ESSEC BUSINESS SCHOOL


# The Grameen Veolia Water Social Business

CSR-Bop division's research program

In 2007, faced with the problem of arsenic-contaminated well water in the major part of Bangladeshi territory, Muhammad Yunus[1], winner of the 2006 Nobel Peace Prize, and Veolia Water decided to create a social business project to provide safe water to rural areas. To support this Social Business/Base of the Pyramid[2] (BoP) pilot project which is aimed at providing solutions for vulnerable communities, Veolia called upon the ESSEC-IIES (Institute for Social Innovation and Social Entrepreneurship) to develop a robust methodological approach through 3 year action-research initiative.

ESSEC IIES (Institute for Social Innovation and Social Entrepreneurship), which was created in 2010 in the wake of the Essec's Chair of Social Entrepreneurship, divides its activities into four main areas: Equal opportunities in education, Social Entrepreneurship, Philanthropy and CSR-BoP. The originality of its approach lies in combining traditional academic activities (such as such as undergraduate, graduate, executive education) and research) with experiments carried out in a social innovation laboratory. The findings from this fieldwork then serve to enrich the education and research activities.

## The French BoP Learning Lab™ and CSR-Bop division's research activities

This action research (AR) with Veolia Water is a part of the work carried out by the CSR-BoP division, and more specifically the France BoP Learning Lab™. The mission of this expertise-based experimental laboratory is to develop knowledge concerning Base of the Pyramid (BoP) / Social Business (SB) corporate strategies, offers and markets in order to fight against situations of vulnerability. Action research is research carried out "with" and not "on" a company or field initiative, which implies a specific form of governance for the project. The role of the IIES is to provide methodological support, management tools based on practical knowledge (such as assessment) and to help the project develop in real time, whilst constructing and exploring research questions based on theoretical frameworks. This approach is particularly appropriate to the issues of social innovation, BoP/SB markets, CSR and sustainable development which are emerging and co-evolving theorethical and practical fields.

Our research program
**"BoP theories and practices as a field of experimentation for the corporate contribution to the transition towards sustainability"**, includes:

a - Analysing situations in which organisations invest in BoP/SB markets and combine "standard" corporate activities and process with participation in collective issues that include a societal and ecological dimension.

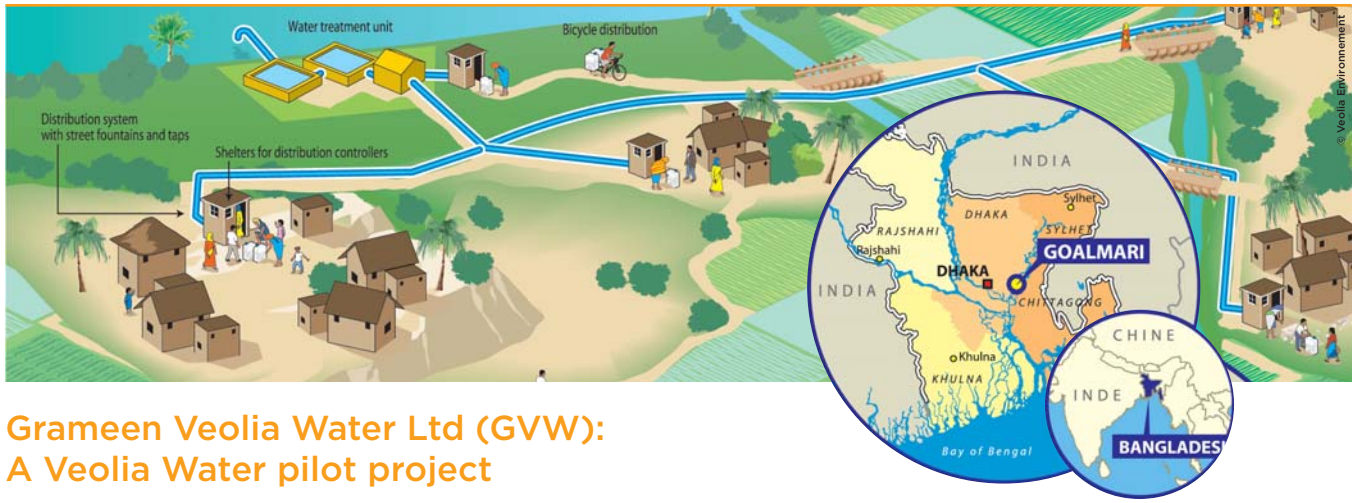
b - Creating models for the strategies and principles of action aimed at developing new BoP offers and organisations by involving the "stakeholders".

c - Studying the social transformation phenomena that accompany the technical and business innovations contributing to the operationalisation of sustainable development.

VEOLIA EAU

[1] Muhammad Yunus, *A World Without Poverty*, Public Affairs, 2008

[2] The Base of the Pyramid is made up of the 4 billion human beings living on less than $2 a day, in terms of purchasing power parity" Prahalad, C.K. 2004. The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits. Wharton School Publishing




## Grameen Veolia Water Ltd (GVW): A Veolia Water pilot project

The idea for this project was born in 2007 when Professor Yunus, who founded the Grameen Bank in Bangladesh and developed the concept of microcredit, met Antoine Frérot (Managing Director of Veolia Water in 2007 and CEO of Veolia Environnement since 2010). Together, in response to the Millennium Development Goals defined by the UN in 2000[3], they decided to create a Joint Venture in 2008: Grameen Veolia Water (GVW).

