pS-Eau Lebanon newsletter
February 2017

WHAT IS HAPPENING IN THE NETWORK?

EXCHANGE WORKSHOP STARTING 6 DECEMBER IN SIAAP, PARIS

Under its cooperation program with Lebanon, the Syndicat Interdepartemental pour l'Assainissement de l'Agglomeration Parisienne (SIAAP) and in collaboration with pS-Eau, organized a series of exchange workshops to assist Lebanese municipalities.

During that workshop, participants held joint brainstorming sessions on support methods provided to Lebanese municipalities to define their needs and develop solutions regarding waste water sanitation. Following that workshop, Lebanese representatives were invited to take part in technical visits, the first of which was organized with the Syndicat Intercommunal pour l'Amenagement Hydraulique de la Vallee de l'Yvette (SIAHVY). That visit allowed participants to share knowledge about the Syndicate's management and mission. The municipality of Champeaux also welcomed the Lebanese delegation's visit to its reed-based filters station.

For more information: workshop minutes.

STUDY SETTING UP A MUNICIPAL NON-COLLECTIVE SANITATION SERVICE IN ANTOURA

As part of the decentralized cooperation agreement linking the villages of Antoura, Noisy le Roi and Bailly, a first diagnostic and feasibility study on setting up a municipal non-collective sanitation service project will be carried out.

Until now, Antoura municipality has yet to establish a collective sanitation network. It also wishes to provide a municipal service to support and control the standalone facilities compliance.

For more information : click here

1- Support project for Lebanese municipalities' capacity building and dialogue with national authorities in the sanitation field, in partnership with the Ville de Nogent sur Marne, SIAAP and the Ministry of Foreign Affairs.

2 Cooperation project done with funding from the towns of Noisy Le Grand, Bailly, Agence de l'Eau Seine Normandie and the Yvellines department. Antoura municipality retained Hydroconseil-Madina group to conduct the study.

PUBLICATIONS

IMPROVING WATER PUBLIC SERVICE MANAGEMENT IN LEBANON

Between September 2014 and May 2016, the Italian NGO GVC conducted a study on improving cost recovery and demand management in the water sector. Based on a literature review and interviews with key sector stakeholders and users, the author defined the main issues the water sector faces:

- Intermittent and irregular service depending on regions
- Water quality below drinking standards
- Users' dissatisfaction
- Complex institutional framework and limited skills
- Lack of independence and financial resources of Regional Water Facilities
- Lack of data on real water production costs
- Inadequate tariff policy
- Low cost recovery and subscription

In order to improve water service quality, the study set two main objectives:

- Promote demand management
- Ensure system sustainability through better cost recovery

The study suggested several courses of action to meet those objectives:

- Install meters and volumetric tariffs (chosen by 91% of interviewed users)
- Improve client service
- Intensify communication with Regional Water Facilities
- Foster Regional Water Facilities and relevant ministries' coordination
- Continuous awareness campaigns about service payment, water quality and saving
- Promote users' involvement in participatory actions
- Involve municipalities to facilitate relations among users and Regional Water Facilities

Consequently, surveys were carried out with 1000 households in five municipalities in North Lebanon and the Beqaa. The surveys gave important data on household's water spending, willingness to pay, and their vision of the sector. These surveys are also a participatory approach that allow users' involvement in service management.

Contact: Michele Pierpaoli, washcoord.lebanon@gvc-italia.org

More information : explore the study

3 This study falls under the European Union project to improve water services access and sanitation in host communities impacted by the Syrian crisis in the North and the Beqaa Valley.

FOCUS ON NEW PROJECTS

LIMIT WATER LOSSES IN IRRIGATION NETWORKS

Located in the north of the Beqaa valley, Qaa is a low rainfall village (300mm of water/year).

This 5,000-resident village is located on the Syrian border and hosts 25,000 refugees.

The agriculture sector represents 80% of Qaa's economy. Also, the great number of qualified Syrian farmers could positively impact the local economy. However, expansion of cultivated land is restricted due to limited irrigation credits.

Historically, Qaa owns water rights over Laboueh's source. In 1995, these water rights had been reduced from 500 liters per second to 260 liters per second subsequent to a political agreement. In 2012, about 30% of this water had reached the village (84 liters per second). This differential results from deteriorated water canals and ineffective resource management. This infrastructure state of neglect allows illicit water pumping, overflowing and leakage.

