

## Co-Chairs' Summary

### Asia – Pacific Regional Workshop on the *Satoyama* Initiative Concept “Ecosystem Services in the Asia-Pacific Region”

1 – 3 October 2009

Penang, Malaysia

#### 1. Introduction

The Asia-Pacific Regional Workshop on the *Satoyama* Initiative Concept “Ecosystem Services in the Asia-Pacific Region” was organized by the Ministry of the Environment of Japan and the United Nations University Institute of Advanced Studies (UNU-IAS) and co-organized by the United Nations Environment Programme, the Secretariat of the Convention on Biological Diversity (SCBD), the Ministry of Natural Resources and Environment (MNRE) of Malaysia, the Center for Global Sustainability Study (CGSS) of Universiti Sains Malaysia (USM), the International Council for Science – Regional Office for Asia and the Pacific (ICSU-ROAP), the Institute for Environment and Development of Universiti Kebangsaan (LESTARI) of Malaysia and the Institute for Global Environmental Strategies (IGES).

About 70 officials and experts participated at the Workshop including representatives from the governments of countries in Asia and the Pacific, academic organizations, research institutes, NGOs and international organizations. Mr. Tsunao Watanabe, Deputy Director-General, Nature Conservation Bureau, Ministry of the Environment, Japan opened the Workshop, underlining the significance and great potential of the Initiative in consolidating knowledge and science on integrated ecosystem management and human well-being improvement across the world and promoting international cooperation. Mr. K. Nagulendran, Deputy Undersecretary, MNRE of Malaysia, speaking on behalf of Ms. Aziyah Mohamed, Deputy Secretary General, MNRE of Malaysia, reiterated her government’s support to the Initiative for promoting knowledge exchange and human resource development aimed at integrated ecosystem management and rural community empowerment. Prof. Dzulkfli Abdul Razak, Vice Chancellor and Professor, Universiti Sains Malaysia emphasized the role that USM plays in promoting sustainable ecosystem management similar to the practice undertaken for satoyama landscape management.

Mr. Yoshihiro Natori, Senior Fellow, UNU-IAS facilitated the Opening Session. Prof. Shaharuddin Mohd. Ismail, Principal Fellow, LESTARI, Prof. A. H. Zakri, Director, USM-CGSS, Prof. Mohd. Nordin Hasan, Director, ICSU-ROAP, and Prof. Kazuhiko Takeuchi, Vice Rector, UNU facilitated discussions as Co-chairs of the Workshop. Mr. Masanori Kobayashi, Coordinator, IGES acted as Rapporteur.

The Workshop was intended mainly (1) to review the management features of satoyama-like landscapes in the Asia and Pacific region and their benefits for biodiversity conservation and human well-being, and (2) to discuss strategic elements of the Vision and Perspectives of the *Satoyama* Initiative concept as well as international partnership under the Initiative, in the context of post-2010 strategy and action plans of CBD and human development.

Two keynote presentations and various country/thematic presentations were made at the Workshop in accordance with the programme of work. And the participants were engaged in intensive discussions. This Co-chairs’ Summary is intended to reflect the thrust of discussions and highlight their key elements.

## 2. Overview of the role of satoyama-like landscape management and underlying challenges in promoting ecosystem management and improving human well-being

Ecosystems perform multiple functions as extensively presented by the 2005 Millennium Ecosystem Assessment (MA). Ecosystem services, for instance, include (1) provisioning food, fresh water, and fuel, (2) regulating climate, flood and disease, (3) cultural functions including aesthetic, spiritual, educational and recreational ones, and (4) supporting nutrient cycles, soil formation and primary production. Such ecosystem services are estimated to amount to USD 33 trillion at the global level as described by Constanza *et al* (1997) and cited in *The Economics of Ecosystem Services and Biodiversity* (2008).

Satoyama-like landscapes play a pivotal role in sustaining ecosystem services contributing to socio-economic development and biological diversity. Traditional multifunctional rural landscapes, called *Satoyama* in Japanese, exemplify an optimal and mutually supportive relationship between nature and humanity. This type of landscape management practice is prevalent across many parts of the world. Satoyama-like landscape management is also closely linked with social, cultural and spiritual aspects of human society.

