Workshop on water point maintenance - Lilongwe, Malawi - February 25th 2016

Context

WHY SUCH NETWORKS ?

- **80%** of the population of Malawi lives in rural areas
- **90%** of rural population is depending on hand pumps (Afridev and Malda)
- Access to safe water in rural areas is **84%**

BUT

Hand pumps failure rate can reach **30%**
=> access gets down to 60-70%

Indeed,

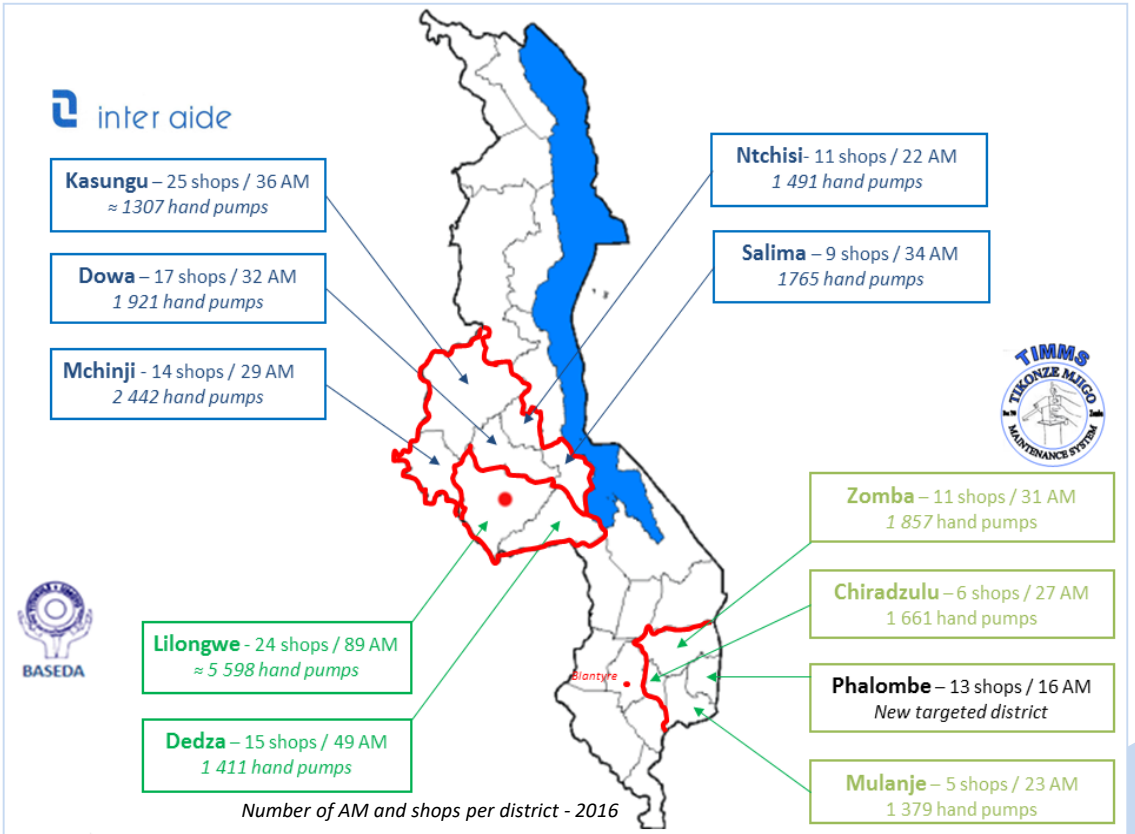
- Afridev and Malda pumps require regular maintenance,
- Few water committees know how to fix hand pumps,
- Access to spare parts is difficult for remote communities

Activities developed to address these stakes

Inter Aide and its local partners, the local NGO BASEDA and its branch for the south TIMMS identified, trained, supported and are currently monitoring in **11 districts**:

- **388 technicians (Area Mechanics)** who are able to propose contracts to communities either for repairs of their pump after sudden breakdowns, or for regular diagnosis' visits during a year for servicing ;
- **150 existing shops** have been identified to resale hand pumps spare parts, facilitating access for remote communities in rural areas. The Malawian micro-enterprise RUWASO links shops and supplier for some districts in the Central Region.

