Pump for Life

A subscription based water point maintenance service

Alphonsina Kanyeto - Project Manager

MSABI - Maji Safi kwa Afya Bora Ifakara

- Tanzanian non-profit company
- Water, Sanitation and Hygiene Programs
- Develops and tests new WASH business models
- Team of 75 people
- International pool of partners and donors

Challenge: Low water access in Tanzania

- 53% of rural population has no access to safe water
- Almost 50% water points are broken
- 9% of mortality under 5 is caused by diarrhoea

Solution: *Pump for Life*

“A subscription based water point maintenance service”

- Regular and affordable subscription premiums
- Network of mechanics
- Proactive and reactive maintenance
- Data driven business model optimization

Pump for Life - Subscription premiums

- Water points with rope pumps (low lifecycle costs)
- 5 USD monthly premium per water point
- Transferred through mobile money

Pump for Life - Network of mechanics

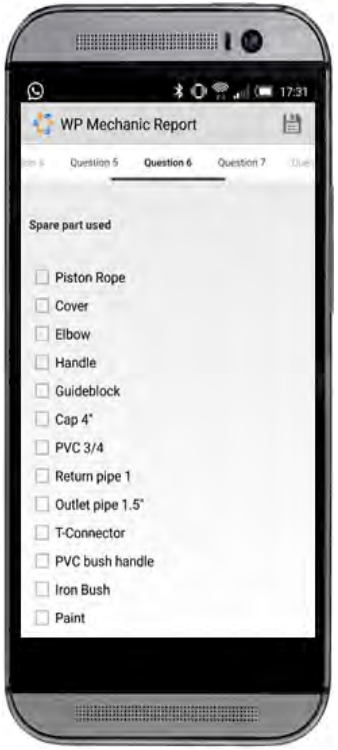
- Currently 14 mechanics - Area: 50,000 Km^2
- New mechanics hired to expand reach
- Regular training sessions
- Headquarter for coordination and quality assurance

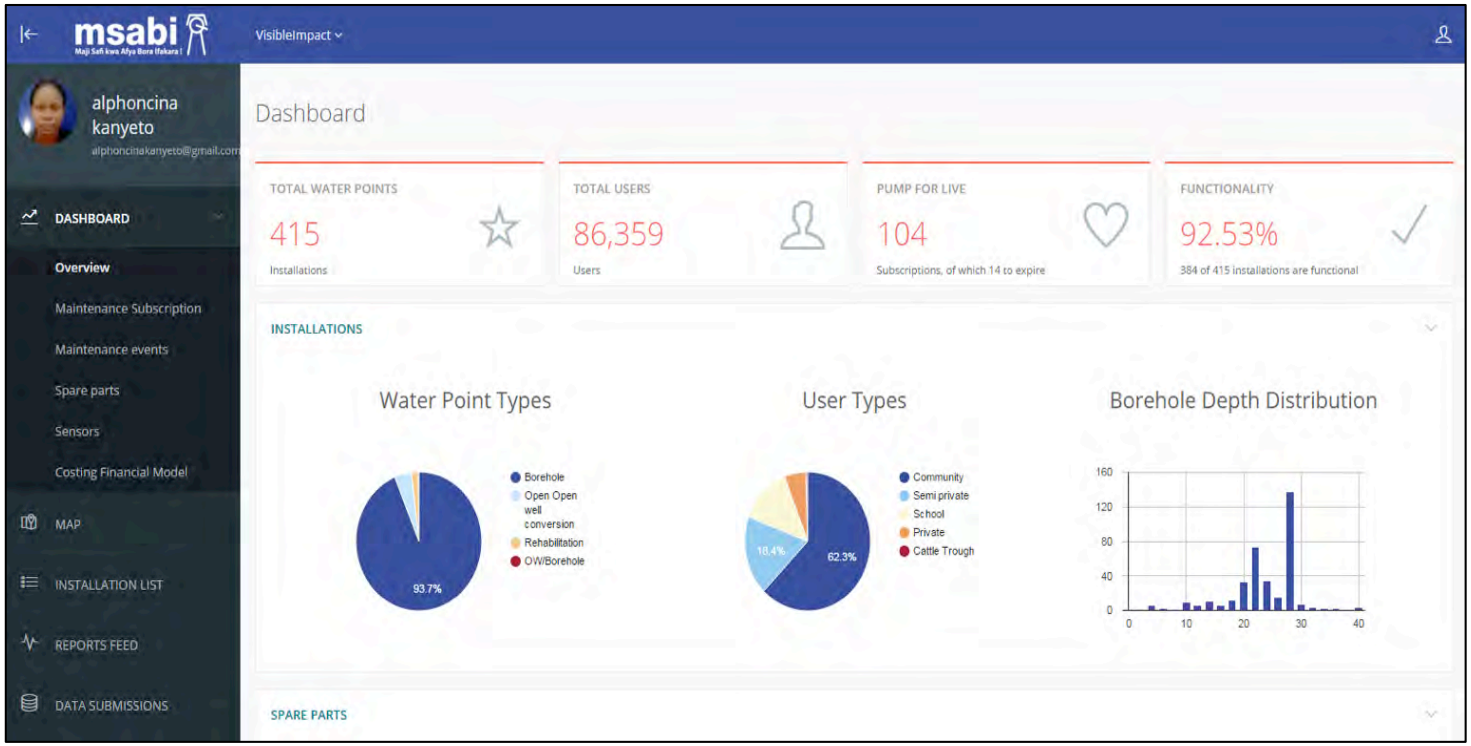
Pump for Life - Proactive and reactive maintenance

