

5<sup>th</sup> International Conference on **Pollution Control and Sustainable Environment**

&amp;

10<sup>th</sup> Edition of International Conference on **Water: Pollution, Treatment & Research**

March 14-16, 2019 London, UK

**Considering multi-level governance of groundwater – through the case study of nitrate-nitrogen pollution in Shimabara City, Japan**

Hironori Hamasaki and T Watanabe  
Nagasaki University, Japan

Shimabara City is located in the southeast part of Nagasaki Prefecture, which is in the Kyushu Island, western Japan. It is famous for clean, fine spring water and the local people there have the custom to use it for their daily life traditionally. Its groundwater comes from the mountains in the west side of the city, but recent years, it started being contaminated by nitrate-nitrogen because of the development of agriculture and livestock industries.

Nagasaki Prefectural Government took the initiative to tackle this issue and continued monitoring water quality at 17 points and 72 wells. They also established the consortium whose members are from the government sector, industrial sector, and university, and organized the plan to mitigate nitrate-nitrogen pollution. They have a regular meeting once a year, exchange the information of their activities, and discuss their future plan. However, the pollution level of nitrate-nitrogen in Shimabara has not been improved yet so far.

This study aims at clarifying what is the reason nitrate-nitrogen pollution has never been remedied despite some efforts by the Prefecture. As a methodology, the authors conducted semi-structured interview with some key informants, such as the official of Nagasaki Prefectural Government, Shimabara Municipal Government, and some staff of related industrial sectors. Through these interview survey, we tried to understand the state of the multi-level governance, in other words, the relationship of various stakeholders about this issue.

As a result of our interviews, we found Shimabara City Government has some difficulties in not having effective solutions. For example, they don't have any communication with other related sections in the government and also dialogue with industrial sectors or ordinary people about this issue, because they are not so serious and enthusiastic as the Prefecture.

**Recent Publications**

1. Hamasaki, H. (2016) "Seeking for the new irrigation governance by co-creation between stakeholders and scientists – through trials of stakeholder meetings and night irrigation in the GAP Region in Southeast Turkey" in *Dividing Water - Co-creating local futurability*, edited by Kubota, J., Bensei Publishing, pp. 205 – 224.
2. Nakagami, K. and H. Hamasaki (2014) "Mekong River Basin Development and Environmental Conservation in Vietnam" in *Overcoming ASEAN Divide and Mekong River Regional Development* edited by Nishiguchi, K., et al., Koyo-shobo, pp.196 – 214.
3. Hamasaki, H. (2015) "Climate change impacts on water resources and adaptation - from a perspective of Mekong Delta Region" *Journal of Water and Environmental Issues*, 28 (1): 67-73.
4. Hamasaki, H. and K. Nakagami (2012) "A New Paradigm of Water Management – Water Security, Governance and Integrated Management" *Journal of Environmental Conservation Engineering*, Society of Environmental Conservation Engineering, 41(10): 600 – 605.
5. Hamasaki, H. (2011) "A Study on Integrated Water Resources Management in the Mekong River Basin – A Case Study on Ratanakiri Province, Cambodia" *Journal of Policy Informatics*, Association for Policy Informatics, Vol.5, No.1, pp.19 – 36.

## JOINT EVENT

5<sup>th</sup> International Conference on **Pollution Control and Sustainable Environment**

&

10<sup>th</sup> Edition of International Conference on **Water: Pollution, Treatment & Research**

March 14-16, 2019 London, UK

---

### Biography

Hironori Hamasaki has completed his PhD (policy science) at the age of 32 from Ritsumeikan University. He is an associate professor of the Faculty of Environmental Science, Nagasaki University since 2014, with his research experience in the fields of water resources management & governance, water policy & institution for stakeholder coordination, integrated management of water quality and quantity. Recent years, focusing on the case studies on irrigation governance in Cambodia and Turkey, he conducts his research through transdisciplinary approach, that is, holding workshops, group interviews, and action research with stakeholders in order to find the solution for water problems, for example, how much fertilizer and pesticide is appropriate for enough yield, good water quality, and ecological environment.

[h-hamasaki@nagasaki-u.ac.jp](mailto:h-hamasaki@nagasaki-u.ac.jp)

### Notes: