Rotary International
Global Grant Proposal
for
Deep-Water Hand Pumps for Senegal
(# GG2016844)

Presentation
to the
West Chester Rotary Club
West Chester, PA

Presented by
Sam Lowry, Huntsville AL Rotary Club
Dwight Leeper, West Chester PA Rotary Club
Sept 17, 2020

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Thank you

To
The International Committee
for
Support and Funding

To
Paul Woodruff
&
Charles Streitwieser
for
Project background and assistance

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Deep-Water Hand Pumps for Senegal

(Rotary Project # GG2016844)

Host Sponsor
The Dakar Soleil Rotary Club, Senegal

International Sponsor
The West Chester Rotary Club, West Chester PA

Supporting Club
The Huntsville Rotary Club, Huntsville AL

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LifePumps for Senegal

The project will provide deep water pumps to five communities in Senegal that would otherwise not have access to clean water

Nouakchott
Dakar
Senegal
Banjul
The Gambia
Bembou
Bamako
Guinea-Bissau
Bissau
Ilha Bolama
Guinea

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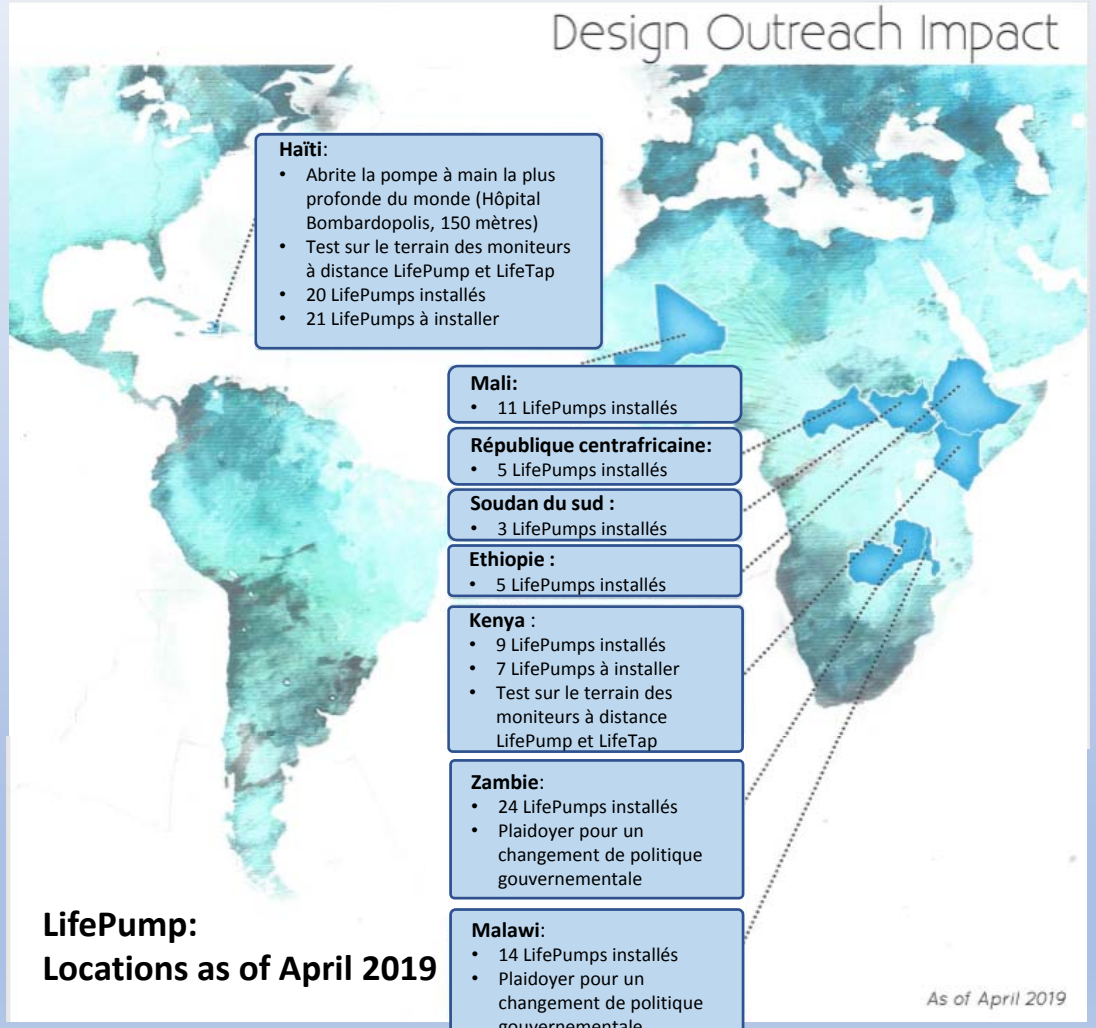
LifePumps for Senegal