This joint venture was launched as a 50-50 partnership between Veolia Water and Grameen Health Care Service Ltd, following the "no loss, no dividend" and social aimed principle which characterises Social Business according to Professor Yunus.


With a starting capital of €500K, its mission is to provide a new source of safe water as an alternative to the water drawn from the local wells, the large majority of which are contaminated with arsenic (due to natural pollution of the aquifers by incoming water from the Himalayas). To achieve its goal of supplying 100,000 inhabitants, GVW drew up a 5-phase development plan.

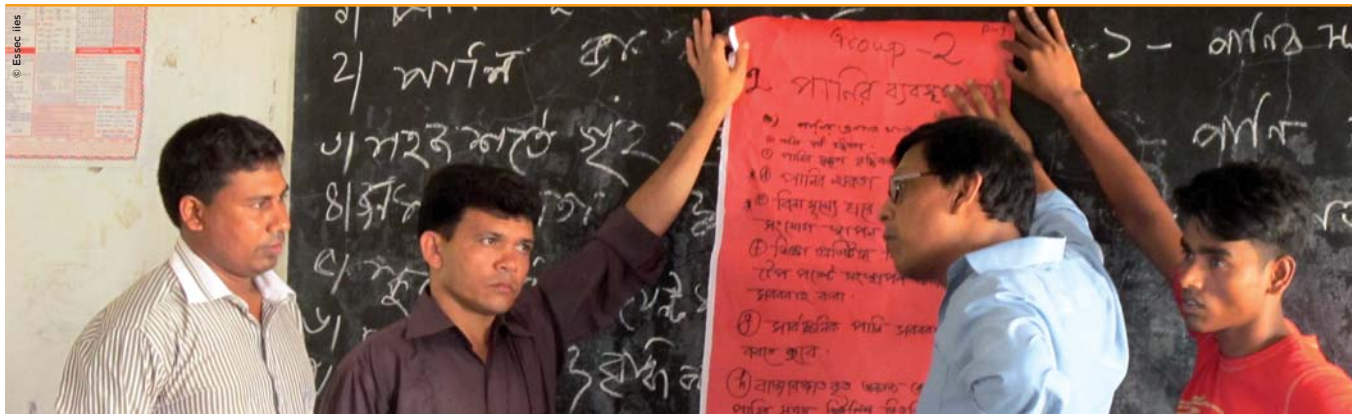
The first phase began in 2008 in the village of Goalmari, with the construction of a plant for treating surface water from the Meghna River, located 50 km south of the capital, Dhaka, in a rural area where 83% of the wells have been identified by the government as arsenic-contaminated. A health study on exposure levels was carried out with a local partner, ICDDR,B[4] and overseen by VERI, the Research & Innovation division of the Veolia Environnement Group.
The first water network (Goalmari) was designed by engineers according to the technical criteria imposed by local geographical constraints and was installed in the village. The water is distributed via tap points by "water dealers", paid on a franchise basis and who operate the tap, filling the jars brought by the village women. Some tap points also supply water to local small-scale entrepreneurs or "wholesalers", who then sell the water on the market.

The business model is based on a price of 2.5 takas (2,2 € cents) paid at the tappoint for 10L of safe water, i.e. the price of a glass of water or tea sold on the market stalls.


The initial sales figures for the village of Goalmari (the immediate area surrounding the plant, comprising 36 "Clusters[5]" supplied by 12 tap points) were disappointing, with only 10% of the targeted population consuming GVW water.

These results led the ESSEC-IIES/Veolia research team to question the "top-down" procedures originally adopted and to seek the opinions of the various stakeholders before implementing the second phase of the project and building a second network (Padua Union). The initial results from this second phase were more encouraging, with 42% of target households purchasing GVW water.

[3] By 2015, the 1 billion inhabitants without access to safe drinking water should be reduced by half," as stated in the MDG.
[4] International Centre for Diarrhoeal Disease Research, Bangladesh, international health research institution located in Dhaka.
[5] Cluster: group of houses.




## Objective of the action research project (AR)

The objective of the AR is to contribute to the successful outcome of Veolia's operational project. **It suggests models** (formalised action processes) based on various methods to support Veolia Water in the management and development of the GVW pilot project.

The AR aims to:

- work on innovative processes and business models (with regard to organisation, product/service offers, institutional structures etc.);
- maximise the societal impact of the project by establishing a multi-criteria system of evaluation, working on all the issues and indicators from an economic, social, environmental and health perspective;
- and prepare for replication by identifying the leverage factors for market co-creation and the resources required.

