

8. Prof. Dr. Masahito Yoshida, Edogawa University

EFFECTIVENESS OF BUFFER ZONES: COMPARATIVE STUDY WITHIN NATURAL HERITAGES IN JAPAN

Buffer zones are an important tool for conservation and sustainable development in and around World Heritage sites. UNESCO hosted an expert meetings on buffer zones at Davos, Switzerland and the World Heritage Committee adopted an important decision on buffer zones at its 32nd session (32 COM 7.1) in 2008. In this decision, it was stated that parties should set up buffer zones around the World Heritage properties, not inside the properties. What influence does this decision make to new natural World Heritage nominations?

Japan has three natural World Heritage sites, namely Yakushima, Shirakami-sanchi (inscribed in 1993) and Shiretoko (inscribed in 2005). Yakushima and Shiretoko are protected as national parks and wilderness areas, while Shirakami-sanchi is protected as a nature conservation area. Only Yakushima has a poor buffer zone amongst a 10,747 ha World Heritage property, while Shirakami-sanchi has 6,832 ha buffer zone amongst a 19,971 ha property and Shiretoko has 37,000 ha buffer zones amongst a 71,000 ha property.

Comparative study on buffer zone effectiveness within natural World Heritages in Japan reveals that poor buffer zone management has had a negative impact on World Heritage properties, especially in Yakushima. For example, entering permission systems for core area of Shirakami-sanchi was effective in controlling the number of visitors into pristine forest (less than 400 visitors/yr). However in Yakushima, increasing number of visitors (400,000 visitors/yr to Yakushima) and poor visitor control in the World Heritage property (90,000 visitors/yr to Jomon-sugi core site) had a negative impact on a pristine forest.

In Shiretoko, the Government of Japan extended the boundary of buffer zone from 1km to 3km offshore from the coastline to meet a recommendation proposed in the IUCN's technical evaluation report in 2005. National park service and forest service compiled basic plans for tourism management inside the World Heritage property in 2005 and Shiretoko ecotourism association provided ecotourism guidelines for the tourism industry and visitors in 2007 to avoid a risk of negative impact on the natural environment and risks to the brown bear.

The Government of Japan submitted a draft nomination form for inscription of Ogasawara Islands on the World Heritage List in November 2009. In the management plan of Ogasawara Islands, the Government of Japan declared establishment of "world heritage management area" around the World Heritage property, instead of buffer zones. This idea provides a new and innovative approach for management of World Heritage, since impacts on natural heritage properties such as visitor impact and alien species come from the ocean line that extends 1000 km from Tokyo to the Ogasawara Islands. On the other hand, there are criticisms that the Government does not include a critical habitat of rare and endangered fruits bat in the World Heritage property nor in the buffer zones.

Impacts on natural heritage properties depend on the status of each natural heritage site and appropriate buffer zone systems vary case by case. Nomination of Ogasawara Islands raises the question as to what kind of buffer zone should we set up for conservation of World Heritage properties within the new buffer zone paradigm.