



Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

Improving living conditions of families living in slums of Bangladesh, through the connection of houses to water network, sanitation trainings and services, waste management and fire-fighting

Region	Asia and the Pacific
Award Scheme	Dubai International Award
Start Year	2017
Sustainable Development Goals	Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

Summary

Urbanisation is one of the most important demographic trends of those last years. It is estimated that by 2050, the percentage of urban population will reach nearly 70% (BIRCH et al. 2012). With a population estimated at 15 million people, Dhaka, the capital of Bangladesh, is the 9th biggest city of the world.

Background and Objective

The slum was characterized by: -No safe drink water at home -Use of hanging latrines, suspended over ponds poor =urban water sources are likely to be contaminated with raw sewage -No solid waste management = environmental pollution and health risks -Exclusion from urban plans of Dhaka City - Social tensions

Actions and Implementation

? During the project process, several problems were faced and overcome: • Relationships with institutional actors were sometimes complicated. Eau et Vie had to demonstrate the interest of its approach to DWASA, the local water operator. An agreement has been signed in 2012 with DWASA to implement a legal water network in Bhashantek slum and to operate it and maintain it, but the efforts have to be constantly maintained to ensure good relationships with local authorities. • Operational problems were also encountered: for example, the solid waste management service was being paid by some of the dwellers but used by their neighbours. The service will then become mandatory for the entire slum in 2017. The experience of Eau et Vie in Bhashantek has permitted to develop an expertise of the field useful to anticipate operational issues. ? The project was successful thanks to the community participation: • A Memorandum of Understanding has been signed with the community. It makes sure that the local representatives are part of the decision making process, and that the project activities are based on needs assessment. Eau et Vie has always been working closely with the community, with a first MoU signed in 2012 in Bhashantek. Now that the water network will be expanded to the second part of Bhashantek, a new MoU has been signed in May 2017. ? All along the project, a close follow-up has been implemented: • For each of its project, Eau et Vie has established a supervision system, linking the French Head Office to the teams of the local projects. Different tools enable this communication: - Monthly dashboards and narrative reports: results of the project are detailed and the issues encountered are described. This monthly system allows quickly identifying and solving the difficulties faced. - Annual activities and financial reports to monitor the achievements of the project. The annual system enables Eau et Vie to have a global and precise vision of the projects. -Bi-annual meetings with project partners to exchange about realisations / problems encountered. - A GIS database is completed each month by SJP team and shared with the Head Office.

Outcomes and Impacts

Financial sustainability: The business model of SJP is supported by a Business Plan combining the 3 services (water, waste and sanitation). It was built on the previous market knowledge gained in Bhashantek since the water service implementation. The psychological price barriers have been assessed, and the SJP clients are paying successfully on a weekly basis the service fees for 4 years already. This business plan of a duration of 10 years aims at the viability. Institutional sustainability The water service is embedded in the DWASA strategy, aiming to provide water for the LICs by the end of 2018. The



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waste and sanitation services are managed in close partnership with the municipality, DNCC. The DNCC built a waste transfer station at the entrance of Bhashantek to make sure that the waste is properly disposed of. Environmental sustainability The water provided by DWASA to SJP is coming from the newly built Water Treatment Plant, using an innovative treatment to improve the quality of the water provided. The waste management service of SJP is contributing directly to the decrease of environment contamination. The environment protection has also been a deep concern in the design of the latrines project. The technical solution selected for the first pilot latrines block is called Biofil and enables solid waste to be decomposed into compost thanks to Red Indian worms. Social sustainability The approach of Eau et Vie is gender sensitive giving a prominent position to women empowerment. It contributes to the integration of women in the economic process of the model. They are also involved in the hygiene awareness, being key actors in the latrines project. Menstruation awareness sessions will also be organized in the future of the project. The program is also addressing the specific needs of disabled people, especially regarding the access to hygienic sanitation.

Gender and Social Inclusivity

Eau et Vie has developed an expertise in water network from a previous project in the Philippines, This expertise has been used for the Bhashantek project. Moreover, the Biofil technology used for the latrines is originally from Ghana and has been chosen among other sanitation technologies implemented in different projects The program of Eau et Vie in Bangladesh can be up-scaled to reach more urban slums' dwellers in Bangladesh but also in other countries as it has already proved the duplicability of its approach. Several tools have been developed during the project and can be easily transferable, such as the using of QGIS or the implementation of the collection software (which is being tested). A GIS manual has been developed, and can now be used in Eau et Vie's different projects. This manual as well as the software could be used by other NGOs or organization to implement similar projects.

Innovative Initiative

Technical lessons: Eau et Vie has developed an expertise in the implementation of water network and sanitation system. Building techniques, environmental issue, choice of the material suppliers and of specific technique (such as the Biofil toilets) are now mastered by Eau et Vie's teams. It will be useful for the second phase of the project, in the second part of the slum, but also for the implementation of the project in Chittagong, another city of Bangladesh. Moreover, the sanitation expertise will be used in Eau et Vie's projects in Ivory Coast and the Philippines.

Resources devoted to delivery

No. Title Source Author Publication Title Volume Number Date Page Number 1 he transformation of a latrine block in a Bangladeshi slum
<https://www.engineeringforchange.org/12085-2/> Claire Benveniste <https://www.engineeringforchange.org/12085-2/> None july, 20 2017 none

Conclusion

Eau et Vie's project is integrated in the whole strategy of the Government of Bangladesh which has submitted to the United Nations (UN) its post-2015 development agenda (2016-30) the goal of "Safe and sustainable sanitation, hygiene and drinking water used by all". Therefore A specific strategy was developed « The National Strategy for Water Supply and Sanitation ». The Objective of the National Strategy is to provide a uniform strategic guideline to the sector stakeholders, including the government institutions, private sector and NGOs, for achieving the sector goal. The National Policy for Water Supply and Sanitation dictates DWASA (Dhaka Water Supply and Sewerage Authority) to provide adequate service to the dwellers of Dhaka city including the slum dwellers. But this operator is not able to provide legal water access to Low Income Communities. So it assigns NGOs as implementing partners to ensure the water supply in The LICs. The project of Eau et Vie has signed an agreement in 2012 with DWASA to implement a legal water network in Bhashantek slum and to operate it and maintain it. Other NGOs are working on the same kind of programs but with a Community Based Organization approach. The approach of Eau is an innovative alternative to this predominant approach, as it is based on a social business, with the support of the community which is not in position of management, and a common billing for the different services (water, waste, sanitation) with the water as main lever for the collective discipline. Moreover this is implemented in the long term to ensure the sustainability of the water supply.