The networks potentially cover an approximate number of **22 000 water points** within this area , **5 500 000 persons** can use these services.



Number of AM and shops per district - 2016

Challenges to overcome

How to make these networks sustainable ?

- Avoiding risks of overlapping with other stakeholders, competition between actors (for ex. : water points rehabilitation for free when it could have been taken in charge locally by the communities and the work of Area Mechanics) ;
- Reinforcing the awareness of the communities and their confidence in the services provided;
- Ensuring a continuous and durable supply chain;
- Service providers are making profits from such activities

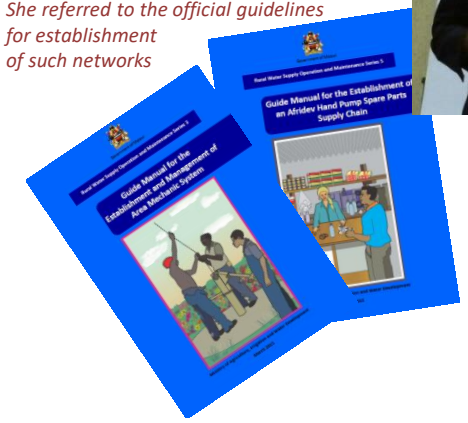
How to ensure a sustainable monitoring & evaluation of the quality of the services delivered ?

- By reinforcing technical capacities of the mechanics,
- Controlling delay of interventions, quality of the spare parts furnished, affordability of prices for the communities…

What were the objectives of the workshop ? ①

Mrs. Mbalame, Secretary of the Ministry of Irrigation and Water Development emphasized on the importance of the maintenance of water points and hand pumps.

She praised stakeholders for collaboration for sustainability of existing mechanisms. She referred to the official guidelines for establishment of such networks

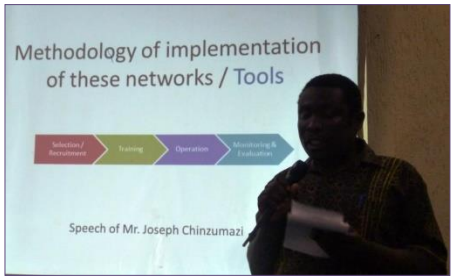


Various and number steps of implementation as well as examples of tools mentioned in the guidelines are directly inspired from Inter Aide / BASEDA's approach.

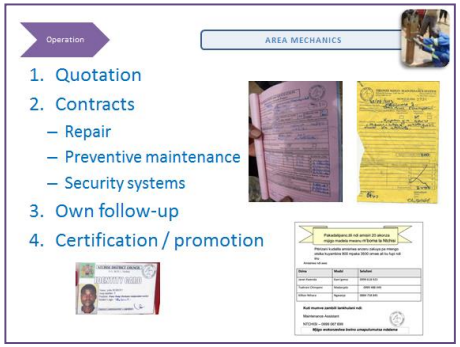
Giving more visibility to the networks

Around **50 participants** attended the different presentations and a working group: representatives of the Ministry, District Water Officers, Donors, NGOs and stakeholders involved in WASH and maintenance activities, representatives of hand pump mechanics and shops.

