

魚津市における町づくりの基本方針の策定及び工場跡地
再開発に関する研究

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1 Purpose of this study

The purpose of this study is the investigation in the ecological improvement and the redevelopment of an abandon industrial site in the city of Uozu. The city of Uozu situated in the Toyama Prefecture is a typical Japanese regional city with a population of about 50,000 people. The changing industrial structure in Japan has also affected the city of Uozu. Some of the main problems that the city is facing are the decrease of green area in the city center and the decline of the main industry.

2 Investigation method

This study has investigated the main problems in cooperation with the citizens. An investigation process as shown in fig. 1 has been set up based on an enquete by 1000 people and a hearing by 100 people. A basic plan, adapting the meaning of the citizens, has been proposed in a symposium. This plan has been evaluated by the participants at the symposium through another enquete. Finally, a basic directory plan has been made.

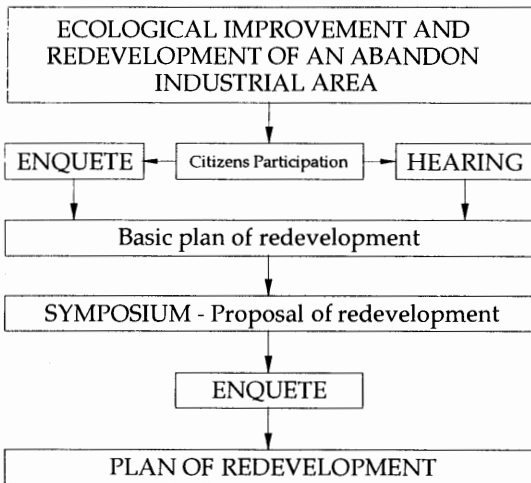


Fig. 1 Investigation process

3 Environmental problems

3-1 Decrease of green area in the city center



Fig. 2: Sprawling of the city center

The sprawling of the city has reduced the green areas and this especially in the city center. In 30 years, the urban area in the city center has increased from 182.70ha in 1960 to 356.31ha in 1990 as shown in fig. 2. Table 1 shows the change of built area in the period 1947-1990, as well as the total surface in the 8 central wards of the city. The built area increased from 288.39ha in 1947 to 790.95ha in 1990, which means an increase of 274.26%. Fig. 3 shows the 8 central wards and the change of the built area in these wards. The wards Shimonakajima, Shimonogata, Kazumi and Michishita are showing the biggest increase in the period 1947-1990.

Wardname	Built area (ha)1947	Built area (ha)1990	Total surface (ha)
Uozu	82.16	103.25	108.8
Shimonaka-jima	23.67	84.05	363.62
Kaminaka-jima	32.85	48.78	865.39
Kaminogata	18.25	46.84	665.92
Shimono-gata	37.18	179.36	414.29
Kazumi	20.57	100.76	425.13
Michishita	18.25	147.75	321.83
Kyoden	55.46	80.16	328.96
Total	288.39	790.95	3493.94

Table 1 Change of built area and the total surface

The surface of public park per person in the urban area of Uozu was 9.6 m² per person at the end of 1995, which is much more less than the aim of the country to achieve 20 m² per person.

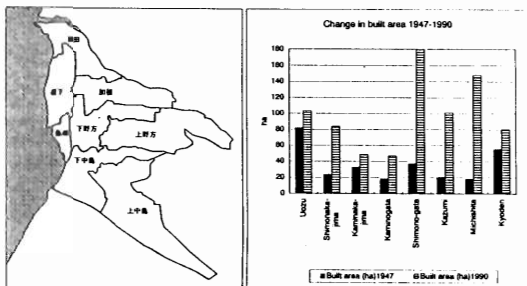


Fig.3 Change of built area in the central 8 wards

3-2 The Kamo River and its borders

The Kamo River which is streaming in the old part of the city, was before flanked with cherry trees and the water quality was very good. The river is used for the drainage of agriculture water. The quantity of BOD (Biochemical Oxygen Demand) in the period 1990-1994 is higher than the standard value of 3 mg/l as shown in fig. 4. With the evolution of the urban sewage system the quality of the water could be improved. Due to the lack of parking space, on several places the river is also covered with iron plate bridges, used to park the cars of the habitants living in the neighborhood, which have also a negative impact on the environment.

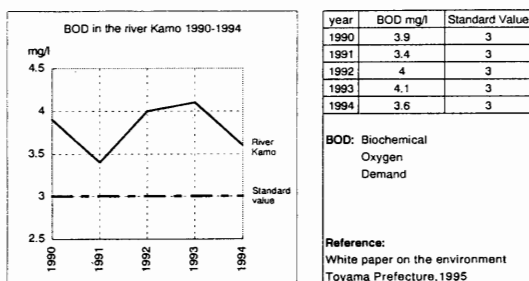


Fig. 4: The quantity of BOD in the Kamo River

3-3 The Nihon-Carbide abandon industrial area

The Nihon-Carbide factory, a petro-chemical factory, which was formerly the main industry of Uozu, is closing down. Along the Sea of Japan is stretching a 30ha large abandon industrial area. This study has investigated the ecological redevelopment of this site which is explained in the following chapter of this paper.

4 Redevelopment plan

The proposed redevelopment plan has been based on the meaning of the citizens expressed in the enquete, hearing and the enquete of the symposium. The plan covers six areas as shown in fig. 5. The improvement of the Kamo River zone consists in the improvement of the water quality and the regeneration of the riverside, the iron plate bridges are removed and little parking lots are created. The proposal for the site of the abandon factory consists of 4 new zones, a) a park and green zone, b) a science and research zone, c) an ecological housing zone and d) the creation of urban park along the mirage road. The whole is surrounded by an access zone to the shoreline.

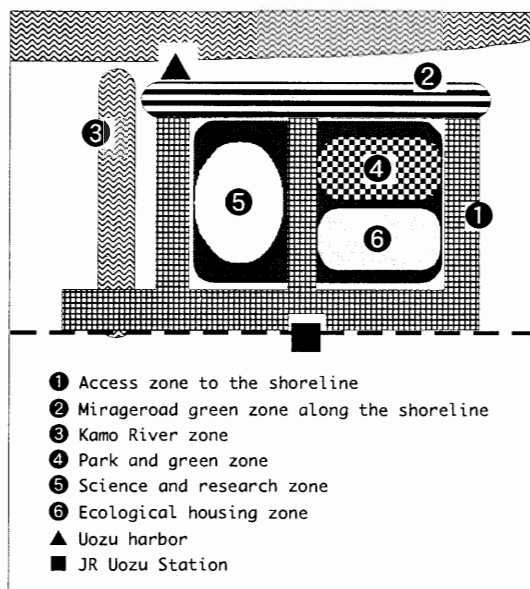


Fig. 5: Redevelopment Project

5 Conclusion

This study has investigated the environmental problems in the city of Uozu. A new basic course for the redevelopment has been formulated in participation with the citizens. Special attention has been paid at the redevelopment of an abandon industrial site, the increase of green areas in the city center, and the ecological improvement of the Kamo River.

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