Case 2: Toyonaka City Setting Targets / Its Review in Environmental Basic Plan and Toyonaka Agenda 21

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1. Legal Design for Toyonaka City's Environmental Administration

Toyonaka City boasts varied topography comprising lowlands, plateaus, and hills, and it enjoys a good amount of sunshine as the city area generally slopes down to the south. Since the Hankyu Line started its service in 1910, the city has been developed as a satellite city of Osaka City. During the period of rapid economic growth in the second-half of the 1960s and onward, the densely-populated areas in Toyonaka grew quickly. During the 1970s, the population started to grow rapidly right after the international exhibition was held at Senri New Town. Now nearly 400,000 people live in the city with an area of 36.6 square kilometers. In other words, nearly 110 people live per hectare—a densely-populated city even by Japanese standards. Since the city has a relatively long history, many families have lived in the city for a long time. Partly because these citizens are relatively community-conscious, their relations with those who have newly moved there are relatively good.

Toyonaka City enacted the basic environment ordinance in October 1995 as a new legal framework for environmental administration. This ordinance sets the framework of a basic environment plan—action agendas—evaluation—an annual report in accordance with the environmental management system of Plan—Do—Check—Action. Article 8 and Article 9 lay down a basic environmental plan and action agendas, respectively. Article 10 stipulates that the city compile an annual report on its environmental measures and that citizens' opinions about the report be heard. Article 21 says that an environmental council may express its opinions to the mayor about administrative measures.

This basic environmental ordinance has taken into account the importance of partnership among citizens, businesses, and municipal authorities in tackling environmental problems today, and Article 18 calls for coordinated action among the three parties. In accordance with this article, in May 1996, Toyonaka City set up the "Toyonaka Citizens' Environmental Congress," an organization promoting partnership among citizens, businesses, and municipal authorities, and which now comprises 150 entities from various fields. The city regards

the congress as a partnership organization involving citizens from all walks of life, as not only organizations with strong ties with the city but also NPOs and NGOs are participating.

Table-1 Members of Toyonaka Citizens' Environmental Congress

Chambers of commerce; trade associations including associations of construction firms and unions of landscape gardeners; industrial manufacturers; architects' and designers' associations; distributors; hotels; transportation businesses including bus companies, taxi companies, railway companies, and trucker associations; banks and other financial operators; hospital associations; farmers' associations; government and municipal offices; the Rotary Club and the Lions Club; PTAs and associations of principals of elementary and middle schools; educational institutions including high schools, colleges and universities; youth organizations, including boy scouts and girl scouts; public corporations and citizens' groups for welfare; women's groups, citizens' groups, and labor unions; medical associations, including dentists' associations; associations of parking lot operators; environment-related citizens' groups; environmental NGOs; others.

2. Formulation of the Basic Environment Plan and Toyonaka Agenda 21

The Toyonaka municipal government defined the Basic Environment Plan over a three-year period, starting in FY1996. In parallel with this move, the Toyonaka Citizens' Environmental Congress prepared Toyonaka Agenda 21 (Toyonaka Citizens' Action Plan for Protecting the Global Environment) over the two years starting FY1997, after a one-year experience of partnership. The congress set up four subcommittees, focusing on living, industry, traffic, and nature. The activity of each subcommittee, comprising 20-30 participants, was not limited to monthly meetings. The members of the subcommittees took various actions, including the promotion of household eco-account books, the eco-office campaign, the stop-idling campaign, and biotope-creation at schools. This experience was put to good use in drawing up proposals in accordance with the "action approach" method. The idea was that the members-citizens and business operators-would tend to merely end up with abstract debates if they just sit down and discuss things at meetings. After deepening their understanding of the matters in question through action, the members worked out proposals for concrete action plans. Furthermore, each subcommittee invited experts in order to avoid any confrontation between citizens and municipal authorities.

A working group of about 30 citizens participating on their own initiative and placed under the board of the congress, plays a central role in making proposals and defining activities. Before joining the working group, many members expressed their opinions about the interim proposals for the Toyonaka Basic Environment Ordinance when it was published by the environmental council in order to hear what citizens had to say. The members are actively engaged in the implementation of Toyonaka Agenda 21, saying that because citizens' opinions have been reflected in the ordinance, they share some responsibility for the enforcement of the ordinance.

The Basic Environment Plan and Toyonaka Agenda 21 have set common goals. Under the Basic Environment Plan, various approaches have been established, including:

- (1) Soliciting citizens' opinions of what the Toyonaka City should be like from an environmental standpoint
- (2) Setting quantitative goals
- (3) Performance review based on more than 100 monitoring indices
 Toyonaka Agenda 21 comprises 101 proposed activities that citizens and
 businesses can take easily to realize the desired environment of Toyonaka
 City.

Table-2 Citizens' environmental visions of Toyonaka(extracts)

- \bullet A city where many citizens work and carry out steps to improve the environment at the community level
- A city where sensitivity towards marvels of nature are fostered through, for example, interaction with animals
- A city where citizens prefer walking to driving
- A city where the blessings of nature including rain and the sunlight are appreciated and put to good use in everyday life
- A city where citizens enjoy clear night skies, viewing stars and breathing deeply in the clean air
- A city where citizens can feel the scent of old history, imagining the period when *Toyotamaphimeia machikanensis*, a kind of alligator, lived.