Explaining methodologies of implementation and for monitoring & evaluation

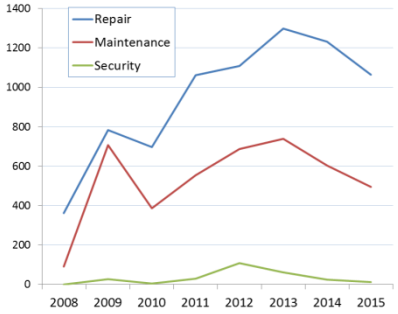


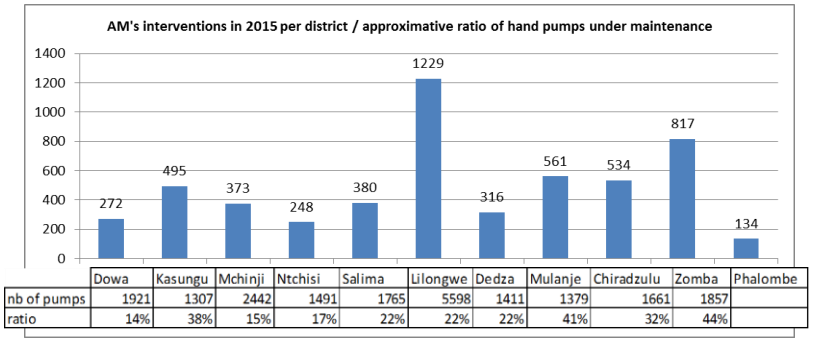
Testimonies of AMs and shop owners, followed by illustrations of tools and documents used at each step, clarified to all participants the approach and efforts made for quality, transparency and sustainability.



Showing the results achieved

Number of interventions of Area Mechanics are followed year after year to measure progression.





	Dowa	Kasungu	Mchinji	Ntchisi	Salima	Lilongwe	Dedza	Mulanje	Chiradzulu	Zomba	Phalombe
nb of pumps	1921	1307	2442	1491	1765	5598	1411	1379	1661	1857	
ratio	14%	38%	15%	17%	22%	22%	22%	41%	32%	44%	

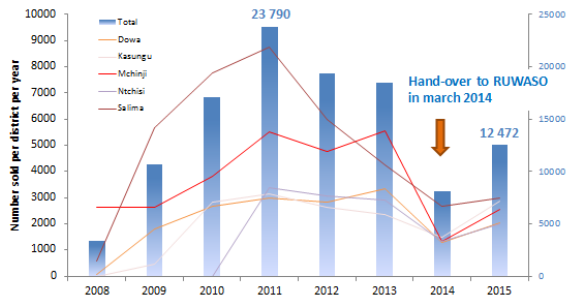
The comparison of number of contracts done (**5 211 in total in 2015 for all districts**) with the number of hand pumps is a way to assess the ratio of communities using such services (**25%**).

The follow-up of quantity of spare parts sold and comparison year after year gives indications on the effectiveness of the network of shops resellers and on the adhesion of the communities.

RUWASO appears after some months (and despite free interventions and donation in the villages from other actors) as an efficient local solution to maintain the link between communities, isolated shops and suppliers.

Evolution of number of sales for the shops year after year

example for Dowa, Kasungu, Mchinji, Ntchisi, Salima



What were the objectives of the workshop ? ②

Giving more visibility to the networks

Diffusing messages for sustainability

Encouraging actors to rely on these local networks

Initiating coordination and collaboration with actors who would implement such approach

Avoiding duplication, competition, overlapping…

Mr Smorden Tomoka, WASH project officer for the NGO Concern Universal, gave his testimony of the collaboration officialised by a **Memorandum Of Understanding** with Inter Aide and BASEDA :

- New shops identified and trained by Concern Univ. have been selected in a way that it is avoiding competition with the existing shops. The follow-up has been transferred to IA or BASEDA
- For rehabilitation of water points that Concern Univ. identified as priorities, they manage the civil work and they mandate the Area Mechanics for hand pump renovations .

Promoting local initiatives for a durable supply chain

RUral WAter SOlutions is a Malawian micro-enterprise supported by Inter Aide and aiming at linking main suppliers to partners' shop (groceries, hardware…) in rural areas.

It is composed of 6 branches in Kasungu (2), Mchinji, Salima, Dowa and Ntchisi districts and supplies a network of 70 partners shops owners spread in all trading Centers in the 5 districts (formally trained by Inter Aide).