## Multiple methods

The AR is based on a multidisciplinary, multi-stakeholder approach, making use of a number of tools and conceptual frameworks to build a process of innovation for sustainability:

- **Anthropological** (through the Drishti Research Center mission led by the anthropologist Thérèse Blanchet), **sanitary and environmental health based approaches and expertise,** in order to gain a detailed understanding of the issues and the context of the project.
- The **Integraal** method, developed by the REEDS laboratory at the University of Versailles Saint–Quentin-en-Yvelines, based on a multiactors multicriteria deliberative approach and a balance between sensitivity to individual situations (bottom-up) and the benefits of "generic" indicators (top-down) aiming at building a relevant assessment scheme adapted to specific context.
- The **models for Social and Ecological Systems** (SESs) inspired by the work of 2009 Nobel Prize in Economics Elinor Ostrom, as well as the concept of resilience, to describe all the sub-systems (social, economic, anthropological, natural and political) at work in the Grameen Veolia Water "system".
- The **Actor-network** theory which explains the social construction of innovation and processes of sociotechnical transformation enabling to take into account local complex ecosystems and socio-economic changes
- The **BoP 2.0 Protocol*** co-written by Pr Stuart Hart and Erik Simanis of Cornell University, as an analytical frame of reference for the innovation and market co-creation issues encountered by businesses wishing to become involved in a BoP process and as a global guide for the innovation process.
- The **HDCA (Human development and capability approach)** coming from Amartya Sen works, dealing with many disciplines on problems related to poverty, vulnerability to be linked with a broad range of topics including the quality of life, gender, development, impoverishment, justice, and well-being.

## Methods of action

**On a strategic level,** ESSEC-IIES's objective is to:

- help Veolia Water deal with all the issues raised by the GVW project,
- highlight the project's external and internal constraints,
- work on the innovation process and provide strategies for overcoming these constraints.

The IIES develops the action-research project within the BoP Learning Lab™ and more broadly through publications, conferences and the development of teaching aids.

**On an operational level,** the action-research team:

- works as a support system for GVW's operational activities,
- formalises the results achieved by following-up and documenting all actions and their effects,
- complements the training received by the local teams with contributions from academic literature,
- initiates and helps structure the complementary anthropological and epidemiological work contributing to the advancement of the project.

## Initial findings

(drawn from an analysis of the positive and negative effects of the GVW pilot project)

**1 - Limitations of top-down procedures:** the initial procedures designed and elaborated by experts (top-down) did not involve the population of Goalmari in


the project in a participative exploratory phase. Grameen Bank identified an area corresponding to Veolia Water's technical constraints, with a high population of women who had subscribed to a Grameen micro credit. Veolia Water provided the technical know-how and built a plant to filter the surface water from the local river and a distribution network in its tradition as a model of public private partnership.
Combining Veolia Water's technical expertise with Grameen's socio-economic expertise was vital to the launch of the project, but not enough to convince the population consume GVW's water. Grameen Veolia Water has now turned to a strategy based on market co-construction (bottom-up) as opposed to entering into an existing market.

**2 – Water, associated with safety and health related traceability, is an "expert" commodity requiring social construction:**
The first marketing initiatives, in the form of a visit by Professor Yunus, strongly encouraging the local population to drink GVW water, posters, a song, meetings with opinion leaders, as well as the publication of the results of the health study, did not succeed in persuading the local population to buy GVW's water. GVW is now adopting procedures to raise awareness about the problems associated with arsenic and to create stronger social embeddedness (local governance for water purchaise points , cooperation on new services).

**3 – Behavioural changes aimed at co-creating a market will bring "social capital" factors into play** (social connections, trust, rules of conduct, conflict management authorities) as well as **leadership structures** and their agents.

Identification of the local "social capital" and leadership structures will be based on an anthropological study entrusted to the Dhristi Research Centre, whose scope and framework were defined by the ESSEC-IIES with GVW. The results of this study will allow us to identify the leverage tools for future initiatives.

**4 – But water is also a common good:** the absence of community infrastructures when GVW arrived in the village hampered the development of a collective form of local governance. After a long period without local mandates, the next municipal elections present an opportunity to create a collective notion of service to emerge.

**5 – Management issue: the business model must be anchored in a process of Research and Development** – the business model at the Base of the Pyramid requires **specifically adapted resources** and the commitment and vigilance of the management at the highest level.

- the business model requires great **flexibility** to adapt to the local situation and to fit into a broader umbrella business concept, within an R&D process approach.

- finally, the project must adopt a logic of "patient capital" in order to support the pilot project throughout its various phases, without the pressure of short term profitability.

## A key innovation process

In the light of these findings, it is therefore necessary to commit even more strongly to a process of innovation, relayed amongst other things by participative strategies adapted to the local context, open innovation and design methods. The aim of these strategies is to work on such innovative business models, with reference to the operational guidelines provided by the BoP 2.0 Protocol among others.

In conclusion, the confrontational issues these approaches raise mean we must go beyond the methods of functioning and on site action procedures traditionally adopted by businesses.

**BoP 2.0 Protocol Guidelines[6]**

- suspend disbelief and seek out the voices seldom heard
- accept the idea that all parties have something to contribute and respect divergent views
- co-develop solutions in the interests of mutual learning
- create mutual value with the community
- be patient – it takes time to grow the ecosystem and win the community's trust.

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[6]2.0 BoP Protocol is available both in English and French on the IIES website