

Rain Water Harvesting and

Subject of Sustainable Community Building for Disaster Mitigation

The Process of 'Rojison' Rain Water Harvesting System Building
And Subject of Sustainable Management for It

Takeyuki Yamada

*Key Words: Rain Water Harvesting, Community Building, Sustainable, Disaster Mitigation
Partnership*

1. The Background of Research

In recent years, there were some floods in urban area, examples: Fukuoka, Nagoya. Rain Water Harvesting is effective for flood. Because its system catches rain water and don't drain it. And if you keep rain water in tank, you can use it for toilet water, cooking, and drinking when you meet with disaster. At daily life you can use it for toilet water, watering a street and plants and car washing. Then you can save it of water service. It is also good for global environment.

Sumida City, Tokyo is an advanced area of rain water harvesting. People in Sumida made the 'Rojison' rain water harvesting system as the symbol of community building for disaster mitigation in Mukojima area, by partnership between city hall and living people Mukojima area. They produced the style of 'Rojison' by themselves. The city hall of Sumida also made the same system for Kyojima in which wooden houses stand closely together as much as Mukojima area. But in Kyojima, the redevelopment project was managed by government. 8 years have passed after project of community building program for disaster mitigation in Mukojima finished. The other side, the redevelopment project in Kyojima also go on now.

2. The Purpose of Research

8 years make change the way of thinking of people in Mukojima. So there are some problems of management for 'Rojison' in there. I have picked up some subjects for sustainable community building for disaster mitigation from them. Those subjects suggest some ideas for solution of those problems and also suggest some programs for spreading of rain water harvesting.

3. The Method of Research

At first I reviewed the history of introduction process for rain water harvesting in Sumida City, from begging, by books and hearing from city hall staffs and members of 'Hitokoto-kai' that is a membership of community building for disaster mitigation in Mukojima area. On second stage, I researched how people used the 'Rojison' on daily life and that how people keep its system, by hearing from those who live around of 'Rojison' in Mukojima area and Kyojima area. And I checked 'Rojisons'. I searched marks that people used them and cleaned them. And I found surprising fact that was 'effect of partnership for community building' was lost. Otherwise On the other hand, most of people in Kyojima use the 'Rojisons'. So I made hearing from members of 'Hitokoto-kai and Staffs of Machidzukuri Center in Kyojima area that is an affiliated association of Sumida City for maintenance of 'community houses' and 'Rojisons' in Kyojima area.

4. Conclusion

□Governance is necessary for sustainable community building for disaster mitigation. It needs the participation of different sectors, department of disaster prevention, department of community building in city hall, membership of community building and membership of fire protection, so on. □The support by NPO is also necessary for governance. □Events and learning program is also necessary for new comers and children in each area.