# DESIGN VISIONS IN THE SUSTAINABLE URBAN REGENERATION

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## Summary

From the environmental design point of view we must prepare our-self to take much time to achieve the sustainable urban regeneration. We all belong to social organizations, for example, from our family to companies or institutions, so driving force of social changes is caused by organized decisions, not by individual decisions. It may be easy for individuals to decide on changing the society in mind, but it is difficult for organizations to decide to do, because they are set in existent social and economic circulation systems and existent material distribution networks. The society has their own institutional and technological inertia formed by its own long history of developments, for example, agriculture revolution is since 8000 years before and the industrial revolution is since 200 years before.

The sustainable urban regeneration is a big and long term project and many people must join for it through generations. it is necessary all joined people have a common total image about what they will build. The sustainable future is not the extended present but the present must be extended from the sustainable future.

We present presentative design visions of the sustainable urban environment of Kitakawachi region in Osaka prefecture, Japan to illustrate discursive points.

## 1. Introduction

The sustainable urban regeneration is a big and long term project. It takes much time through generations to do. So it's better to introduce the word "acculturation" to hit the point of situations. The kernel point of acculturation is the heritage of the way of life by the next generation. It's important to establish the education of not only the environmental management system but also how to make new urban environment. Recently Japanese government promotes the environmental conservation education supporting by legislation.

In the definition of "environmental conservation" in the law it is said that environmental conservation includes making a good environment. It is easy to start first from the environmental conservative side because the side is scientific and is explicit in the causal relation but it is local actions and we need to get a total image of the environment summed up by such local actions. If the image is no good, we must think about how to change the way of actions.

The demographic estimation in Kitakawachi region ( Fig 1) shows the total population of Kitakawachi region becomes less than half in 2060 if the present trend will continue. It's like urban-osteoporosis. How to regenerate the sustainable urban environment in Kitakawachi region is the urgent theme.

If we scrutinize the demographic trend, we notice among 7 cities there are two cities, namely Kadoma city and Sijounawate city which do not show decreasing trend after 100 years later. We can learn more by examining their situation and causations. But the way to follow results of present situations is like extrapolation. It may be right or best in some case and in some case it may be not wrong but not right. A certain environmentalist says that contents written about the environment in books are not wrong but not right. The significance is that the environment is different each other, if time, place and occasions are different.

Here we start from design visions following the natural farming by Mr. Fukuoka which refuses to persist in the local standpoint and insists to keep the situation in perspective. The perspective view is actualized as interpolation in planning. From the sustainable perspective view comes the sustainable urban regeneration through generations.

