

Filtering Water in Ifakara, Tanzania

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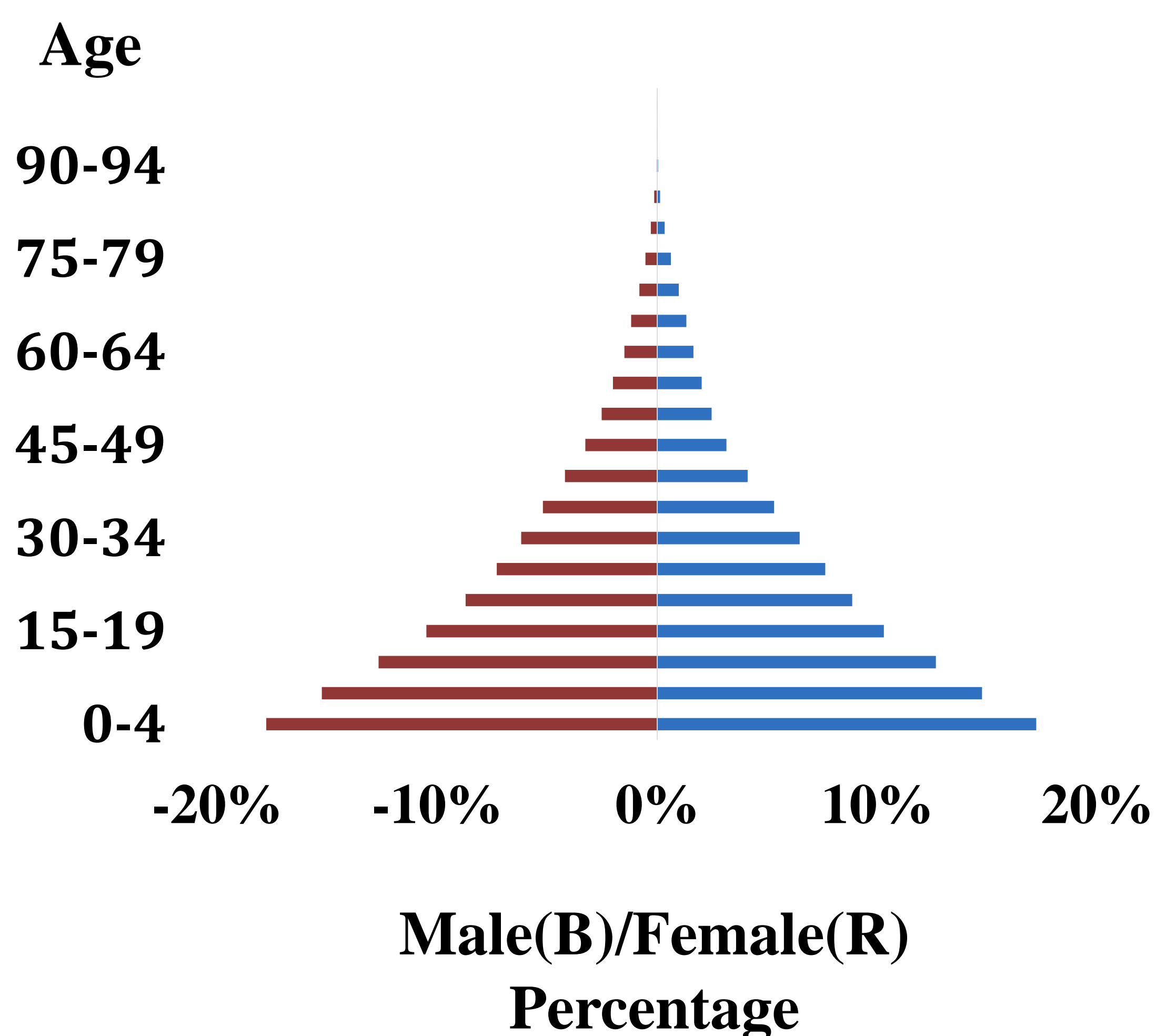
Problem

Thousands of people in Tanzania have no access to filtered water, which has resulted in disease and death.