- Proactive (monthly): preventive - simple repair and cleaning
- Reactive: on call, major repairs
- Response time: 24 hours

Pump for Life - Data driven optimization

- All data is tracked with ICT platform
- Data: customer satisfaction, service reliability, life-cycle costs
- Allows improvement of all business model components





Achievements and Impact - Water Points

190
Water Points

48
Schools

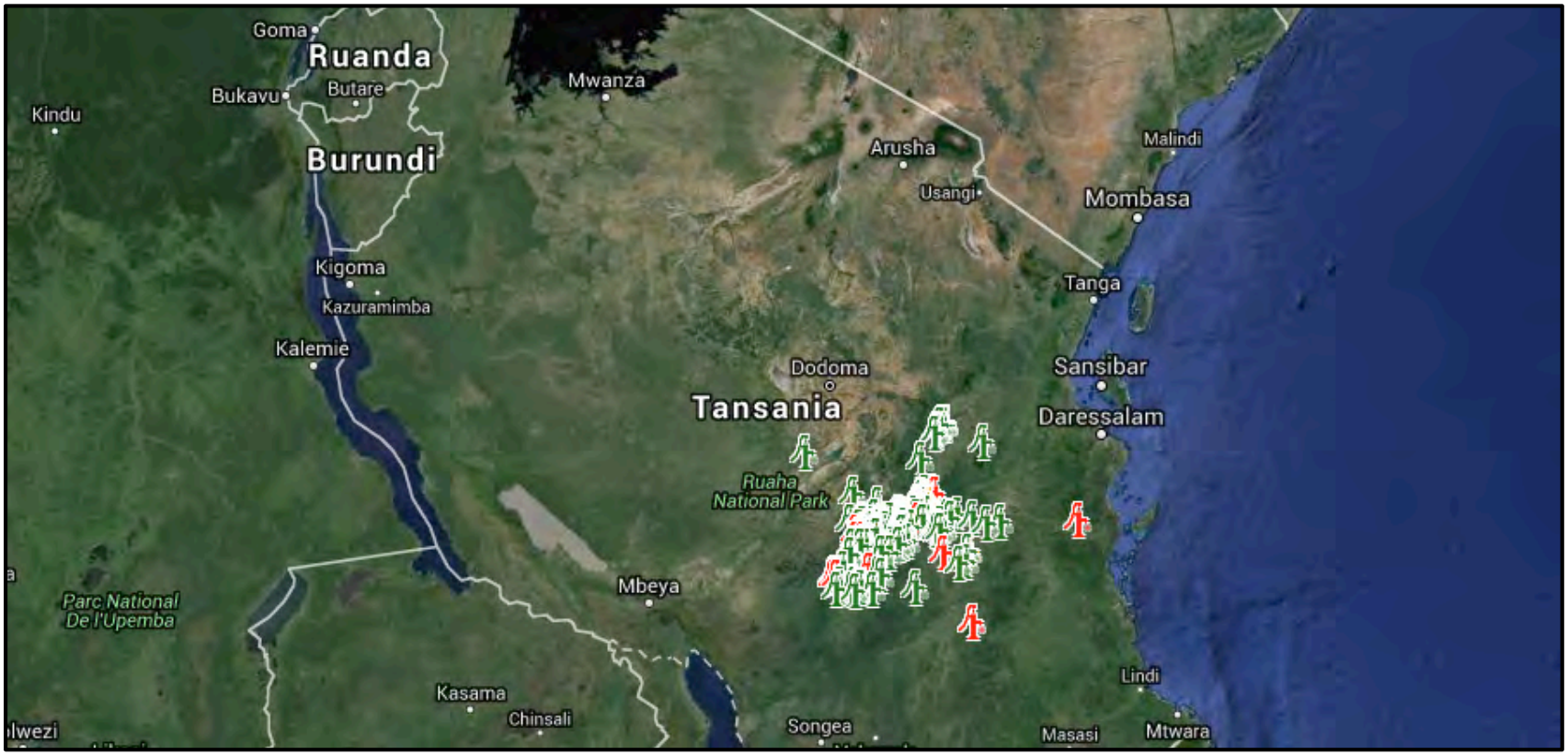
38,000
Clients

Achievements and Impact - Maintenance

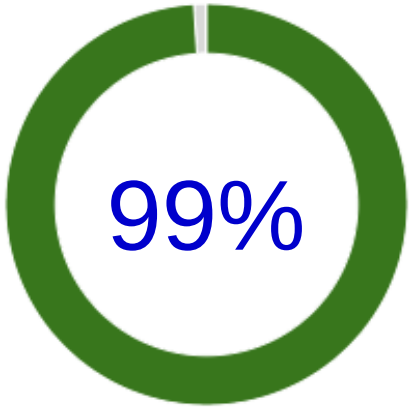
14
Mechanics

5140
Total visits