However, satoyama-like landscapes have been increasingly threatened by various socio-economic challenges. The growing demand for food and fuel, prompted by population growth and economic development and entrenched poverty, drives people to exploit natural resources in an increasingly inappropriate manner. Land use conversion, growing monoculture plantation, urbanization and an aging and declining rural population are some of the causes for the decline in rural satoyama-like landscapes. According to a recent study released by the European Union, the international community will suffer greater loss from deforestation alone than from the recent financial crisis. The degradation of satoyama-like landscapes would cause an enormous and irrevocable loss to the human society. Food production analysis figures contained in the MA (2005) demonstrate the growing pressures on ecosystems. Although food production in the 50 year period from 1961 – 2003 has increased by over 250 per cent in total, and about 130 per cent per capita, the irony is that the number of undernourished people has not decreased. In fact, it has rather increased from 780 to 815 million over the 1995 – 2001 period.

A major cause for the degradation of ecosystems or satoyama-like landscapes is insufficient ecosystem service evaluation and market failure. Ecosystem services are not yet sufficiently recognized and not properly evaluated. Current policies and market mechanisms have failed to internalize the cost of managing ecosystems and/or satoyama-like landscapes sustainably. It is crucial to identify and evaluate ecosystem services, and to transform current policies and market mechanisms into ones that account for ecosystem service values. There are other driving factors that undermine satoyama-like landscapes. Urban migration, modernization of social lifestyles and changing attitudes of people, particularly youth, are among those driving factors.

The *Satoyama* Initiative proposed by the Government of Japan provides a useful impetus to reinforce management practices of rural landscapes and natural resources to sustain ecosystem services and improve human well-being. Traditional practices of sustainable natural resource and landscape management can be reinvigorated to restore and sustain ecosystem services. At the same time, it is also suggested to utilize simple and low cost and/or advanced technology to enhance ecosystem productivity and improve human well-being. In doing so, the challenge is to pursue and maintain an optimal balance between ecosystem productivity and ecological

integrity. In this respect, it is vital to develop enabling policy and institutional frameworks and to empower stakeholders. It is expected that the proposed *Satoyama* Initiative can contribute to facilitate endeavours towards achieving such policy objectives.

### 3. Common and unique features of satoyama-like landscapes in Asia and the Pacific and underlying challenges

#### (1) Satoyama-like landscapes in Asia and the Pacific – its practice and significance

Various local terminologies exist for multi-functional land use practices that deliver composite services and value. Indigenous and Community Conserved Areas (ICCAs) also serve as satoyama-like landscapes that national governments and international development cooperation agencies have been supporting in many countries in Asia and the Pacific.

Satoyama-like landscapes perform functions equivalent to what are characterized as ecosystem services. Satoyama-like landscapes provide food, water, fuel and other material to support livelihood and create income sources. In addition to food, fuel and water, rural communities benefit from satoyama-like landscapes through the extraction of non-timber forest products that include honey, traditional medicine and sap. They sustain ecosystems and their integrity including biodiversity conservation, and help prevent land degradation, soil erosion and forest fires. They provide social, cultural, religious and spiritual backbones and recreational platforms. In addition, increasing movement to promote eco-tourism expands the scope for generating revenue for rural communities.

#### (2) Key policy measures, market mechanisms and community actions

Participatory assessment of environmental and socio-economic conditions in the area concerned is a first step to introduce a collective management of satoyama-like landscapes at the community level. There is a need to develop an agreement on resource use and management among community members. National legislation and implementation guidelines provide an important basis for communities to undertake the role in participatory assessment, decision-making and management of natural resources.

While potentially supportive national legislative measures have been in place in many countries of the Asia-Pacific region, implementation capacity varies substantially across the region. Fiscal support and resource allocation to support the development and strengthening of institutional and social capacity are still limited. At present, stakeholders that steer successful practices rely on international support provided by UN agencies and international development cooperation agencies. Land tenure is not set in favour of enabling local communities to undertake responsible actions for maintaining satoyama-like landscapes in a sustainable manner for the long term. It is vital to mainstream satoyama-like landscapes or ecosystem management in national sustainable development policies.

