

Cities and Biodiversity

Takehisa Matsubara, Mayor of Nagoya, Japan



Nagoya is the hub city of Central Japan. With a population of 2.2 million, Nagoya is located almost in the geographical center of Japan, and is the fourth largest city after Tokyo, Yokohama, and Osaka. It started to develop as a city when Tokugawa Ieyasu built Nagoya Castle in 1610. Today, this area is the center of a high-quality manufacturing industry, as represented by Toyota Motor Corporation. Although it is a big city, Nagoya has a rich natural environment thanks to its mild, humid climate and four distinct seasons. Nagoya's city planning reflects Nature's Wisdom, the theme of Expo 2005 in Aichi, Japan.

The year 2010 will mark the 400th anniversary of the founding of Nagoya and the fifth anniversary of the expo. Scheduled to be held in the same year is the 10th meeting of the Conference of the Parties (COP 10) to the Convention on Biological Diversity (CBD), which the City of Nagoya is now preparing to host together with the national government. Under the Convention, the Parties are required to significantly reduce the current rate of biodiversity loss by 2010. The year 2010 also falls on the International Year of Biodiversity, as proclaimed by the General Assembly of the United Nations. It is perhaps more than a coincidence that the City of Nagoya and the CBD share the same milestone.

On 22 May 2007, various events were held in Nagoya to commemorate the International Day for Biological Diversity and to raise public awareness about the day and the

importance of preserving biodiversity. As a prospective host of COP 10 in 2010, the City of Nagoya will further publicize the importance of biodiversity and build momentum toward COP 10.

Nagoya has a solid track record of protecting a tidal flat and preserving biodiversity by reducing waste. The following is an overview of Nagoya's experience of, and commitment to, preserving biodiversity based on three pillars: "attaining a sustainable lifestyle" through a waste reduction campaign, "achieving harmony with nature" by redeveloping the Higashiyama Zoo and Botanical Gardens and upgrading the Higashiyama Forest, and "developing human resources and building human networks" through cooperation with citizens and companies under the framework of the Nagoya Eco Campus.

Attaining a sustainable lifestyle

Back in 1997, the City of Nagoya urgently needed to build a new landfill because the conventional one was expected to become full early in the 21st century. The city designated part of the Fujimae Tidal Flat in the Port of Nagoya as a candidate site. However, there were strong calls to preserve the tidal flat because it has a water-purifying function and also serves as one of the largest stopovers in Japan for migratory birds, some 60 species. The city examined an option of building an artificial tidal flat, but failed to win public support, so in January 1999 it abandoned the plan to reclaim the tidal flat.

The only option left was to reduce the waste generated by citizens and companies. In February 1999 the city made an "Emergency Announcement for Garbage Reduction", set a target of reducing waste by 20% (equivalent to 200,000 tons) by the end of the 20th century, and sought public cooperation. The city started to collect empty bottles and cans in all the

wards of the city, and to collect garbage put in bags designated by the city. In August 2000, Nagoya became the first city in Japan to launch a program for fully recycling containers and packages.

By sharing a sense of crisis and taking the initiative together, the city and the citizens succeeded in reducing waste by 230,000 tons in fiscal year (FY) 2000 (from 1.02 million tons in FY 1998). This huge increase in the collection of recyclable waste reduced the amount of the waste to be landfilled by about 60 %. In fact, the city's failure to build a landfill turned out to be a blessing in disguise — reduction in waste, extension of the service life of the existing landfill, preservation of the Fujimae Tidal Flat, preservation of biodiversity, and above all, increased public awareness toward the environment.

In November 2002, the Fujimae Tidal Flat was registered as a Ramsar site. In May 2007, the City of Nagoya entered into an agreement with the Australian city of Greater Geelong — a city home to the Swan Bay wetlands, another Ramsar site — to protect the habitat for migratory birds that visit both cities. These efforts demonstrate the city's commitment to preserving the tidal flat as a valuable asset and to use it for environmental education.

Achieving harmony with nature

The Higashiyama Forest is located on the hilly area in the eastern part of Nagoya. Measuring 410 ha in total, this forest has been miraculously left untouched in the urban area. Situated in the center of this forest are the Higashiyama Zoo and Botanical Gardens, which

exhibit some 550 kinds of animals and about 7,000 species of plants, while preserving endangered species of fauna and flora, and conducting research. In 2007, the city embarked on a project to redevelop the Higashiyama Zoo and Botanical Gardens as “a bridge connecting people and nature” to mark the 70th anniversary of their opening. Specifically, the redeveloped zoo and botanical gardens will enable visitors to experience fauna and flora habitats and to appreciate the relationship between people and nature.

The city also plans to replace old trees with young trees in the Higashiyama Forest which is becoming a climax forest that absorbs less carbon dioxide. Meanwhile, the city is working on a project to revive *sato-yama* (mountains closely linked with community life) and terraced paddy fields so that citizens can take an interest in nature and think about nature. All of these efforts are intended to pass on the natural environment of the Higashiyama Forest to future generations as the symbol of Eco-Capital Nagoya.



Developing human resources and building human networks

Through the waste reduction campaign and Expo 2005 Aichi, Japan helped raise public awareness about environmental issues. To increase the momentum, the City of Nagoya opened Nagoya Eco Campus in 2005 to develop human resources who will underpin Eco-Capital Nagoya.

Administered jointly by civic groups, companies, universities and governmental bodies, Nagoya Eco Campus is intended to provide citizens of all occupations and ages with opportunities to work, think, and learn together about the environment and share a sense of growth. The campus is everywhere -- from forests and rivers to factories and meeting spaces. Nagoya Eco Campus also offers programs where participants can gain university credits. In FY 2006, about 11,000 citizens participated in 110 courses (574 sessions in total).

Concurrently, the city is promoting eco-life activities to conserve the global environment for future generations. Citizens are encouraged to be kind to the environment and avoid wasting resources. Under the slogan of "From awareness to action", in November 2005 the city started to recognize citizens who practice eco-life activities. As of the end of March 2007, about 390,000 citizens have declared their commitment and started to take action. More citizens should become involved in this program to act like the small hummingbird depicted in a folk legend of South America, which flew back and forth between water and fire, dropping a single drop of water from its beak onto the fire below to do what it could.

In March 2007, I participated in the meeting on Cities and Biodiversity held in Curitiba, Brazil as the mayor of one of the candidate cities for hosting COP 10. I presented Nagoya's commitment as described above to the representatives participating in the meeting, including the mayors and high officials of Curitiba, Brazil (host city of COP 8), Bonn (host of COP 9) and Montreal, Canada (host of the Secretariat of the Convention). I explained to them

that such efforts are the key to overcoming biodiversity-related problems in cities.

Discussions at the meeting led to the conclusion that cities and other local governments in the world play significant roles in achieving the 2010 target. Action requires the involvement of the private sector including citizens, and in this context, Nagoya has met the challenge to reduce waste through cooperation with citizens. I am convinced that the citizens will fulfill their roles in preserving biodiversity.

I sincerely hope to build upon the accomplishments at the meeting on Cities and Biodiversity, raise awareness of the global community on different occasions, show the commitment of the city to preserving biodiversity, and promote city planning befitting of the host of COP 10.