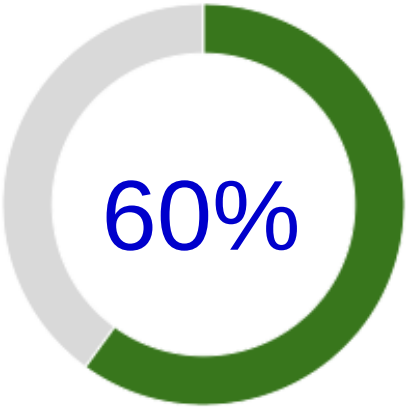
370
Spares replaced



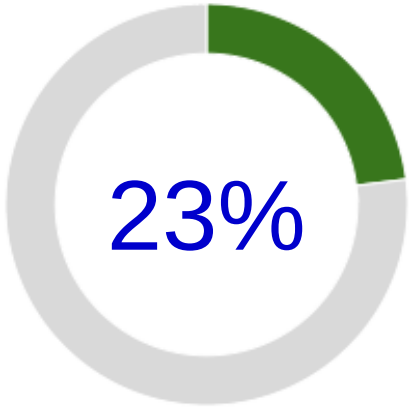
Achievements and Impact - Functionality



Functionality
Pump for Life



Functionality
Conventional



Functionality
Conventional Schools

1 day

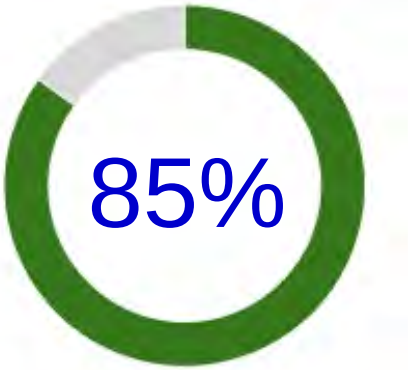
Time needed for repair
Pump for Life

17.5 days

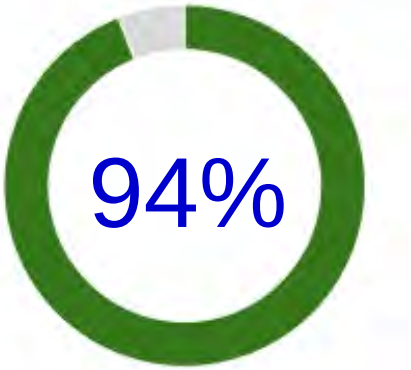
Time needed for repair
Conventional

Achievements and Impact - Payment Methods

- Payment system: mobile money
- Different operators reaching all areas
- Accessible remotely: no need to travel long distance to banks