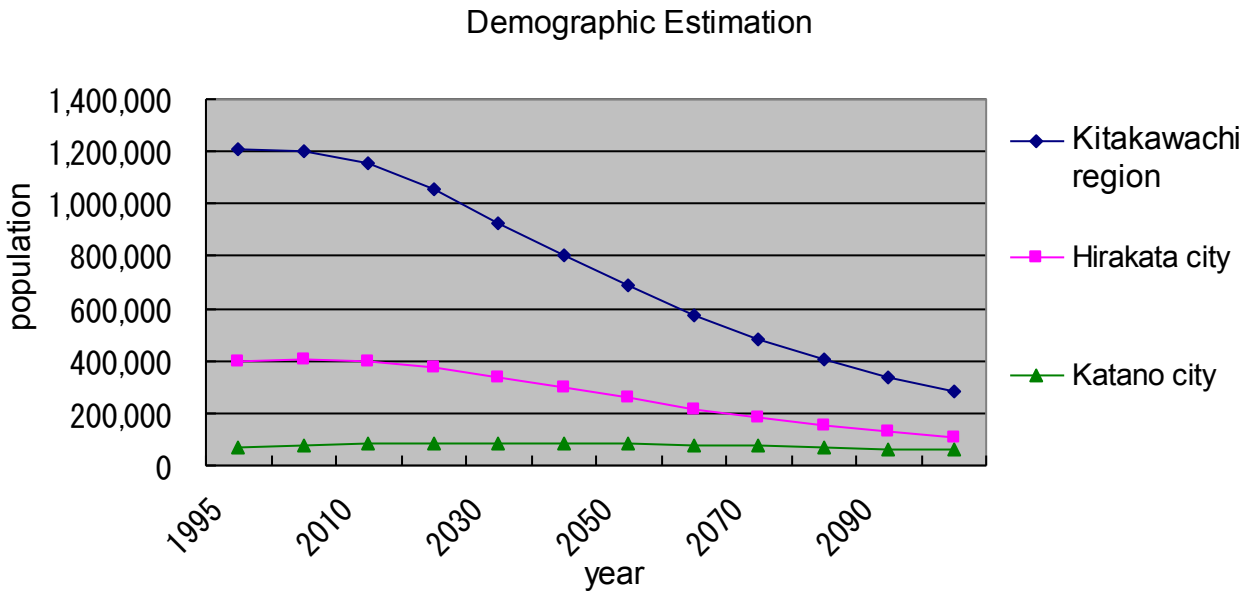


Fig 1 The Decreasing Trend of Population in Kitakawachi region

## 2. Decision Level at an Individual and at a Member of Organization

The sociologist Luckmann wonders that authors of "The Limits of the Growth" writes like this;

> The basic difficulty-if we consider the *Report* as a solution to the problem rather than merely as another symptom of the general mode of contemporary thought-is contained in the third point of the passage:"[...] If the world's people decide to strive [...]". With regard to the problem before us this simply begs the question. Is it really "people" who "decide to strive" today for alternative global goals as they *might* have done at the of Crusades ? Or is it institutional processes which are *relatively* independent of what people individually strive for that will determine our future ?

Luckmann asks whether it is OK that an individual decision is necessary condition to regulate the growth. He thinks that it is not enough in individual decision. Here comes ethical phase like the compliance of organizations. From an individual to class and from class to institutions there are many steps or a ladder to ascend the realization of the ideal environment. The pictorial vision of the sustainable urban environment must be an axis to converge diverse discussions in different levels.

## 3. Common Images at a Big Project

The sustainable urban regeneration is a big and long term project and many people through generations must join for it. It is necessary all joined people have a common total image about what they will target, otherwise people's activities loose their center and diverge.

Besides when we have a class about the environment management system at school, some school children are depressed by what they heard, namely some ways of life cause to pollute our environment. For these children it is necessary to show the promising and happy environmental image after their another kind of doing to the present environment.

The image must be drawn concretely and pictorially in line with the region or neighborhood, for example, like the view from people's house window.

## 4. A Shift from Extrapolation to Interpolation

The sustainable future is not the extended present. On the contrary the present must be interpolated from the sustainable future. We must take the method to interpolate intermediate steps between the remote future and the present in planning.

The existent planning documents in Kitakawachi region show extrapolation to the future as Table 1.

Table 1 Targeted Period of 7 City Plans in Kitakwachi Region

| Cities of Kitakawachi | The base year (year) | targeted year (year) | targeted period (years) |
|---|---|---|---|
| Hirakata city | 2001 | 2015 | 15 |
| Katano city | 2001 | 2010 | 10 |
| Neyagawa city | 2001 | 2010 | 10 |
| Shijyonawate city | 1996 | 2005 | 10 |
| Kadoma city | 2000 | 2010 | 11 |
| Moriguchi city | 1994 | 2005 | 12 |
| Daito city | 2001 | 2010 :Fist period | 10 |
| | | 2020 :Second period | 20 |
| | | 2030 :Grand plan | 30 |

According to the table most of length of targeted planning period is 10 years because people think there may be many technological and social changes in future and they cannot prospect the remote future or they avoid risks to miss their tip. But it is clear that within 10 years it is impossible to realize the sustainable urban regeneration at all. So we must first imagine the targeted sustainable urban environment and then come back to now. Of course the targeted image may be not the final one. During intermediate years we must modify it according to actualized situations but we stand at the safe side in the sustainability.

## 5. GIS Visions of Sustainable Urban Regeneration

We present the GIS vision of Kitakawachi region far from now, based on the agriculture following the method of M. Fukuoka's natural farming. (Fig 2) His principles of farming are, in short, 1) No Cultivation 2) No fertilizer 3) No weeding 4) No pesticides. He has thought about and practiced agriculture by "do nothing " (or "none of your business" by our translative expression) during more than 60 years since his young 23 years old in 1937. This method of agriculture in urban areas is most suitable method, which can reduce most of the cost of Urban Agriculture.