Rural communities supporting satoyama-like landscapes are still isolated from major markets. Products from satoyama-like landscapes need to be transformed into products to be marketed preferably at higher values. In producing and marketing value-added products, rural communities of satoyama-like landscapes face multiple constraints related to technology, transport infrastructure, marketing networks and access to financial credit. Catalytic and enabling support need to be provided for reducing afore-mentioned constraints and empowering

rural communities in forging a socio-economic basis to sustain satoyama-like landscapes and improve human well-being.

Payment for ecosystem services (PES) is one of the prospective policy measures for evaluating ecosystem services and generating revenue to compensate custodians of ecosystems for their work and cover the cost of restoring depleted natural resources.

#### 4. Strategic elements of the *Satoyama* Initiative – policy tools and partnership

The following points were deemed as important in further substantiating strategic elements of the *Satoyama* Initiative.

##### (1) Policy approach

- Recognizing the urgency and importance of reversing the trend of degrading ecosystems and declining biological diversity, and utilizing the proposed *Satoyama* Initiative to reinvigorate efforts towards conserving biodiversity and ecosystems, and improving human well-being.
- Facilitating policies, measures and activities to evaluate ecosystem services, and to develop market mechanisms or compensatory schemes that can integrate ecosystem conservation and restoration costs.
- The *Satoyama* Initiative can be an umbrella concept for various forms of long-term sustainable/traditional use of land, forest and other natural resources.
- Ensuring that consideration shall be given to balancing multiple policy requirements such as ecosystem productivity as well as ecological integrity, poverty reduction, food security and other socio-economic conditions essential to sustainable ecosystem management.

##### (2) International policy linkages

- The *Satoyama* Initiative could be a tool for the achievements of the post-2010 Biodiversity Targets of CBD.
- The Initiative can be also linked with the Millennium Development Goals, particularly MDG 7 on environmental sustainability and MDG 1 on poverty alleviation.
- Ecosystem, biodiversity and climate change nexus should also be considered through, for instance, Reducing Emissions from Deforestation and Forest Degradation in developing countries (REDD), mitigation and adaptation to climate change.

##### (3) Suggested perspectives of the *Satoyama* Initiative

The Initiative will aim at supporting the followings:

- Understanding and assessing landscapes taking into account the physical, spiritual, cultural, economical and political significance, its services and functions,
- Understanding local community livelihood,
- Appraising local traditions and culture and adaptive processes to modern socio-economic conditions,
- Planning optimal use and management of ecosystem services, and
- Promoting stakeholder participation.

(4) Suggested approach to the *Satoyama* Initiative

The Initiative will be supported through the following approaches:

- Exploring value addition to ongoing policy processes and activities,
- Refining strategies to publicize the Initiative to a wide range of stakeholders and generate a greater impacts,
- While the term “*Satoyama* Initiative” is useful in promoting and marketing its brand name widely, it is worth considering to find alternative options to refer to the so-called satoyama-like landscapes in general and academic use, and
- Expanding networks for supporting the development and implementation of the Initiative by building upon existing programmes, organisation, networks and mechanisms.

(5) Components of the *Satoyama* Initiative

- Undertaking information collection and exchange including database,
- Supporting research and case studies,
- Facilitating pilot projects,
- Fostering capacity development including policy and institutional transformation and development, and training and human resource development,
- Facilitating technology transfer, and
- Supporting network activities.

(6) *Satoyama* Initiative portal site

- Further developing the portal site which was launched by UNU-IAS as a pilot one, in an open and participatory manner by loading a resourceful information such as case studies and bibliography,
- Encouraging the use of multiple media including still photos and video clips,
- Considering, where possible, the featuring of the site in languages other than English and Japanese.

5. Future steps

Based on intensive discussions at the Workshop, broad agreements have been reached on the following future steps:

- The paper on the vision and perspective of the *Satoyama* Initiative will be revised based on the discussions at the Workshop, and through informal consultations with partners, and shared with the Workshop participants in due course,
- The revised paper will be shared with key stakeholder representatives of other regions in the process of the 3<sup>rd</sup> Preparatory Meeting proposed to be held in the first part of 2010, and
- Further revision of the paper and consultations will be facilitated to gain wider and stronger support for the *Satoyama* Initiative at the tenth session of the Conference of the Parties to CBD (CBD/COP10) to be held in Nagoya, Aichi, Japan in October, 2010.