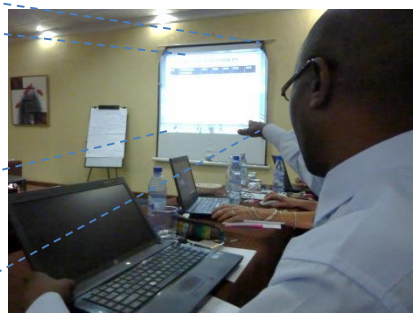
Mr. Pacharo Chiumia and Alufeyo Njeresa, partners in charge of RUWASO

Identifying mechanisms for a transfer of the monitoring to District Water Offices (DWOs)

Inter Aide, BASEDA and TIMMS developed a methodology and different tools to measure activities of AMs and shops and ensuring the monitoring of the quality of the services delivered.
BASEDA and TIMMS are following AMs hands in hands with the Water Monitoring Assistants (WMA) of the DWOs. Inter Aide launched a complete hand-over to the DWO of Salima.

DWO's BUDGET FOR THE FOLLOW UPS

- Districts budget for the AM Follow Ups is around K30,000.00 (6 USD)
- The budget carters for fuel for WMAs, lunches allowances and refreshments for the monthly meetings
- Monthly meetings generate reports on the performance of each AM as per number Maintenance and Repair Contracts made



Mr Waki Martin Chungwa, District Water Development Officer for the district of Salima, made a presentation showing how the Water Department is involved in the monitoring of AMs and the budget and human resources that have been allocated by the district for this specific task.
He also explained what was the reinforcement of capacities provided by Inter Aide : methodology for collection of information and follow-up.

Working groups

A second part of the workshop was dedicated to a brainstorming between participants on the possible solutions and way forward to :

- **Improve the coordination,**
- **Build capacities for local actors in particular District Councils and DWOs ?**
- **Enhance the quality and sustainability of the services of networks of AMs and spare parts shops !**

Conclusions & way forward

Observations

The comparison of all the data compiled shows that :

An **Area Mechanic** on average…

- supervises about 55 Hand Pumps
- does 10 **to 15 contracts a year**

Which means,

- 40 000 kw a year of money earned – 8 USD

(for a part-time job: 10 to 15 contracts = **30 days a year** – quotations + interventions + **visits)**

But,

Some AM can reach up to supervising 100 Hand pumps, doing 80 contracts a year (80%), 240 000 kw earned -45 USD!

A **Partner Shop** in average…

- sells about **190 000 kw of spare parts a year ~ 250 USD**
- makes **38 000 kw of profit per year ~ 50 USD**

(profit margin is almost 20% between prices bought from RUWASO or BASEDA and prices sold to communities)

But,

Some shops can reach up to 2 300 000 kw of sales = 460 000 of benefit a year (600 USD) !

There are rooms for expanding the business !

Messrs Staford (left photo) and Guande, respectively Area Mechanic and shop owner, related their own perspectives of the profit they are making from this activity, in addition to the support they are providing to their communities.

Costs for users

Preventive servicing contract costs 5 000 Kw a year + spare parts = 4 000 Kw a year in average in total in average = **9 000 Kw a year.**

Communities are encouraged to enter on a preventive approach rather than only repairing when there is a breakdown, because :

- 1 Major repair can cost up to 25 000 Kw

And on the long term, it allows to:

- reduce shortage of water between repairs' interventions
- reduce risks of breakdowns or losing the borehole

In theory…

considering one water point = 250 users, and almost 50 households, water point committees can collect around 60 kw on average in a month per each household (4 to 20 cents USD), thus around 36 000 kw a year.

Entering in a preventive service with an AM is the cheapest way to maintain a water point.

Synthesis of the brainstorming

Challenges	Solutions
Convincing communities of using recognized networks + the importance of a preventive approach	• Increase communication and services promotion • Sensitize communities on contribution for water point maintenance fees
Strengthening the quality of the services provided by AM and spare parts retailers	• Refresh trainings , doing evaluation of the quality • Giving advises for quotations / contracts and own-management
Risks of overlapping, duplication, competition	• Coordination between stakeholders • Involve Water Department and DWOs • Encourage stakeholders to recognize and promote the existing networks • Encourage stakeholders to follow national guidelines for rehabilitation and maintenance • All stakeholders should promote to communities the importance of contributing (and not waiting for free intervention)
Hand-over of monitoring to District Councils	• Trainings of DWOs on monitoring tools • Trainings of DWOs on action plan • Designing budgets that can be adopted by District Councils

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