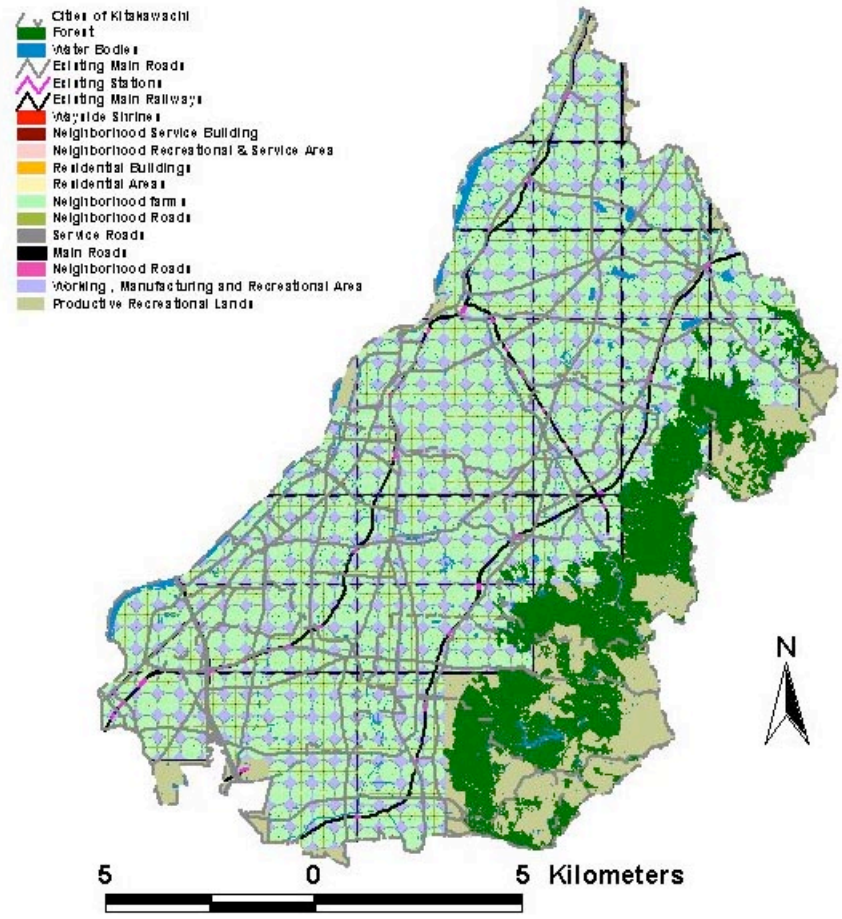


Fig 2 GIS Map of Kitakawaachi Region by S. B. Schrestha

Fig 3 is the present situation of the targeted area and if we compare both Fig 1 and Fig 2 there seems no relationship between them and Fig 1 is more near to Fig 3 which shows the center pivot irrigation in the Great Plane in U.S.A..

Japan imports much food from U.S.A. and other countries. The Japanese food self-supporting ratio is around 40%. If foreign countries stop exporting and change to importing by their own reasons, Japanese must starve. Japan must think about food for his security. The distance between Fig 2 and Fig 3 is long now but during many years Fig 2 is changed to Fig3 through Fig 1.

