

Name: Gemma MANIRARUTA

**Current Appointment**: Water supply development project implementation officer

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## Area of Research/Teaching Water supply and sanitation

#### **Biography**

Eng. Gemma Maniraruta is a master graduate (April 2015) from UNESCO-IHE Institute for water education, Delft, in the Netherlands in the department of "urban water and sanitation with a specialization in Sanitary Engineering".

During my stay in the Netherlands, I have been dealing with the courses related to urban water and sanitation such as Integrated water resources management, Engineering hydrology, Water and Wastewater treatment plant design, management, maintenance and modelling, wastewater/water network design, urban drainage and sewerage systems design (rainwater harvesting and storage), waste stabilization ponds for treatment of wastewater and protection of water bodies. In addition to this, my MSc thesis focused on simultaneous removal of carbon and nitrogen under anaerobic conditions for a period of 6 months.

I was also involved in water engineering and management during my final year memoir at the University of Rwanda which had a topic of "water balance of Migina catchment". This work involved field experiment where I dealt with hydrological data collection and analysis, such as river discharge measurements, evapo-transpiration and rain gauge setup monitoring and performance evaluation.

In my civil engineering career, I was involved mainly in consultancy, monitoring and evaluation as well as construction works and reporting for a period of two years. The stated projects include civil engineering works, hydraulic structures, water and wastewater engineering such as water supply, pipe network supervision etc. My work also covered accounting and finance where I was meant to control and decide about the budget to be used for either office purpose, payment schedules and taxes. During this time, I got leadership and communication skills necessary for directing and a coordinating of projects. In addition, I was in charge of weekly, monthly, quarterly and annually reports to the managing director and other third parties

Recently (from September 2015 to February 2016), I was employed by JICA (Japanese International Cooperation Agency) in Rwanda where we evaluated water supply status in Rwanda, in the four districts (Rwamagana, Kayonza, Ngoma and Kirehe) of the eastern province of Rwanda, in the project of the "strengthening of operation and maintenance for rural water supply systems" hosted by the Rwandan "water and sanitation corporation" agency. During this survey, we evaluated the status of water supply facilities (piped water, improved springs and boreholes) by taking into account the number of people accessing the water facility, distance covered to water facilities, availability of water, quality and installed strategy to take care of the facilities.

Nowadays, I am working in the Rwanda "water and sanitation corporation", in the department of "water supply and sanitation development" as an officer in charge of "water supply development project implementation". With this position, the following are basically my area of expertise:

- Participation in development of water supply project proposal
- Develop terms of references for studies and prepare tender documents related to water supply projects
- Monitor the implementation of water supply projects from beginning to end from the feasibility stage, to design through the construction and handover, and make regular progress report
- Analyze and approve the technical reports, design for water supply projects
- Ensure proper contract management emphasizing on timeline and quality standards
- Participate in the preparation of project procurement plans, action plans and budgets for the program
- Liaising with various bodies and individuals, including local authorities, government agencies, investors, contractors, residents, suppliers, technical experts and other partners,
- Support other project managers and directors within the corporate
- Managing staff, including other engineers, technicians and site workers
- Prepare and timely submit, monthly, quarter and annual project progress reports plus other reports as required
- Take a prominent role in the M&E of the project

### Eng. Gemma Maniraruta, MSc

#### **➤** Research Interests & Accomplishments:

- "Water balance of Migina catchment", BSc research work
- "Simultaneous methanogenesis and anammox in a UASB system: continuous and batch reactors", MSc Thesis

#### **≻**Educational Background

- ■MSc in Urban water and sanitation (UNESCO-IHE, Delft, The Netherlands
- ■BSc in Civil engineering (University of Rwanda, Huye Campus)

### **≻**Current Appointment :

Water supply development project implementation officer (WASAC)

#### **Educational Interests:**

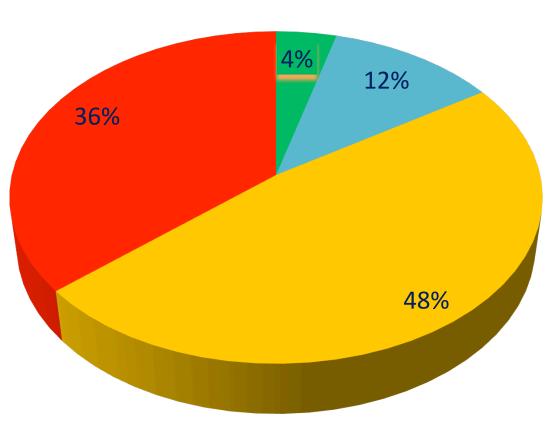
Water supply and sanitation

➤ Other Information about
me:

Llove children and flowers



# Number of households per 1 water point



Source: WASAC & JICA, Survey on existing boreholes with hand pumps in the 4 pilot districts: Rwamagana, Kayonza, Ngoma & Kirehe, Eastern province of Rwanda; 2015

Less or equal to 50

Between 51 and 100

Between 101 and 300

**■** Above 301

