

## COMPLETION REPORT

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Japan is famous with various effective technologies in environmental management in Asia and over the world. Especially, Japan has quite many models of waste recycle as a force for clean agricultural production, which makes highly socio, economic benefits to people. One of these successful models is waste treatment model in OKIMACHI Town. This research would analyze this model and assess applicability for Danang city of Vietnam through comparative research method.

In order to complete this study, the author implemented various research activities, including (in research proposal): (1) collect all necessary research data about Okimachi town waste treatment model and Danang current status of waste treatment via conduct online interview with relevant Japanese partners and face to face interview and discuss with relevant Danang experts; (2) conduct field trips to have deep understanding about Danang waste treatment status; (3) analyse Okimachi waste treatment model and Danang waste treatment status based on collected data; (4) use comparative research method to make a comparison between Okimachi waste treatment model with current status of Danang waste treatment system; (5) analyse applicability of Okimachi waste treatment model in Danang city. (6) analyse to point out some lesson learnt from Okimachi waste treatment model for Danang city and make recommendation to Danang policy makers.

Through above research activities, the author finds out some research results as: (1) Okimachi Town has sufficient socio-economic conditions, waste status and awareness of city government and people to gradually seek for the advanced waste treatment model, (2) Okimachi Town has studied on Aautothermal Thermophilic Aerobic Treatment (ATAT) model to recycle organic waste into liquid fertilizer in period of 2002 – 2005, and develop and apply the pilot model not only at this town but also at global scale, (3) Okimachi Town has developed the procedure of effectively applying this model, which identifies relevant stakeholders, develops operation mechanism, scales up the model, develop the mechanism to attract participants, calculates the model's effectiveness, (4) One of the core research findings of this project is that the application possibility of Okimachi model in Da Nang city is high in terms of technology, support of local government, sorting out waste and post – sorting out waste collection, input source, and demand of liquid fertilizer, similar attraction mechanism of relevant stakeholders.

Through the research, the author indicates some lessons learnt from Okimachi model to Da Nang city government if applying this model, including: determination and comprehensive policy from local government; correct identification of participants in the model; to develop comprehensive cooperation mechanism; effective communication campaign; to develop the network of domestic, foreign experts, scientists to research, apply proper technology into local circumstances.

With those lessons, the author has recommended that Danang city government, particularly, and any locality in the world, generally, should learn this best practice of Okimachi town to successfully build up effective waste treatment system for their own. However, in the author's opinion, this learning should carefully take into account existing conditions in each locality. Also, the author strongly emphasizes the most important factor of successful Okimachi model, that is: willing and determination of the government and coordination between experts, scientists, business, residents and state authorities.

Publication of the Results of Research Project:

Nguyen Phu Thai (2018). Okimachi waste treatment model **and** Application possibility of this model in Da Nang city, Scenario workshop on Infrastructure planning for waste/water/energy and urban agriculture in Danang city, December, 2018

1. Nguyen Phu Thai (2018). waste management in Da Nang City, Vietnam Status and solution, Review of Danang Socio – Economic Development, October 2018
2. Nguyen Phu Thai (2018). Okimachi waste treatment model **and** Application possibility of this model in Da Nang city, Review of Danang Socio – Economic Development, November, 2018

Book (Publisher and Date of the Book, Title and Author of the Book, etc.)