

Economic Incentives for Green Initiatives in Nagoya city, Japan

Author: Kiichiro Hayashi

Short title: Economic incentives for green initiatives in Nagoya city, Japan

Key Message: In order to stop the decrease in green space of Nagoya City, Japan, the local government introduced a system of financial incentives offered by the financial sector to preserve private green spaces. Further, a certification system called the "NICE GREEN Nagoya" has been initiated, offering incentives to landowners for better ratings.

Suggested citation: TEEBcase by Kiichiro Hayashi (2010) Economic Incentives for Green Initiatives in Nagoya city, Japan, available at: TEEBweb.org.

What is the problem?

Nagoya is the third largest economic area in Japan after Tokyo and Osaka, with a population of over two million. Most of the city is classified as urban and, in the past 50 years, green space in Nagoya has gradually decreased. Between 1990 and 2005 approximately 1600ha of green space (5% of the total city area) was converted to other land usage. This figure now stands at approximately 8000 ha (25% of the total city area)¹.

Which ecosystem services were examined? And how?

The Nagoya city government introduced an incentive-based urban greening initiative in 2008 to increase green spaces, which focuses on privately owned land. According to the city government², this is the first incentive based greening initiative in Japan. The system is supported by several different institutions.

Firstly, the "Greening Area³" initiative requires that property owners create 10-20% of green space within their total land area. The target size is in excess of 300m² for a property located inside Nagoya city.

Second, in order to guide more effective greening in urban areas, Nagoya has introduced what they call "NICE GREEN Nagoya, 4" a certification system for green facilities. It is a

¹ Green area information is provided by Nagoya city, for example the following website, last accessed in 1 Oct 2010. http://www.city.nagoya.jp/shisei/category/53-3-3-6-0-0-0-0-0-0.html, (in Japanese)

² The information obtained by the personal communication with Nagoya city government in the TEEB-D2 Workshop in Nagoya in 20 May 2010 in Nagoya Japan.

³ The detailed information of this system is presented in the following Nagoya city web site, last accessed in 1 Oct 2010.

http://www.city.nagoya.jp/ryokuseidoboku/page/0000008169.html, (in Japanese)

⁴ The detailed of this system is presented in the Nagoya city web site, last accessed in 1 Oct 2010, http://www.city.nagoya.jp/ryokuseidoboku/page/0000008208.html, (In Japanese). Also the information obtained from personal communication with Nagoya city government was

voluntary program, applied without greening obligations. There are three levels of certificates (fig.1). Sites are graded as fair (one-star), good (two-stars) or excellent (three-stars) based on certain criteria such as the ratio of green area to total area, the ratio of trees to other vegetation on the site, preservation of existing trees, the greening of rooftops and walls and efforts to maintain and manage green spaces. Projects are awarded certificates and use the program's logo, according to their ranking.



Fig.1 Certification system in Nagoya city in Japan Source: Nagoya city government, last accessed on 1 Oct 2010,

http://www.city.nagoya.jp/ryokuseidoboku/page/000008208.html, (In Japanese)

Two and three star facilities are eligible for 0.1 - 0.2% discount bank home loan compared to the usual bank rate. Five regional banks (Aichi Bank, Aichi Shinyoukin Bank, Chukyo Bank, Chunichi Shinkin Bank and Nagoya Bank) have agreed to offer preferred interest rates for housing loans to landowners who rank highly under the system.

Thirdly, in order to facilitate greening in small private facilities, Nagoya has introduced the "Nagoya City Private Facility Greening Support Program⁵" which aims to financially support private facilities wishing to "go greener." Under this program, property owners can get some financial support (less than 50%) from the city for roof greening, wall greening and open space greening etc. The budget for this program comes from the Aichi Forest and Greening Tax in Aichi prefecture.

What policy uptake resulted from examining the ecosystem services?

While this system is still in its infancy with no official evaluation of its success, its benefits are apparent. Importantly, it uses economic incentives offered by the financial sector for increasing green spaces. It also has the benefit of focusing on improvements to privately owned land. While changes in practice to privately owned land are difficult to implement, this program has taken up effective measures to increase green space in the private domain.

Acknowledgement:

The author would like to thank Nagoya City, IGES and many others for their valuable inputs for finalizing the paper.

References:

Nagoya city government web site top page: http://www.city.nagoya.jp/

added to summarize the explanation of this sentence.

⁵ The detailed of this system is presented in the Nagoya city web site, last accessed in 1 Oct 2010, http://www.city.nagoya.jp/ryokuseidoboku/page/000008309.html

Nagoya city government web site, last accessed in 1 Oct 2010. http://www.city.nagoya.jp/shisei/category/53-3-3-6-0-0-0-0-0.html, (in Japanese)

Nagoya city government web site, last accessed in 1 Oct 2010, http://www.city.nagoya.jp/ryokuseidoboku/page/0000008169.html, (in Japanese)

Nagoya city government web site, last accessed in 1 Oct 2010, http://www.city.nagoya.jp/ryokuseidoboku/page/0000008208.html, (In Japanese)

Nagoya city government web site, last accessed in 1 Oct 2010, http://www.city.nagoya.jp/ryokuseidoboku/page/0000008309.html, (in Japanese)