

Flood-control measures by Kobe city and its enlightenment activities

W201908 – 2 : Kobe Municipal High School of Science and Technology
Akane Mrita ,Shunki Sanda, Kandai Yabuuchi, Tenma Kiniwa, Nobuyoshi Nezu

1. Introduction

Our city Kobe has various kinds of disaster prevention measures, but still has some risks because it is located between the sea and mountains.

So we started a campaign to give its citizens enough knowledge about the risks of disaster and disaster prevention measures.

In this research, we have two purposes.

One is to make the citizens more aware of and interested in the prevention and reduction of disasters.

The other is to take actions to make the city more resistant to disasters.

On the left model, no flood control is carried out, so a lot of houses are likely to be destroyed by flooding and landslide.

On the right model, proper flood control is carried out; wider roads, an erosion control dam, rainwater tanks, and others.

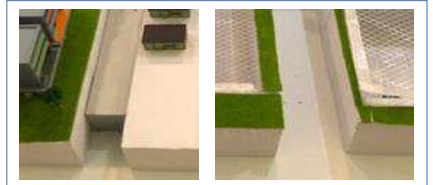
All of them protect the city and its citizens from floods and reduce the damage.

In our experiments, we recreated landslide disasters on both models by running a lot of spheres with different diameters, which look like water and soil.

By doing this, we visualized the different degrees of damages between the two models, so we were able to compare the damages on both models.



Picture 1



2. The way of research

1. Research to improve our knowledge of prevention and reduction of disasters.
2. Investigation outside school
3. Make some models of assumed complex disasters and panels
4. Discuss the ways of preventing and reducing disasters by simulating various scenes of disasters
5. Participate in the disaster drills in order to give the citizen of Kobe more interest in the importance of prevention and reduction of disasters.

3. Results

At the comprehensive water control exhibition held in Kobe Science Museum in October, we explained river control measures to elementary school students. The children showed great interest in water disaster because they had seen various typhoon damage on TV. They listened to us carefully and answered positively to our questions. We told those children and their parents about the importance of flood control and realized how important our action was.

We can say that what we did was successful, but also have found what we need to improve. We are going to continue considering how we should make a presentation and how we should make models.

4. Conclusion

In our simple experiments, it was difficult for me to use words easy enough for elementary school children to understand. Of course, there are a lot of things we have to modify, but we will try to make this campaign better through a lot of practice, and we will prepare for the next event in January.

Finally, we are going to continue this campaign to save as many people as possible from disaster and make people realize that

“you are the only one who can protect yourself from danger.”

