The purpose of this template is to support anyone who wishes to share learnings with other people in a standardised way. This has the advantage that the information can be easily shared through the sector learning website [www.washlearningsl.net](http://www.washlearningsl.net).

**What do we mean by Learning?** A process by which an activity/project/research leads to sharing knowledge / experience / lesson learned / feedback on a given theme; learning can take place within the WASH sector or other sectors, at different levels (communities, districts, national); it may have been shared (or not yet) through different means (training, workshop, publication, presentation, etc.)

**Learning Headline and theme**

Water points maintenance: reinforcing local capacities and supporting water committees for regular preventive diagnosis

**Name and Brief description of the intervention/project**

**CAPACITY DEVELOPMENT OF RURAL BOMBALI COMMUNITIES AND LOCAL ACTORS TO SUSTAIN ACCESS TO SAFE WATER**

**What problem is the project addressing and what solution does it propose?**

A water point mapping in 2012 sponsored by the World Bank shown that at that time, out of 1 396 hand pumps, only 857 of them were functional (61% of the total). Based on these observations - high density of population, important number of water points and needs of repair. The program strategy based on a public-private approach is aiming both at stimulating the demand, by sensitizing and counselling the communities about the needs for proceeding to a repair and then to regular maintenances of their installation, and developing the service offered through a network of trained and equipped private technicians called Pump Officers.

**How was the solution implemented?**

A Pump Officer is a private technician identified, trained, supported and promoted by the project and certified by the Water Directorate (WD). They do not receive any payment from Inter Aide but from the communities only according to the type of intervention. Each one of the Pump Officer has his own area of intervention (most of the time a whole chiefdom) determined by the program and depending on the place they are coming from. Indeed, to ensure the efficiency of their work and its sustainability it is advisable to appoint someone already well-known by the communities he will work for. The program is following 15 Pump Officers. On average, a pump officer is in charge of 500 pumps.

The team of Inter Aide is organizing participative sessions to introduce the pump technician and to enable the communities to understand how their pump works. A participative diagnosis of the pump is organised to illustrate the deterioration of the pumps throughout the time, by comparing old spare parts and new ones, and to explain the notion of preventive maintenance and promote yearly diagnosis.

The initial maintenance usually concerns the reparation of the pumps, with a possible upgrade to standards. As some pumps are broken down beyond the community’s ability to pay the full cost, Inter Aide only subsidizes this first intervention. For this first reparation, the maximum amount to be paid by the community is 300 000 Le (not including the transportation cost)*, which includes a portion returned back to the community as:

1/ tools to equip the water committee’s pump caretaker,

2/ a cash box that allows securing the contributions but also facilitates transparency during for example meetings when the treasurer will count in front of everybody the cash in hands.

3/ a 10 000 Le (or 20 000 Le for a borehole – as no chlorination is done in that case) first amount to encourage saving a maintenance fund.
### Community Contribution

<table>
<thead>
<tr>
<th>Description</th>
<th>Community Contribution</th>
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<tbody>
<tr>
<td>Total cost for the service of the Pump technician for the diagnosis and the reparation/maintenance of the pump</td>
<td><strong>60,000 Le</strong></td>
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<tr>
<td>The community covers the spare parts needed for the reparation up to 100,000 Le. The remainder is subsidised by Inter Aide.</td>
<td><strong>Max. 100,000 Le</strong></td>
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<tr>
<td>A tool bag is given to the Pump Caretaker to maintain the greasing of the pump between yearly maintenances</td>
<td><strong>70,000 Le</strong></td>
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<tr>
<td>The metallic box comes with two pad locks: one key with the secretary, one with the treasurer and the box is kept by the chairlady.</td>
<td><strong>50,000 Le</strong></td>
</tr>
<tr>
<td>Provision returned back to the community to encourage them to start saving a maintenance fund</td>
<td><strong>10,000 Le</strong> (or 20,000 if it is a borehole)</td>
</tr>
<tr>
<td>A systematic chlorination is done for a well after each intervention. Boreholes are not chlorinated to avoid the corrosion of their casing (most of them have been built with galvanized casing).</td>
<td><strong>10,000 Le</strong></td>
</tr>
<tr>
<td>Provision returned back to the community to encourage them to start saving a maintenance fund</td>
<td><strong>Max 300,000 Le</strong></td>
</tr>
</tbody>
</table>

