT teaching,

Also continuing and making wonderful progress









Chambwavi Girls' Dorm

- ▶ Between 2019-2020 we built a new girls' dorm for the Chambwavi HS
- ▶ Houses **90** girls who now don't have to walk for miles to and from school but can stay on site.
- ▶ Provides a lot more study time as a consequence
- ▶ Much of the structure was built by our medical mission team



Chambwavi Girl's Dorm/Hostel









COWS AND PLOUGHS

- ▶ **2019:**
- ▶ Our initially purchased herd of **24** cows increased to **39**. These cows and plows are shared amongst the farmers of **5** different villages, benefiting thousands of people.
- ▶ Beneficiary farmers can now plow **5** acres in a **day** when it once took them **5-6 weeks** to cultivate this much land by hand with a hoe.

COWS AND PLOUGHS

- ▶ We provided **3** Magoye Rippers (conservation agriculture plows that plow a straight line rather than a wide furrow, thus preserving topsoil health) and the farmers using them have noticed a significant improvement in crop production..

COWS AND PLOUGHS

▶ **2020:**

▶ **2** more Magoye Rippers donated

▶ **6** more cows donated



COWS AND PLOUGHS

2 weeks in April. Based in Mtunthama, Malawi. Different team members work/teach either at St. Andrews Hospital, Kasungu District Hospital, K2TASO HIV Clinic, or as part of a mobile/rural outreach clinic team. Everyone rotates to have all experiences



Medical Mission Trip

- ▶ Over **80** high school students have participated to date
- ▶ Another **18** were supposed to go in **2020** but didn't.
- ▶ Plan **2** trips to accommodate them and this year's crop of high school seniors
- ▶ Wide variety of health care providers
- ▶ IT teacher, Chemical Engineer, Dairy Farmer,





HYDROPONICS/AQUAPONICS