Table-3 Quantitative targets for achieving environmental visions

- The number of participants in partnership-type activities: (yet to be set)
- Carbon dioxide emissions: 8-9% reduction from FY1990 levels per head (0.92t-c/year, per head in FY1990)
- Waste emissions (net): 3-5% reduction from FY1995 levels (151,836t in FY1995)

- Rainfall permeation rate: 0.21 (reduction to the levels of the second half of the 1970s; 0.217 in FY1974)
- Achievement rate of environmental standards: 100% (70% in FY1997)
- Percentage of green coverage: 17% (15.5% in FY1995)

Table-4 Examples of monitoring indices

The number of visitors to incineration plants, the number of seminars on environmental problems, power and gas consumption (by households and by businesses), the volume of chlorofluorocarbon collected, concentration of nitrogen dioxide, concentration of SPM(suspended particulate matter), yearly average levels of aircraft noise, traffic volumes of automobiles along trunk roads, quality of treated water, daily water supply per head, consumption of medicine, recycling rate of waste, percentage of pruned branches and leaves turned into compost, the amount of waste generated from business activities, the number of collection spots for PET bottles, the daily amount of household waste collected per head, the amount of purchased power made redundant as a result of solar power generation, the amount of subsidies for buying compost generating containers, the number of street lights installed, the area of land covered with porous asphalt pavement, the records of environmental consideration, the state of community-led cleaning activities, the number of sheets of paper used in the city hall, energy consumption by the city hall

3. Implementation of Plans through Interaction between Citizens and the Municipal Authorities

The implementation of the two plans—the Basic Environment Plan and Toyonaka Agenda 21—are managed through an interactive method. In this method, citizens, businesses, and municipal authorities share problems and exchange opinions while the two parties implement their respective plans, and then reflect the results of such interaction in new measures and actions.

In FY1999, municipal authorities compiled the track records of its activities carried out in the previous fiscal year in July and August (1-2). In November, municipal authorities published an interim environmental report outlining activities by the municipal authorities themselves and by citizens, and exchanged opinions between the two parties at an environmental forum (3).

- 1. Tracking down the implementation of environmental measures
- 1.5. Checking data reported within the city hall

- 2. Compilation of data and preparation of an interim report
- 3. Publishing the interim report and soliciting opinions from citizens
- 4. Evaluation
- 5. Feedback reflected in the following year's measures
- 6. Publishing the final report
- 7. Implementation of the following year's measures
- 8. Fig. 1 Procedure Flow for Compilation of the Environmental Report

At the environmental forum, members of the environmental council, city assembly members, the mayor, and other high-ranking city officials, directors of the Toyonaka Citizens' Environmental Congress, members of the working group, and ordinary citizens exchanged their proposals and opinions concerning environmental problems under the theme "waste, the natural environment, and traffic." In December, based on such exchanges, the environmental council compiled a set of proposals for measures to be taken the next year in response to the interim environmental report (4). As a cross-sectorial agency of environmental administration, the environmental management committee, which is headed by the deputy mayor and is made up of department managers, as far as possible incorporated such proposals into the measures to be taken in the next and following years (5). The committee also expressed, in its final environmental report, the basic stance of the municipal government regarding the opinions of the environmental council (6). The committee plans to respond to the opinions and questions from citizens regarding the interim environmental report in the environmental report for FY2000. See Figure-1 and Table-3.

Table 3 The flow of Toyonaka City's environmental management system

Item	Who does what
(1) Keeping track of the	Sections in charge fill out questionnaires on
implementation of	environmental measures
environmental measures	
(2) Compilation of data and	The secretariat compiles data provided by the
preparation of the interim	sections in charge and prepares the interim report
report	
(3) Soliciting and sharing	Municipal authorities publish the report and
opinions from citizens	solicits and shares opinions from citizens at the
	environmental forum.
(4) Evaluation of the	The Toyonaka Citizens' Environmental Congress
implementation of	makes an evaluation at its expert committee.
environmental measures	
(5) Feedback reflected in	The congress reports to the Toyonaka City
the following year's	Environmental Management Committee, a
measures	cross-sectorial agency headed by the deputy mayor.
(6) Preparation and	The city publishes the environmental report
publishing of the final	incorporating the opinions of citizens, the
report	environmental council, and municipal authorities.

4. Communication among Stakeholders and the Role of the Local Agenda 21

In Japan, Local Agenda 21 is often regarded as the action program for the basic environment plan—an administrative plan of a given municipality, or as the same as the basic environment plan. This has something to do with the following factors:

- (1) There have been only a few cases in which citizens and business from various fields and municipal authorities together work out agendas for decision-making on an equal footing at a roundtable or other open forum.
- (2) Because the concept of management has not been fully understood, there has, until recently, been no system for evaluating the implementation of a given plan on a yearly basis, and feeding back such evaluation to the following stages.

Local Agenda 21 can serve as a management tool for the environmental policy of a given municipality that is being implemented in partnership with citizens and businesses, if the agenda is used in the following ways for creating a sustainable society:

- (1) As a tool for various interested groups in projecting the municipality's future, identifying the challenges ahead, and setting objectives;
- (2) As a process of enabling citizens to express their opinions to municipal authorities and coming to agreements together; and
- (3) As a communication tool between citizens and municipal authorities in evaluating the state of the environment and the public services provided by a given municipality.

Toyonaka City puts communication with its citizens first. To this end, the cityensures the participation of its citizens in the management of environmental policies. In an attempt to attain common goals for citizens and the municipal authorities, the city also makes use of environmental reporting, including maintaining track records for both parties.