*The pump technicians are also negotiating with the communities the price of their transportation to go and come back, according to the distance.*

Afterwards, the community is responsible for paying full cost of each maintenance (60,000 Le for labour cost + cost of spare parts to be replaced + transportation costs) and have to organize regular fee collection to finance these maintenances.

Inter Aide with the hand pump mechanics are then following the renew of the diagnosis: yearly campaigns of maintenance are organised during one quarter - October, November and December - the best timing for the communities since they get some funds from cropping at this period. Some weeks before, the assigned Pump Officer visits his communities, with the support of Inter Aide at the beginning, to remind them that it is time to do their preventive maintenance and to collect the necessary contributions. This preliminary campaign can be considered as a “promotion tour” while the Pump Officers can make an appointment with the communities for their preventive maintenance.

### Who are the key stakeholders or partners involved in this intervention and what are their roles?

- The project is implemented in collaboration with Bombali District Council and the Water Directorate of Bombali: certification of hand pump technician + joint monitoring
- Sections and paramount chiefs: sensitizing communities for maintenance + following Hand pump technicians.
- Hand pump technicians, water committees

### What learning has emerged from the project? And how do you ensure learning across the project?

- Good practices for hand dug well construction or rehabilitation:
  - Best standards in line with national guidelines + importance of working on dry season
  - Security measures while construction is on-going

Project managers and HQ team is writing notes and documents that are shared with stakeholders on the field (team, contractors, water directorate, other NGOs), and that are also published on the net through two platforms: a blog dedicated to Inter Aide’s wash activities in Sierra Leone ([www.interaide.org/watsan/sl](http://www.interaide.org/watsan/sl)) + a general web site named Pratiques ([www.interaide.pratiques.org](http://www.interaide.pratiques.org))

### What is innovative and significant about the project?

- The development of local professional technicians who can get additional incomes from this activity
- The promotion of pro-active and preventive maintenance
- The promotion to water committees of a dedicated and calculated amount of money for water point maintenance annual needs.

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1 For India Mark II (or PB Mark II), the tool bags include 1 pot of grease, 2 spanners 17 mm + 2 spanners 19 mm, 1 screwdriver. For Kardia (65/2000), it includes 1 pot of grease, 1 spanner 17 mm + 1 spanners 24 mm, 1 allen key 8 mm.
What learning materials or products have been produced?

1. **Manual for water committees' training**
   
   [http://www.interaide.org/pratiques/content/manual-water-committees-training-sierra-leone-tool-eng-0](http://www.interaide.org/pratiques/content/manual-water-committees-training-sierra-leone-tool-eng-0)

   Guidelines and tools for water committees training.

2. **Hand pumps preventive maintenance strategy in Sierra Leone**
   

   Detailed description of the maintenance strategy of Inter Aide in Bombali dt.

3. **About costs and financial organisation to maintain access to safe water in Sierra Leone rural areas**
   

   Cost of maintenance for communities and the importance of a preventive approach for saving money + how they can organise themselves for money collection.

4 and 4 bis Kardia and India Mark maintenance guidelines


5. **Examples of anecdotes that can be used to raise communities' awareness and understanding on water points maintenance**


6. **Involving Women: Developing Communities through Women and Water**


   General considerations why wash programs should involve women and practical guidelines on how concretely involved them (as pump care taker for example)

Is there any further work necessary to solve the problem? What are the remaining gaps?

- Scaling up the approach and coordinating with other actors to disseminate it
- Sustainable monitoring of hand pump technicians and water committees with water directorate
- Access to spare parts

**Key contact of the project in case further information is needed**

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Please add an action oriented picture about the initiative/intervention/project.

The network of hand pump technicians.