Analysis on the Development Condition of Eco-town Project for Recycling-based Society Construction

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1. BACKGROUND AND PURPOSE

The purpose of this study is considering the development condition of eco-town project for recycling-based society construction. In 1994, Zero Emissions Research Initiative was proposed by United Nations University as a response to the need to convert from a waste producing society to a recycling-based society. Zero Emissions means aiming at zero waste by utilizing all waste exhausted from a certain industry as material for other industries. To promote this concept, the eco-town project was founded by the Ministry of Environment (MOE) and Ministry of Economy, Trade and Industry in 1977. This project provides financial support for eco-town plans such as recycle facilities and educational awareness implemented by the local government. Eco-town concept has attracted attention in Asia with 26 areas already developed as eco-town. Some extent of environmental conservation effect of eco-towns has been recognized based on an evaluation by MOE in2008. On the other hand, it became clear that there is a need to improve the project because differences in area and performance factors also emerged. This study examines the development condition of the eco-town project looking at some factors for success and failure.

2. METHOD

First, good and not-good practice areas of eco-town project were selected. Second, factors to analyze success and failure of these project areas were determined and then used in the analysis. Three case areas were selected for each of the categories and five performance factors were used: ① recycling rate, ② the amount of saving resources, ③ the amount of final disposal reduction, ④ operating ratio and ⑤ the amount of CO_2 emissions reduction. The items for analysis included mainly support from the government, (1) existence of the administration support for procurement of waste and supply of a recycled-waste article and recycling technology, (2) existence of coordination meeting between industries by administration, (3) existence of direct support by the administration regarding procurement of waste and supply of a recycled-waste article and (4) proximity to the source of procurement of waste and supply of a recycled-waste article. In addition, a questionnaire survey was carried out for local governments who did not have sufficient data for analyzing factors.

3. RESULT AND DISCUSSION

The result of analysis using success and failure factors of these case areas is that analysis items (3) and (4) have a possibility of determining the condition of the eco-town project. Also the theoretical hypothesis of Togawa (2000) was confirmed. And the effrctivity of the condition regarding supply was confirmed. The findings of the study suggest that support from local government is important. Specifically, (ⅰ) direct support for procurement and supply and (ⅱ) consideration of a more efficient area for circulation of waste for project decision making were generated as additional factors. For (ⅰ), the support of introducing the party of procurement and supply will be expected. For (ⅱ), in the case of deciding a new eco-town project, local government should construct eco-town located near downtown area that is advantageous to the procurement and supply. Also in the case of attracting new industry, decision making by local government should consider the proximity to the source of procurement and supply.

REFERENCE

Kenichi Togawa (2000),"Location of Venous Industry and Its Training Policy", *Economics Research*, pp-141-181