This project will build on the benefits and success of the ultra-deep hand pump *LifePump™* in Africa & Haiti



LifePump:
Locations as of April 2019

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From this ….

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… to this

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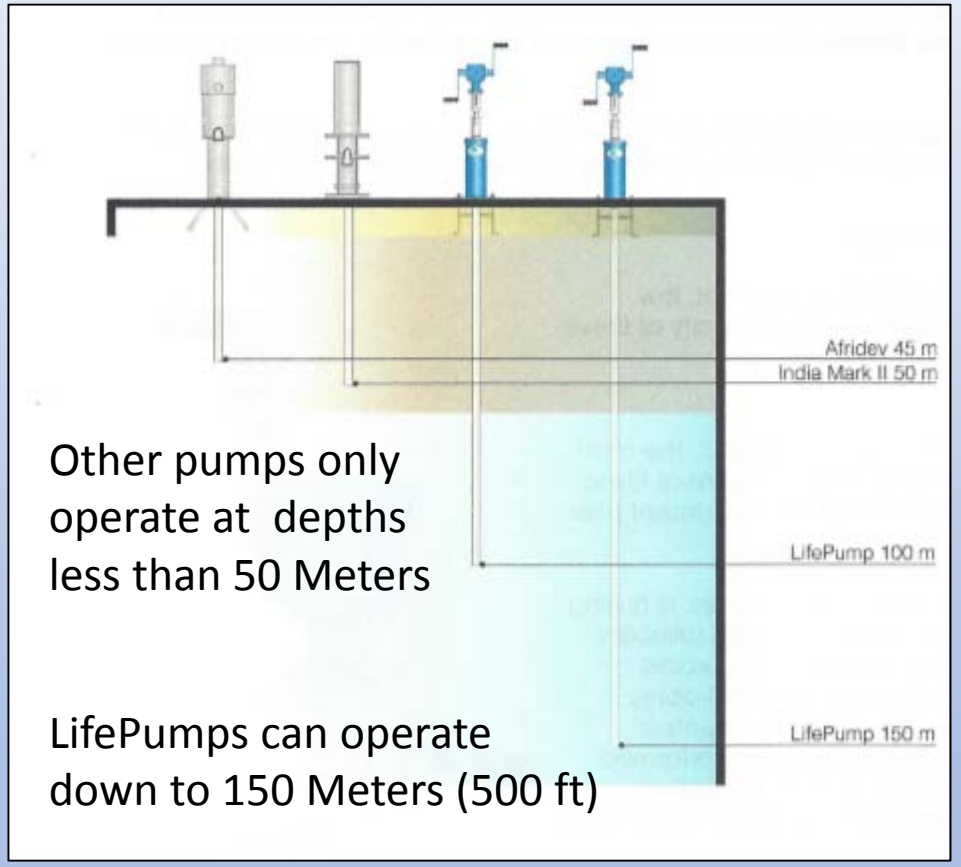
Why the LifePump is the best solution for Senegal

LifePumps
vs. Current Hand Pumps*

- Able to go 3 times deeper (1.5 football fields)
- 30 year predicted life span
- 5 year maintenance cycle
- Easier to operate
- Degrades vs. fails



*(15% of water points are non-functional after one year and 25% after just four years of operation[1])

LifePump™ is developed by the Non-profit organization Design Outreach (www.doutreach.org)

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Ref: 1 Banks, B. & S. G. Furey (2016), "What's Working, Where, and for How Long. A 2016 Water Point Update to the RWSN (2009) statistics" GWC/Skat, RWSN, St. Gallen, Switzerland.