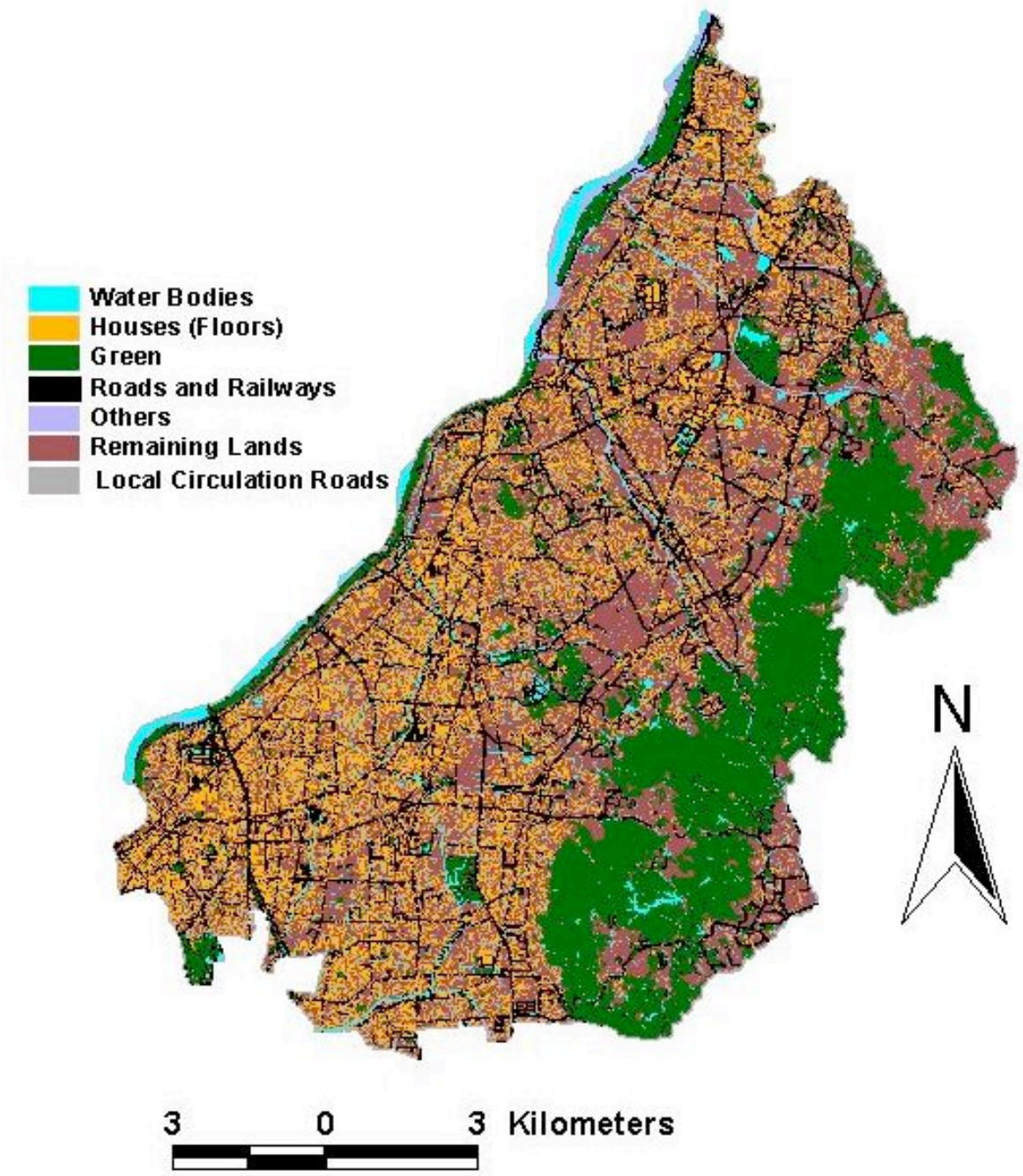


*Fig 3 Kitakawaachi Region (2002)*

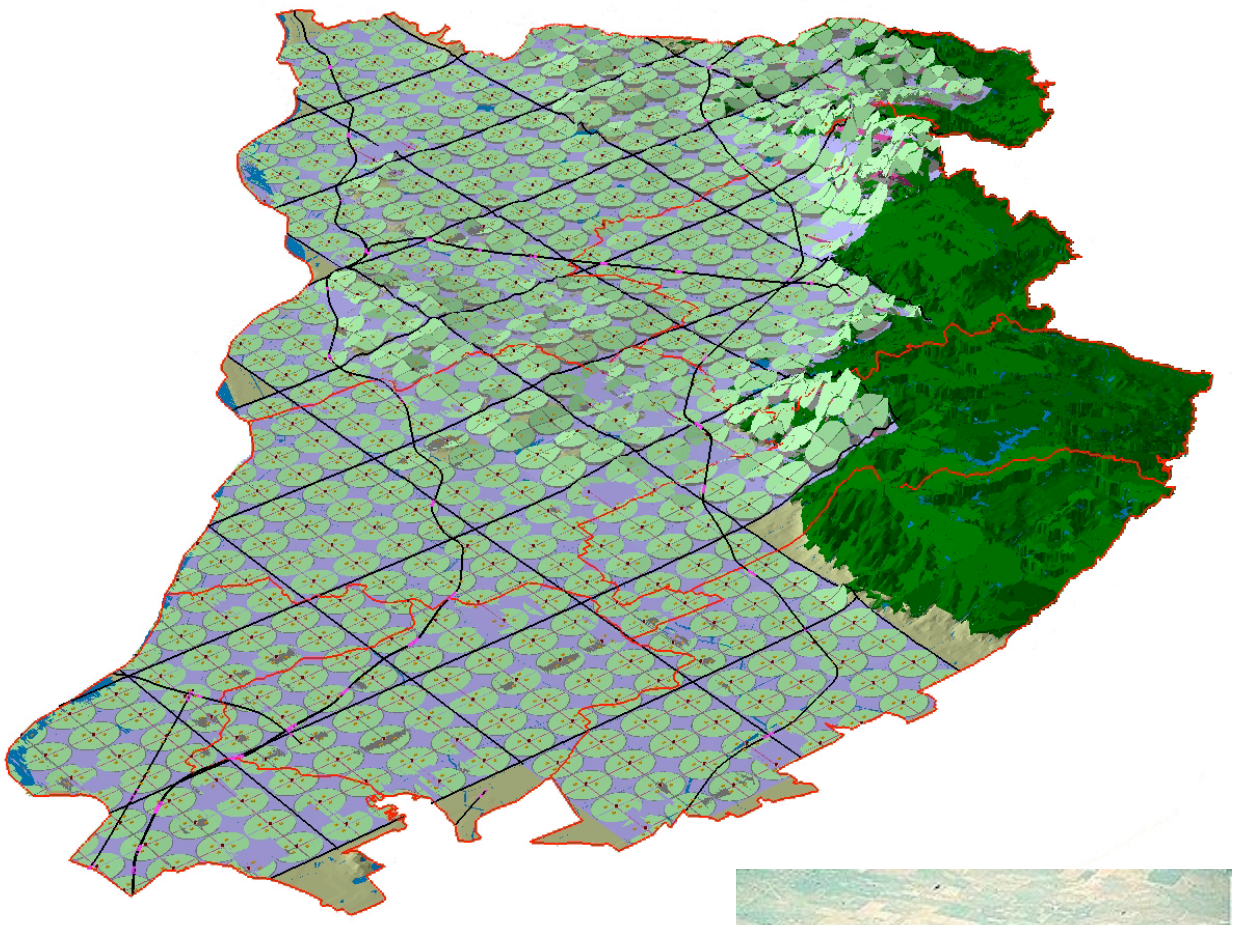


*Fig 4* *Perspective View of Kitakawaachi Region by S. B. Schrestha（2004）*

*Fig 5* *GIS Vision in 3D and Center pivot irrigation ((C) the photographer: Professor Paul Starrs, University of Nevada, Reno) depending upon the ancient aquifer under the Great Plain ( Nebraska (1986))*

## 6. Breakthrough by Environmental Design

The similarity between Fig 1 and Fig 2 is only superficial. In Fig4 the water is from the sky but in Fig 5 it is supplied by the underground aquifer, namely ancient rain. This means Fig 5 is not circulative and not sustainable fundamentally. We must find the way to escape from such non-sustainable system as soon as possible.

From the environmental design standpoint we ask whether it is OK that we begin planning by first setting presuppositions. Presuppositions describe some conditions and the positive phase of such conditions not only limits things and excludes matters or elements from the planning discourse without referring in the plan. But matters do not stand alone and depend on each other. Setting presupposition in planning does not mean actually cut off such bondages among matters. Here comes the view point of the environment.

So we must start from without presuppositions which means there is something. Even If we start from like this, there happens the question whether we are as a planner or designer. The ceramicist K. Kawai writes;

(*) There is nothing –If we see, then there exits.

In the latter half sentence there appear two words “we” and “see”. The sentence structure includes a kind of verbs like “see” is said as referentially opaque and is not fixed as true of false in the modern modal logic. But it is important to use the referentially opaque sentence in the big project or planning to communicate the image which is intended to plan or design and without such sentences the project does not have the totality but an ensemble without the internal structure.

By HIntikka’s model how to determine such sentence true or false is called as the multi-possible worlds model. The true or false of such sentence is determined if a certain sentence is fixed. In that model the existence of a speaker is not questioned or indifferent in its existence. Does this means the model presuppose the speaker (here planner or designer) or he don’t mind it. ? Our common sense does not doubt our existence. But from the environmental design point if we start from “there is nothing”, we must apply this rule to ourself, namely we must doubt our existence. In order not to conflict to the common sense that we are here it’s better to say we are a planner-to-be or a designer-to-be, not a planner or designer. This means the environment is peculiar to the time and place. There is no common environment because if we think the environment is outside or surrounding the entity , the entity is spatio-temporally different.

## 7. Summary to Future

We propose “Interpolation”, but we extrapolate here nevertheless. Our proposal may be called slow planning like slow food, slow life and slow science. The environmental problem is caused by fastness symbolized by the phrase “dog year” in IT world. On the contrary Following the principle “do nothing” of the natural farming is safe side to sustainability. We can wait for time-maturing as possible as we need while spending life in the environment like the proposed GIS vision. It is the life-save boat to navigate through the time until to disembark the sustainable land.

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