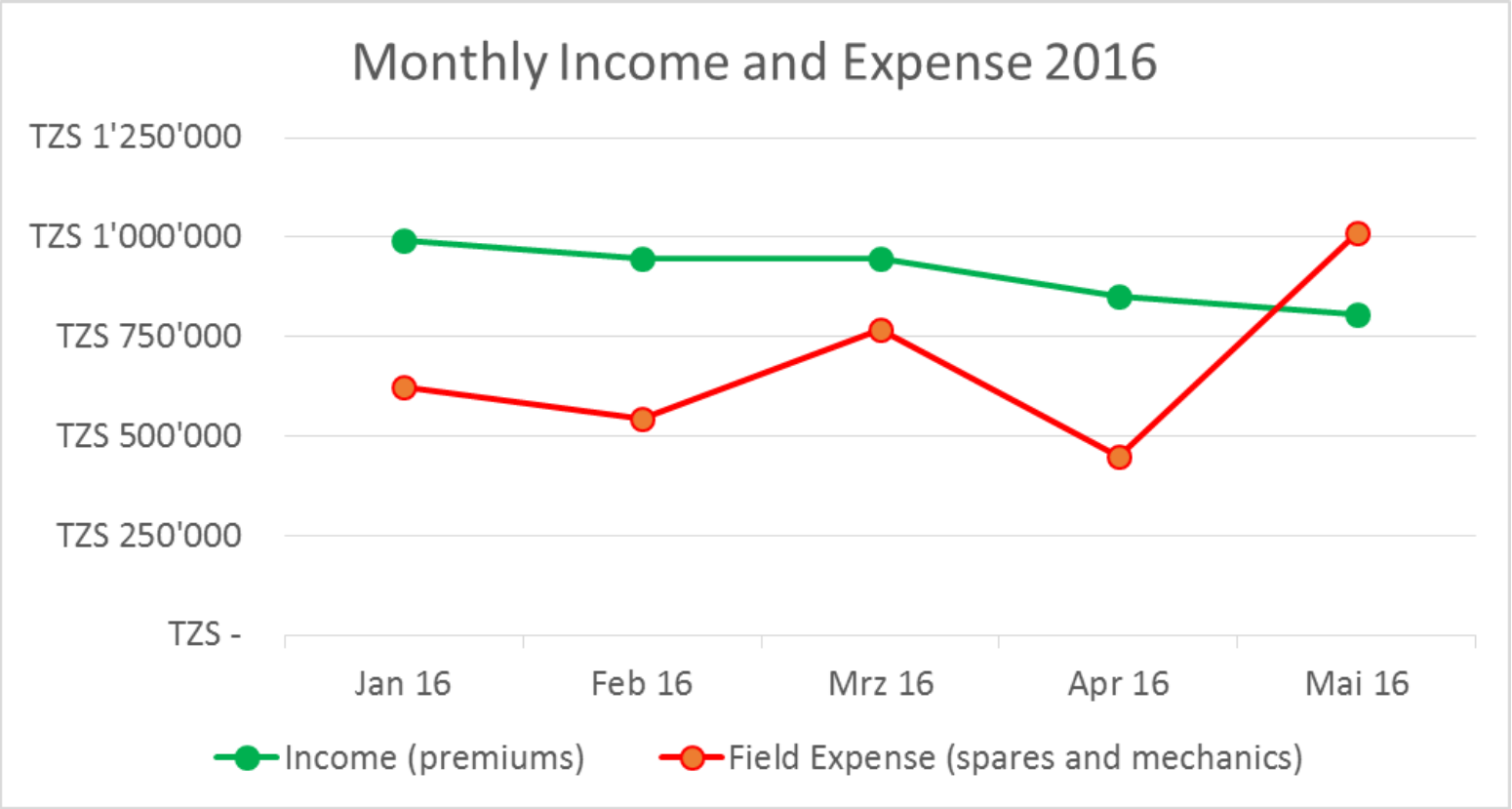


On-time payment



Overall payment

Achievements and Impacts- Financial viability



Premiums currently cover spare parts and mechanic labour

Need of premium increase and program scaling to cover all costs

Business Development Plan

	2015	2016	2017	2018	2019	2020
Mechanics	12	25	50	80	125	150
Water Points	180	300	700	1200	1800	2800
Customers	36,000	60,000	140,000	240,000	360,000	560,000