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La LifePump

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Where can a LifePump help the most?

LifePumps best help a rural community with a population of approximately 250 to 1000 individuals that have a need for a deep water pump because:

- A standard hand pump won't work because the water table is deeper than 45 meters
- They have a standard hand pump that fails during the dry season
- The existing supply of water is inadequate or contaminated
- Water is difficult or dangerous to obtain
- The community is remote and has need for an independent water supply
- There are social benefits to be gained
- There are financial benefits to be gained

The Dakar Club and L'OFOR of Senegal have selected Five Communities in dire need of a deep water hand pump

Seyni NDAO, Director
Office of Rural Boreholes, Senegal
l'Office des Forages Ruraux (OFOR)

Projet de réalisation de PMHA dans la région de Kédougou						
N	Region	Département	Arrondissement	Commune	Nom village	Population à alimenter (hts)
1	Kédougou	Kédougou	Bamdafassi	Bandafassi	Diendji Bassari	295
2	Kédougou	Kédougou	Bandafassi	Bandafassi	Baïtilaye	474
3	Kédougou	Kédougou	Bandafassi	Dindéfélo	Hafia Thiabé Caré	700
4	Kédougou	Kédougou	Bandafassi	Ninéfécha	Soukouta	600
5	Kédougou	Saraya	Bembou	Bembou	Diakha Madinai	1522

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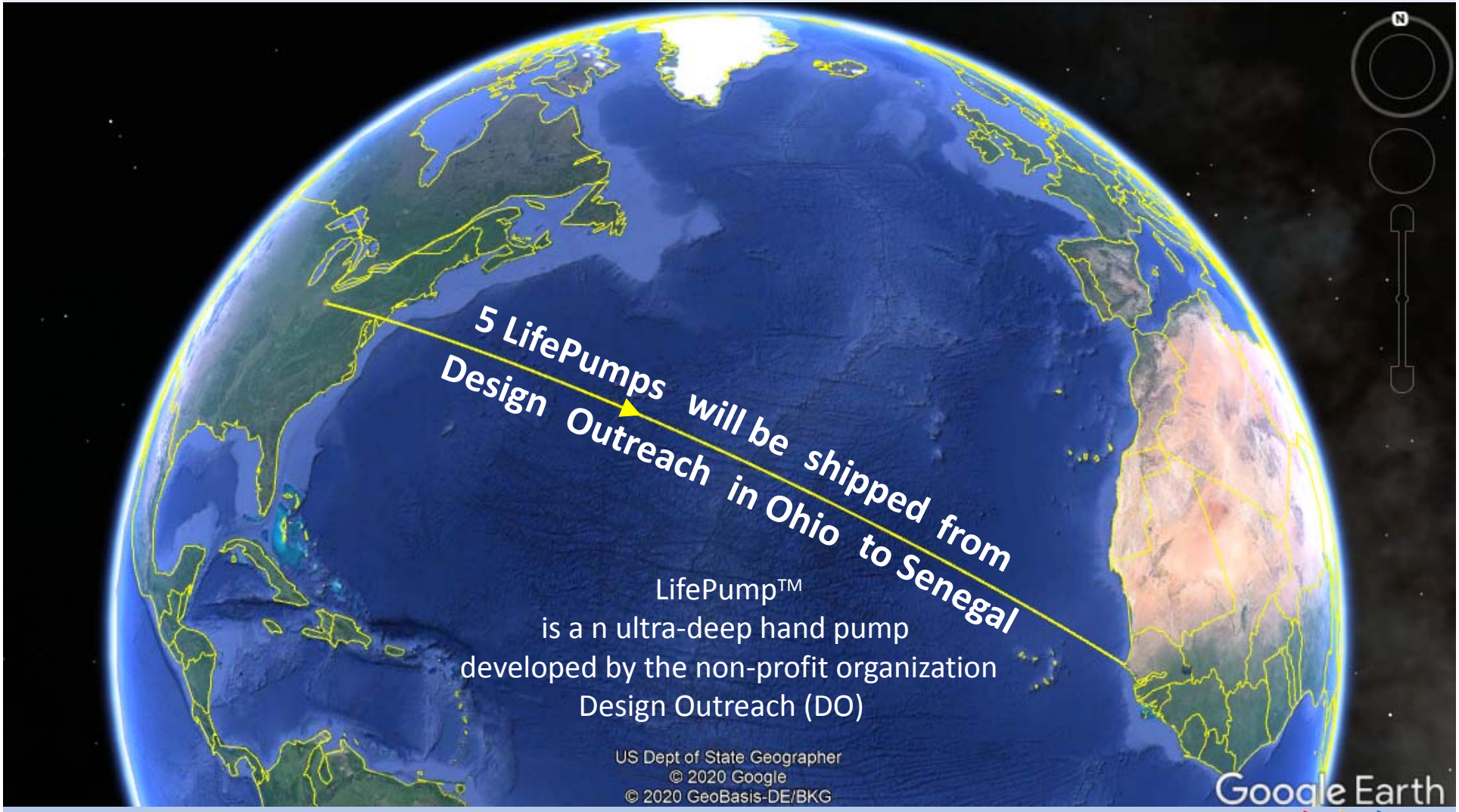
LifePumps for Senegal