In order to secure and develop agricultural activities, and thanks to the European Union financing, the Lebanese Institute for Social and Economic Development (ILDES) rebuilt 9.5 km of the main irrigation canal. The clay canal was replaced with a cement canal in order to limit losses. Constructions were accompanied with awareness activities on the sustainable use of water resources.

The increase in flows allowed farmers to move from one to two water towers. Large losses were also recorded in secondary networks which led ILDES to launch a second phase of the project, in order to rebuild the secondary networks and set up drip water irrigation systems to improve irrigation performance.

Contact: Samir Medawar, President of ILDES, ildes@sodetel.net.lb

More information : click here

A MUNICIPAL INITIATIVE IN PARTNERSHIP WITH THE MUNICIPALITY OF CHOLET

As part of their cooperation program, Cholet and Araya municipalities jointly developed a wastewater treatment plant.

In line with the Sanitation Masterplan, the municipality of Araya wastewater should be treated by the municipality of Bourj Hammoud plant. As a result of significant delays, Araya municipality decided to address wastewater treatment locally.

This plant, inaugurated on 17 December 2015, allows the city of Araya to meet users' demands and concerns.

However, Araya municipality faces new challenges resulting from the need to ensure plant sustainability, such as power supply, skills development and fecal sludge management.

However, investments granted to Araya municipality encourage it to ensure optimal plant operation.

Contact: Pierre Bejjani, Mayor of Araya, pierrebejjani@hotmail.com

More informations: click here

COORDINATION INITIATIVES

LAUNCHING OF A COORDINATION PLATFORM IN NORTH BEQAA

On 30 November 2016, the Lebanese NGO LOST (Lebanese Organization of Studies and Training) held a conference titled "Constructing a Common vision and Strategy in Response to the Water Issues in Baalbeck-Hermel".

The conference gathered municipalities, state institutions and international actors; as it aimed to develop a common understanding of major stakes in the water and sanitation sector as well as to discuss potential solutions.

During that conference, the Liaison and Development Office in LOST officially launched a platform to link donors and municipalities. The platform, funded by the Swiss embassy, allows municipalities in Baalbeck and Hermel to determine their needs and projects. Information will be made available to donors interested in investing in the region.

More information : http://www.ldo-lost.org/

WASTEWATER TREATMENT AWARENESS

Owned by Jesuit Fathers since 1863, Taanayel domain is managed by Arcenciel Association since 2009. The association plants and develops agricultural lands by implementing pilot projects in irrigation, agriculture, recycling and most recently in sanitation. In 2015, Taanayel domain welcomed 117,000 visitors thanks to its ecotourism activities.

In 2016, Arcenciel association implemented a wastewater treatment system aimed at treating the domain wastewater. Funded by the European Union, this project allows the treatment of wastewater resulting from different livestock farming, recycling and tourism activities.

This plant has a capacity of 20m^3 day and follows the activated sludge process. Water is treated over three successive phases:

- Primary sedimentation: heavy materials are deposited in the bottom of the tank using the force of gravity while lighter materials float on the surface (Tank 1-2). The third tank neutralizes waters prior to starting the second treatment phase.
- Aerobic digestion: organic substances are digested by microbes which growth is ensured by oxygen supply
- Secondary clarification: the remaining sludge is separated from treated water and sent to the primary sedimentation tank, while treated water is returned to nature.

Located at the heart of this domain, the plant has educational purposes given that it raises public awareness on sanitation issues and techniques.

Contact : Samir Hatem, water management project coordinator samir.hatem@arcenciel.org

More information : click here

DOCUMENTARY ON WATER AND WASTE- WATER POLICIES IN LEBANON

During summer 2015, Lebanon had witnessed several protests denouncing waste mismanagement. Faced by the accumulation of waste in Beirut and its suburbs, the Lebanese people were mobilized to force the government to face its responsibilities. This movement shed light on the environmental issues underestimated until now.

Those same issues are raised in the water and waste-water policies in Lebanon. Water resources degradation and the waste crisis impact are the focal point of this documentary. If this water resource degradation is a process that started during the civil war (1975-1990), we realize that it has recently accelerated.

By giving around twenty citizens, decision makers and technical experts the chance to express their opinion, the documentary discusses this problem from political, economic and social perspectives. This educational awareness tool highlights water policies deficiencies by using concrete examples.

Contacts :

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