Strategy:

- Onboard all MSABI water points
- Scale to new regions
- Include new technologies (solar pumps)

msabi

Financial Plan

	2015	2016	2017	2018	2019	2020
Income (kUSD)	6.5	18.0	50.4	120.9	248.8	534.9
Expense (kUSD)	28.5	129.1	162.0	220.1	279.1	351.3
Profit and Loss (kUSD)	**(22.0)**	**(111.1)**	**(111.6)**	**(99.2)**	**(30.3)**	**183.6**

- Breakeven in 2020
- Required investment: 400,000 USD

Market and Competition

4,000 rope pumps in Tanzania

200,000+ water points in Tanzania

20,000 in MSABI core area of operations

How do we «win»?

- No other maintenance company in Tanzania
- Recognized need for maintenance of existing water points rather than construction of new ones (also by Government)

Recent Achievements - Improved Business Model

- Optimized number of proactive visits, now 1 total visit per month
- Developed strategy for increasing premiums

	2015	2016	2017	2018	2019	2020
Premium (Tzs)	6,000	10,000	12,000	14,000	17,000	20,000

- Improved service reliability tracking
  - Real time detection of visit time and location

Recent Achievements - Improved QA systems

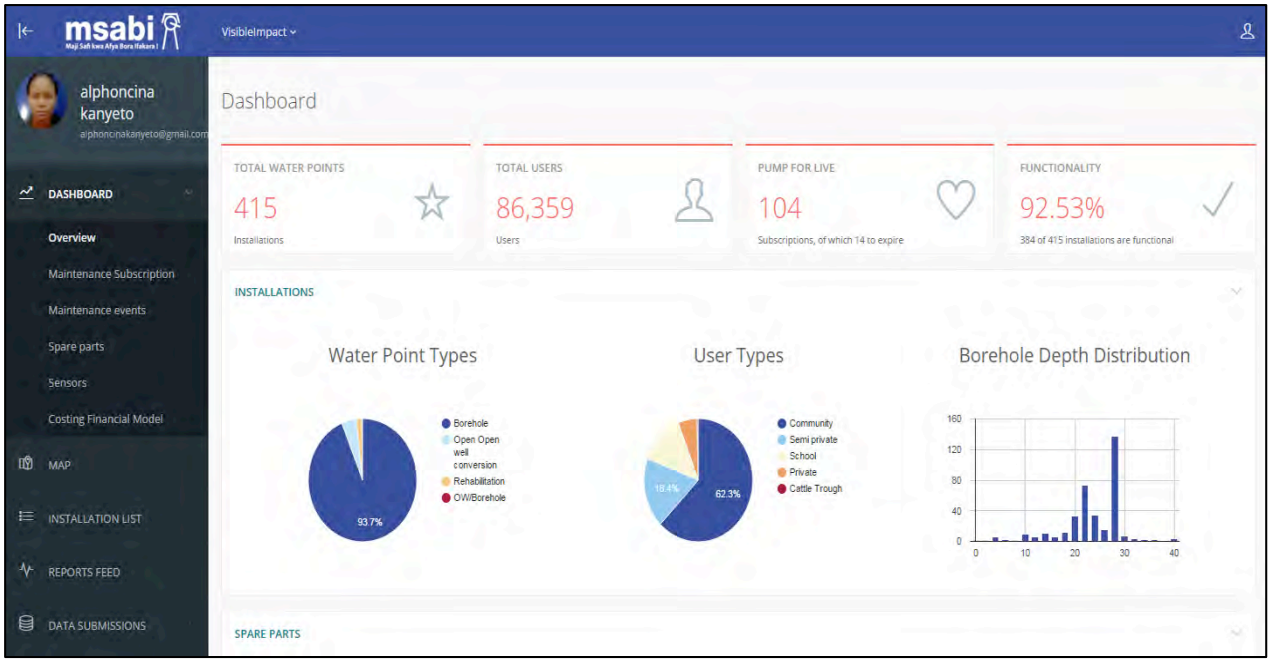
- Mechanics' increased ability to upload data (85% reliability)
- Formalized training schedule