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The pumps will be included in a 40’ intermodal container to be shipped to Senegal in May, 2021 by the non-profit Partner of World Health, whose mission is to provide essential medical supplies that would be otherwise discarded

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LifePumps for Senegal

Local contractors will then be trained in the installation and maintenance of the LifePump in the five communities

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LifePumps for Senegal

Local water committees will be formed in each community for routine pump maintenance and water management

Education will be provided on water usage, sanitation, and hygiene (WASH)

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De la poussière à l'eau au Malawi

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Sustainability and Growth

Satellite monitoring

LifePump

Local Water Committee

Assessment

Rotary Club of West Chester

DAKAR SOLEIL

OFOR Office des Forages Ruraux

DesignOutreach

Maintenance

Repair

Local Repair Service

Growth

Additional LifePumps

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Target Schedule

2021	Purchase 2 pumps	March
	Ship & Install first 2 pumps	**May**
	Training and education	May
	Monitor existing pumps performance	
	Evaluate and assess the humanitarian benefits of the project	
2022	Purchase additional 3 pumps	March
	Ship & Install remaining pumps	May-June
	Training and education	April – May
	Continue to monitor existing pumps performance	
	Continue to evaluate and assess the humanitarian benefits of the project	
2023	Hand over management of the pumps to the local committees and L'OFOR	

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Project Organization

- The **Dakar Soleil Rotary Club** in Senegal is serving as the Host Club www.facebook.com/Rotarydakarsoleil
- The **Pennsylvania West Chester Rotary Club, USA** is serving as the International Sponsor www.westchesterrotary.us
- The **Huntsville Rotary Club, USA** is a partner www.huntsvillerotary.com
- **Partners for World Health**, who routinely provide medical supplies to Senegal, will project training and advice www.partnersforworldhealth.org
- The project will be coordinated with the **Office of Rural Boreholes (L'OFOR)** to keep them informed and solicit their advice www.forages-ruraux.sn

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Budget

Total Budget requested for the project (5 pumps) : $126,250

(Approximately $22,000 / pump)

Hardware (pumps& parts)	$10,000 / pump
Shipping, drilling and set-up	~ $10,000 / pump
Training and education	$3,700 / pump
Travel	$4,000 total
Admin/ overhead / misc	$7,000 total

Target $126,250

Secured $32,500

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The Global Perspective

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“Whatever you do will be insignificant, but it is very important that you do it.” — Mahatma Gandhi

- Desertification and land degradation are among the main causes of low agricultural productivity in Senegal.
- Extreme weather conditions related to climate change affect food security, livelihoods and job opportunities, triggering forced migration from rural areas.
- The World Bank has estimated that three regions (Latin America, sub-Saharan Africa, and Southeast Asia) will generate 143 million more climate migrants by 2050

Thank you for your time
and to
West Chester Rotary
for
contributing

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