Intervention of a task force composed of professional water technicians in Sri Lanka, after the dec.2004 tsunami

Presented by François GUERQUIN, Director for International Affairs Société des Eaux de Marseille
Groupe des Eaux de Marseille - WaterHelp:

- **Groupe des Eaux de Marseille**: a private water and sanitation service operator, with references in 60+ towns in South East France including Marseille (900 000 inhabitants)

- **WaterHelp** is a task force of the company

  **Objective**: to conduct water and sanitation interventions in context of humanitarian emergency crisis

  **Staff**: 60+ employees from the company (volunteers), immediately available if needed (30+ made at least one mission in Trincomalee)

  **Equipement**: pumps, sandfilters, flushers,…but also trucks and cranes

  **References**: first help and rehabilitation activities after the floodings in Bab El Oued (Algeria), and Arles (France), and the earthquakes in Boumerdes (Algeria) and El Hoceima (Morocco)
Location

The Kinniya peninsula

- In eastern Sri Lanka
- located in Trincomalee gulf
- 65,000 inhabitants
Before Tsunami

- Connected to the town of Trincomalee by ferry (5mn) and by a poorly maintained, 13-kms long road along the gulf coast (2 hours)
- Water comes from Trincomalee through a 220 mm large, 600m long undersea pipe
- The 20 kms-water network is used by 35% of the population, two third of the population using one of the 2350 wells
Tsunami impact: general

The facts:

- The area was struck with full impact by the tsunami
- A population of 6,600 lost their habitations and was sheltered in 10 refugee camps in the vicinity
- The road, already in bad shape, was no more practicable
Tsunami impact: water issues

Water is no more available: the undersea pipe is torn away and beached, the network also suffered, and a large majority of the wells are contaminated by salty water.
Phase 1: emergency activities

- A few days after the event, our first technical team arrived in Sri Lanka for a first diagnosis.
- On Jan. 6, the team began working with Société du Canal de Provence staff, who has been there for an hydraulic engineering study for months.
- Emergency water delivery was ensured by the Sri Lanka Water Board through 55 citerns (volume available 95 m³) filled by trucks: two rotations per day allow for 30 m³/day available, instead of 2000 m³/day before.
- In these conditions people had to go inland to search for water and were not available for repair.
- On Jan. 12, more technicians and material arrived from Marseilles to start well depollution operations.
Phase 1: emergency activities

Le littoral dévasté au Nord-Est du pays

Enfants d’un camp de réfugiés de la région de Kuchchaveli

Désinfection d’un puits autour de Trincomalee

Camion-atelier équipé de matériel de pompage
Phase 1: emergency activities

Aide médicale apportée dans un camp de réfugiés près de Kuchchaveli
Phase 2: reconstruction activities

- On view of the diagnosis report the French Ministry in charge decides to finance rehabilitation works in the Trincomalee area, and mandates Société des Eaux de Marseille and Société du Canal de Provence for their supervision.
- Depollution of around 30 wells allows for 3 villages to recover self-sufficiency.
- Network rehabilitation by the Water Board, with technical assistance from Waterhelp, lasts from January to August 2005; budget even allows for extension of the network, with an estimated 5,000 people switching from well water to better-quality network water.
Phase 2: reconstruction activities

Réparation, directement sur la plage, de la conduite sous-marine endommagée
Phase 2: reconstruction activities

Pompage et curage des puits dans la région de Kuchchaveli

Qualité de l'eau avant le curage et le pompage
Phase 2: off-project activities

- Water help technicians reports back in Marseilles the collapse of numerous schools in the Trincomalee area.

École de Nilaveli

Toiture de l’école arrachée
Phase 2: off-project activities

Ecole de Kuchchaveli
Phase 2: off-project activities

Cash collected among our company’s employees is used to rebuild 3 schools in time for the new school year, and buy stationery for 160 pupils.
Stakeholders involved

**Water Board:**
- The national Sri Lanka water company

**Société des Eaux de Marseille / Waterhelp**

**Société du Canal de Provence:**
- French company, operating a canal in southeastern France, and working as an engineering company internationally – and especially in Sri Lanka

**Agence de l’Eau Rhône-Méditerranée-Corse:**
- This basin agency has the status of a French Public entity.
Costs involved

**Groupe des Eaux de Marseille / Water Help:**
- Diagnosis, well depollution and network reconstruction supervision: 50 000 euros

**Employees of Groupe des Eaux de Marseille:**
- Rebuilding of 3 schools: 20 000 euros

**French Government through Agence de l’Eau Rhône Méditerranée:**
- Trincomalee network rehabilitation and extension: 144 000 euros
Conclusion

- This water network rehabilitation project relies on a partnership between 2 public bodies in a context of post-catastrophe solidarity. This public frame allows for coordination and organization - a general weakness in the tsunami-struck area.

- Technicity and professional experience in such a case are very much needed. The task force of a private water company has the capacity for targeted and adapted actions during humanitarian crisis. It benefits from experienced staff and professional equipment, and helps ensure that money is efficiently spent in the reconstruction phase.

- Administratively …. Flexibility is needed but accepted.
The road forward

Exchange of know-how between the Sri Lanka Water Board, and WaterHelp continue: contact is kept via phone and Internet, and in the near future technicians of the Water Board should come to Marseilles for targeted training sessions.

Thanks for your attention