Future Plans - Expansion to new pump technologies

- Other hand pumps
- Solar pumps
- Piped scheme

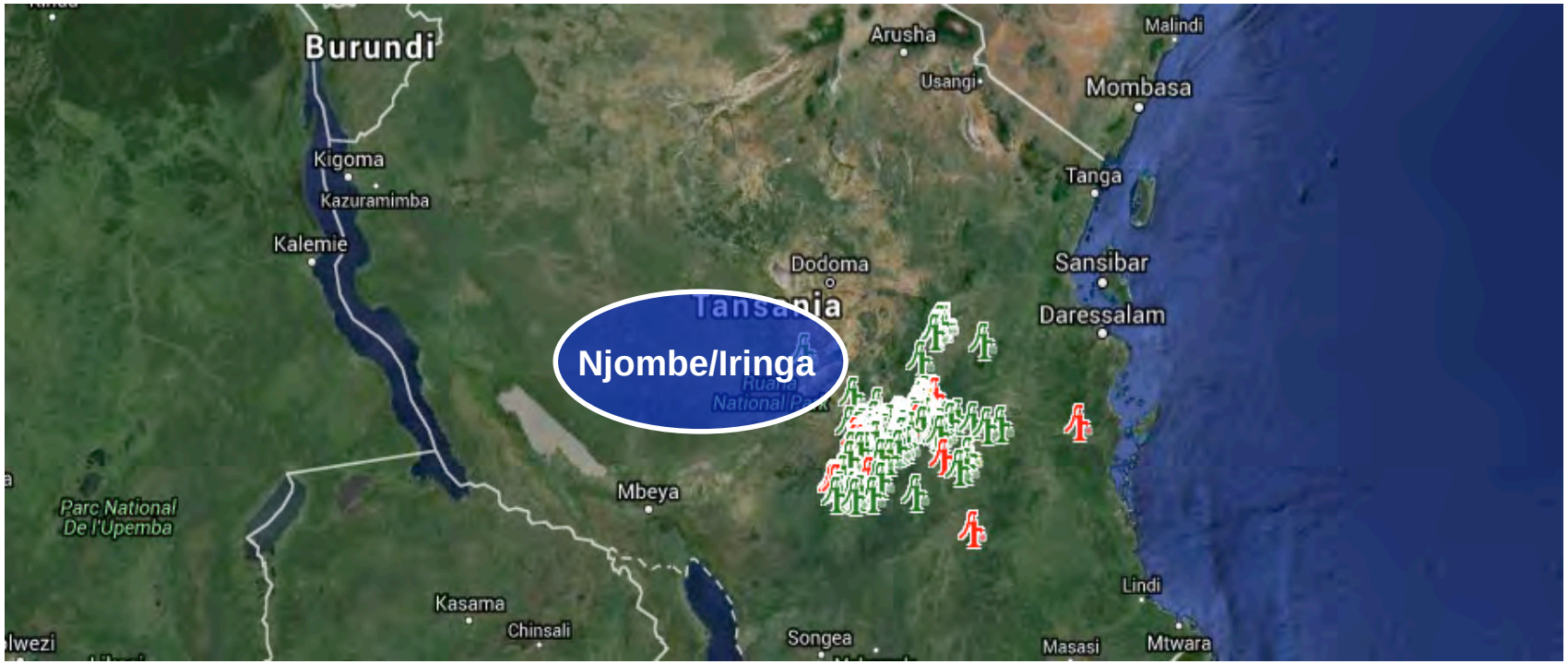
Future plans – Developing monitoring technologies

- Further develop **data systems** to improve data access
- Integrate **remote sensors** to remotely detect problems
- Integrate **NFC labels** to identify water points



Future plans – Expansion to new areas

- Expansion to new areas (Iringa/Morogoro regions)
  - *Existing partner – Local NGOs*
  - *Similar water pump technologies*
  - *We can test willingness to pay for a higher premium*



Requirements 2016 - 2020

1. External Investment

- Total required: 400k USD
- Currently committed: 150K USD
  - Salaries
  - Business Development and Expansion
  - Hub Training
  - Spare parts

