AN APPROACH TO MAKING NON-SMELL COMPOSTING SYSTEM : CASE STUDY IN FUCHU

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ABSTRACT

The project to form non-smell composting system in Fuchu are working now. This project started in May, 2009. We are involved in this project as an advisor. The members of the project are Fuchu city government, the agriculture cooperative in the region and our laboratory of Tokyo university of agriculture and technology. The purpose of the project is to compost the school-lunch garbage and utilize the compost in Fuchu. The machine to compost school-lunch garbage was introduced in May, 2009. The machine has the ability to keep the smell of composting process down. The project is a very challenging try. All over the world the recycle system is becoming very important and in Japan too. So we had the hearing search to reveal the important factor of reaching a consensus in the project. We had the hearing search from October to December in 2010. We intended the project concerned persons. For example, a farmer in Fuchu, the school-lunch center president, the Fuchu government office staff, the principal in the primary school and so on. We study the process of forming the team in the project and the team working on the problem that appeared when the project started. We got the important factors of achieving the consensus on these cases. The factors were a central person and instrumentals..

Key Words: Lunch garbage, recycle system, composting, system approach

INTRODUCTION

Currently in Fuchu City, there is a project that established recycle system of using school lunch garbage for material of compost. Fuchu City is located nearly central of Tokyo and Fuchu City office have been active in reducing rubbish. Fuchu City office leads the project. We have took part in the project as advisor since the project started. So we have observed how the project advanced and overcome problems. And we worked on problems with Fuchu office members to solve the problems.

The purpose of this study was to find important factors for establishing this recycle systems and solving the problems. The information is useful for those people who intend to start establishing recycle system. We observed how the project worked and interviewed the members who took part in the project.

RESEARCH METHOD

We interviewed the members of the project to know how the cooperation system was constructed and the problems were solved.

The targets : 4 Fuchu office staffs, 1 Fuchu farmers, 2 agriculture cooperative staffs, 1 principal of the primary school, 1 company staff(the company providing the machine),1 professor of Tokyo University of Agriculture and Technology.

RESULTS & DISCUSSION

Origin of the project

Originally, the farmer and the Fuchu office staff worked on the recycle system that food garbage is used for material of compost. But in the past, the odour of composting is the problem to maintain the recycle system. So the recycle system did not continue for a long time.

Then, the company staff informed of the farmer about the machine which was used in the recycle system at a kindergarten in Karuizawa. The machine is succeed in making compost without odour. The farmer and the Fuchu city staff went to Karuizawa to confirm the efficiency of the machine and they were sure that they used the machine for a recycle system without odour in Fuchu. Then they started thinking the plan of the project.

Process of solving the problem

When the project started we confronted a problem that we did not have workers who put garbage into the reactor of the machine every day. We did not have much money to employ the worker and the members of the project could not do so every day.

Then we discussed the problem and suggested that we asked the worker who provided school lunch for school children to put garbage into the reactor without reward. The workers and the company which employed the workers were interested in the recycle system and they accepted our demand. We saw that the way needed some implements and we talked about the implements with the workers. We discussed the subject and reached the conclusion that Fuchu city office would give the implements. Thus we made the way of putting garbage into the reactor. The way worked well.

Later we found that the way could not give sufficient garbage to the reactor. So we discussed the problem again and upgraded the implements. We were succeed in increasing the amount of putting garbage into the reactor.

CONCLUSIONS

We found that the farmer contributed for making cooperative systems and the precision thinking was important for solving problem. We, in fact, solved the problem so we understand how we can solve the problem.