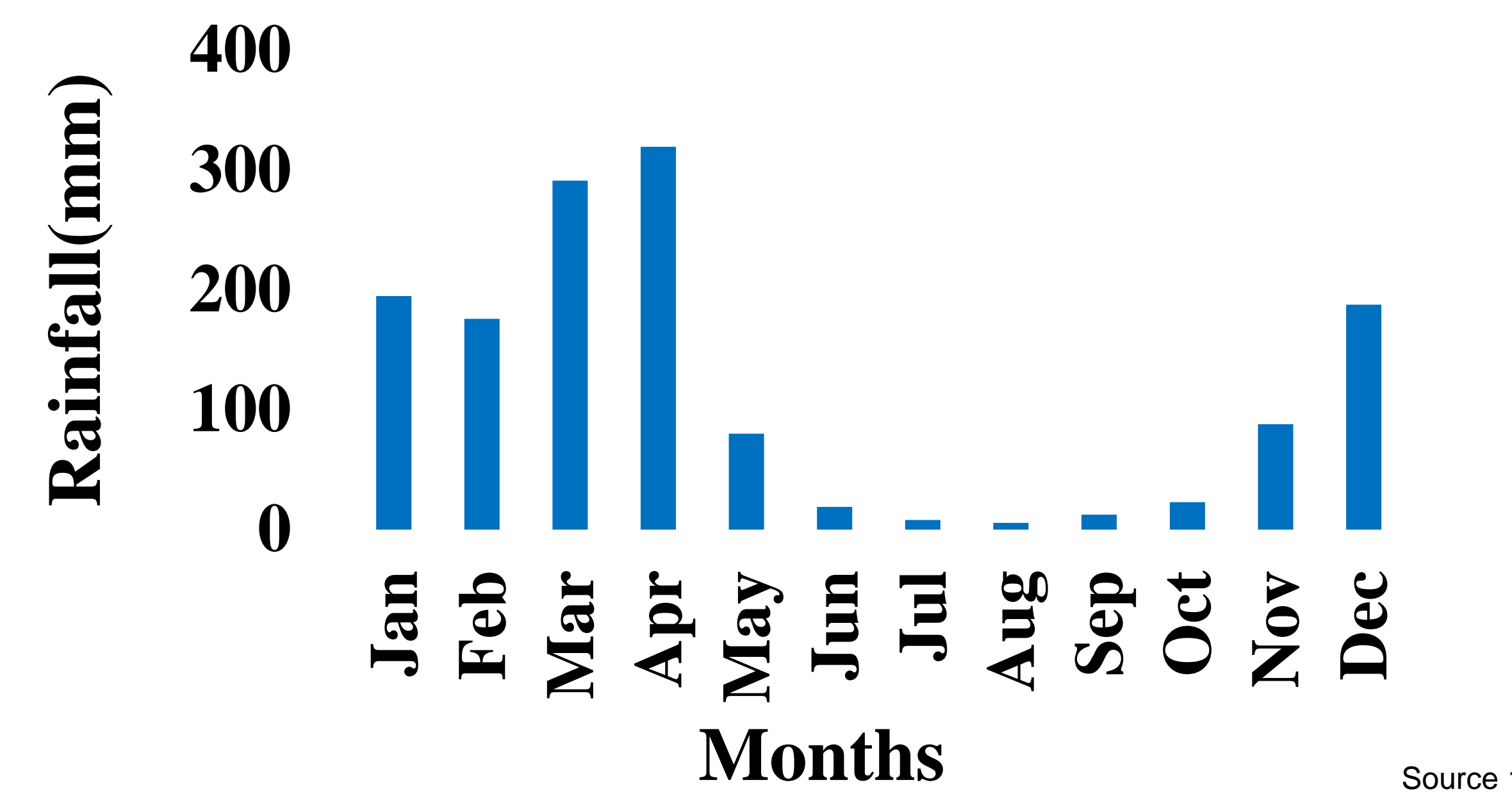
Background

- ~50,000 people
- Rural
- Attempts to provide clean water have failed
 - Management
 - Complexity
 - Lack of integration in to culture