2. Training and Capacity Building

Requirements for replication

- Needs long term vision
- Data on pump lifecycle costs (premium to charge)
- Local enterprise/Local ownership
- Start-up grant/investment
- Demand for services

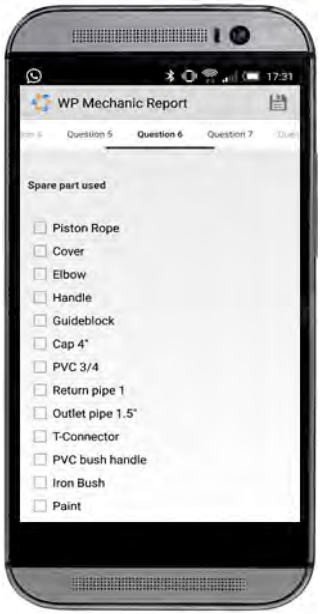
Possible in rural and urban settings:

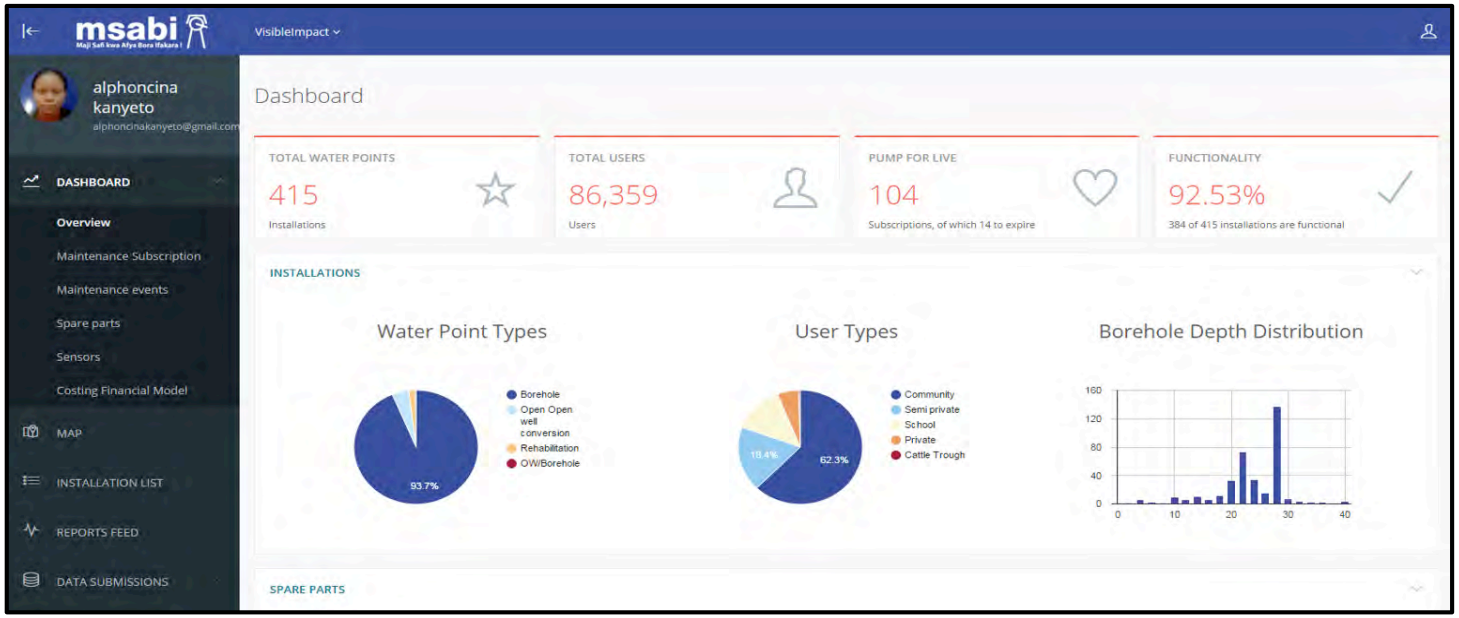
Urban**:**

- Maybe easier and cheaper (pumps are closer)
- But: competition and demand might be different

Potential for wider application of developed systems

- Subscription based services
- Advanced ICT monitoring systems
- Decentralized mechanics/ service units
- Potential sectors include: sanitation, energy, health service delivery





Pump for Life

Thank you for listening!

msabi

Alphonsina Kanyeto

www.msabi.org