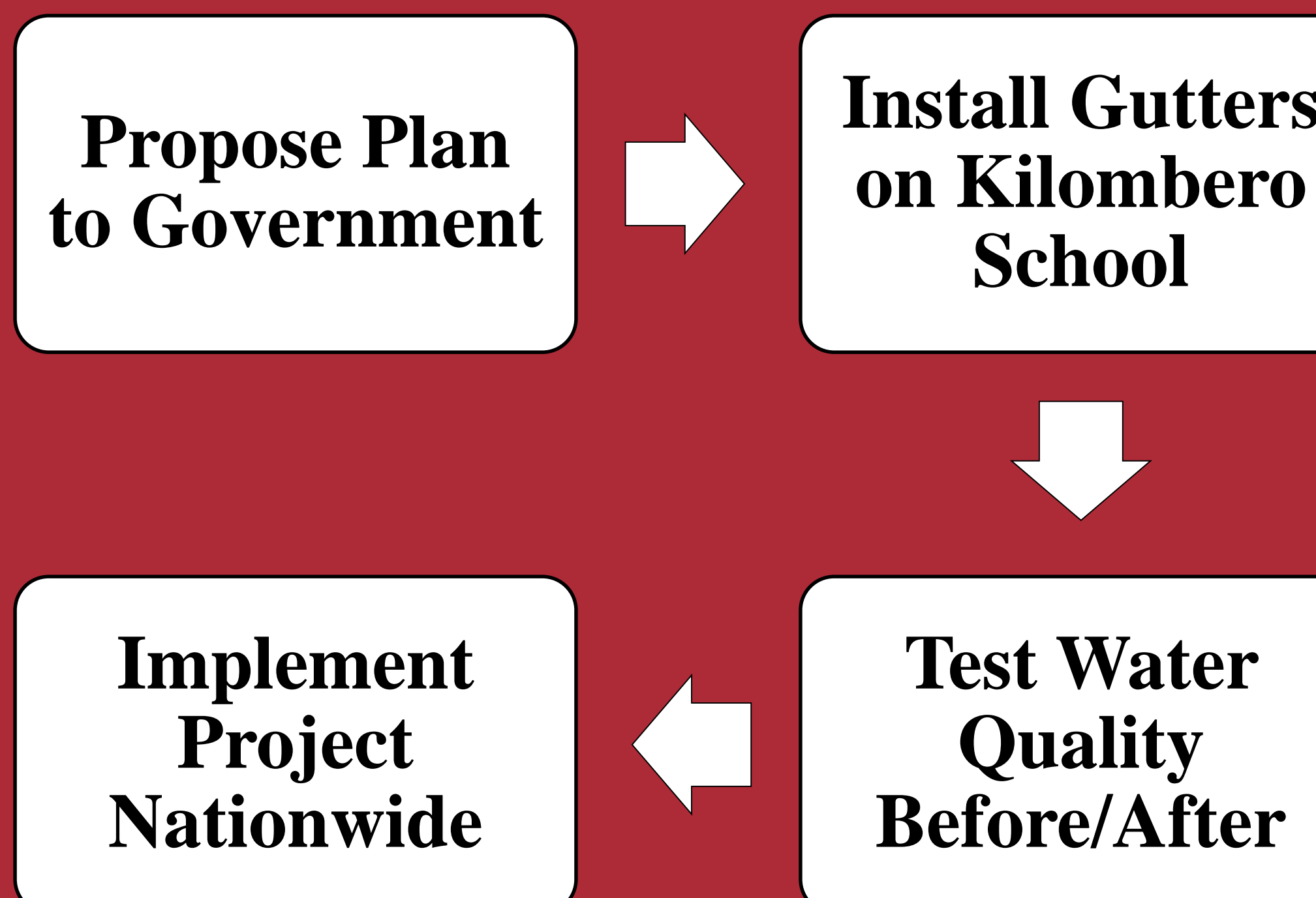
Tanzania Population Pyramid 2016



Average Rainfall 1991-2015



Approach



Cost of Gutter System

Price of PVC Gutters	\$786.5
Price of 100,000 liter tank	\$6000
Total Cost	\$6786.5

Sources 2 and 3

Water Quality Data

Ceramic Filtration Used	Colonies of Bacteria present
Before	3000 CFU/ 100mL
After	95% reduction of CFU's

Source 6

Results

Liters Filtered per Year	1,125,032
Liters Filtered per Person	1168.8
People Supplied per Year	963

Source 1

References

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