

## Discussion paper<sup>1</sup>

### The *Satoyama* Initiative

#### I. The importance of the *Satoyama* Initiative

##### (1) Background

In order to significantly slow down the rate of biodiversity loss at a global level, it is important not only to protect wilderness areas, but also to promote human activities which are compatible with biodiversity conservation in biocultural landscapes, which have been formed and maintained in many parts of the world as a result of human activities such as agriculture, forestry and fishing. In particular, by employing natural resource utilization methods which have been passed down for generations, areas derived from positive human-nature relationships are important not only to conserve biodiversity but also to inspire ideas for the realization of societies in harmony with nature.

Unfortunately, these landscapes are threatened under modern socio-economic conditions, and in many cases, have been lost. Increasing demand for fuel and food accompanied by population increase and economic growth, and deeply-rooted poverty, have caused inappropriate utilization of natural resources on the one hand, while on the other, large monoculture, ageing population in societies, and depopulation of rural areas have changed human-nature relationships in these areas markedly, resulting in the deterioration of biocultural landscapes. This situation hampers humans from enjoying the various benefits of nature (ecosystem services) in a sustainable manner and may also have deleterious effects on human well-being.

In order to improve the situation, different approaches from conventional ones like the establishment of protected areas, which prohibit human activities, are needed. In other words, it is important that the values of biodiversity conservation and biocultural landscapes, which contribute to human well-being, are recognized so that policies suited to the special features of each area might be adopted effectively, and the importance of promoting the sustainable utilization and management of these landscapes shared globally.

##### (2) Activities advocated by the *Satoyama* Initiative

The *Satoyama* Initiative aims to share such issues based on a common philosophy that values regional characteristics in order to maintain and rebuild positive human-nature relationships in certain biocultural landscapes for enhancing biodiversity conservation and human well-being.

To this end, it would be beneficial to globally share and comparatively analyze methods of sustainable utilization and management of natural resources and their associated knowledge in various parts of the world, recent problems and ways to overcome them. In addition, it would be useful to promote capacity building of affiliated parties and to strengthen the basis for activities by linking national and local governments,

---

<sup>1</sup> This paper was prepared by the organizers of the Global Workshop on the *Satoyama* Initiative with indispensable inputs from UNESCO, Ecoagriculture Partners and other organizations participating in the workshop.

international organizations, the private sector, communities and NGOs and promoting bilateral and multilateral international cooperation.

At the Fifth Conference of the Parties to the Convention on Biological Diversity (2000), the “Ecosystem Approach” was adopted as a strategy for managing land, water and biological resources in an integrated manner, and at the Seventh Conference of the Parties to the Convention (2004), the “Addis Ababa Principle and Guidelines” were adopted for the purpose of utilizing biodiversity sustainably. The Government of Japan (Ministry of the Environment) and the United Nations University-Institute of Advanced Studies (UNU-IAS) are preparing to propose the promotion of sustainable utilization and management of natural resources under the banner of the *Satoyama* Initiative which targets kinds of biocultural landscapes, one of the issues that forms the focus of the Approach and the Principles, and an area where particular emphasis is needed. The strengthening of international partnerships and the expansion of activities that may prove instrumental in achieving Post-2010 Targets will be called for at the Tenth Conference of the Parties (COP10) to the Convention on Biological Diversity.

The *Satoyama* Initiative has the potential to address food, water and fuel shortages, while respecting ethnohistorical, cultural and ecological characteristics of an area, by maintaining and rebuilding kinds of biocultural landscapes (including restoring deteriorated ecosystems through sustainable management) in ways that are well-adapted to a number of global environmental problems, including prevailing socio-economic issues and climate change. Thus, it may also contribute to the realization of policy goals linked to the advancement of humankind, such as the Millennium Development Goals, which will play a key role in human development and the alleviation of poverty. As global and national strategies are developed to achieve the level of food production needed for 9 billion people, while reducing emissions from agriculture and land-clearing simultaneously, and mobilizing large-scale carbon sequestration through new methods of agriculture and forest land management, the *Satoyama* Initiative may offer a promising landscape framework for integrating sectoral initiatives.

### (3) Areas targeted by the *Satoyama* Initiative

The areas that will be targeted by this initiative are landscapes that have been formed through human habitation and activities such as agriculture and forestry over many years, which consist of, in many cases, croplands, settlements, forests and grasslands, although they differ from place to place according to the climatic, topological, cultural and socio-economic conditions. There is no unified definitions used to describe such landscapes, and consequently they are known under various terminologies. Taking into consideration that “*satoyama* and *satoumi* landscapes” have been defined as “dynamic mosaics of managed socio-ecological systems that produce a bundle of ecosystem services for human well-being,” (Japan SGA, 2010)<sup>2</sup>, “socio-ecological production landscape” is proposed to refer to the targeted areas of the *Satoyama* Initiative in this paper. The organizers of this workshop intend to discuss further a more appropriate definition that integrates elements of biodiversity, as for instance “dynamic mosaics of managed socio-ecological systems

---

<sup>2</sup> Japan Sub-Global Assessment 2010 (in progress)

**that maintain biodiversity** and produce a bundle of ecosystem services for human well-being.”

Such landscapes formed through harmonized human-nature relationships, including agroforestry and common lands, are widely found all over the world. Each country or region has a term for such landscapes that have been utilized and managed—*muyong*, *uma* and *payoh* in the Phillipines, *mauel* in Korea, and *dehesa* in Spain and *terroirs* in France. These are generally characterized by a wise use of biological resources in accordance with traditional cultural practices that are compatible with conservation and sustainable use.

“*Satoyama*” is a Japanese word that indicates a “*yama*” (mountain/woodland/grassland) that is located in the vicinity of a “*sato*” (=village) in a Japanese agricultural or mountain settlement. *Satoyama* was used as forest for firewood, charcoal, agriculture, and hay cultivation. The compound landscape consisted of *satoyama*, agricultural land, human settlement and watershed areas in mosaic-like patterns of different types of land usage that were functionally linked. It is important to note that such *satoyama* landscapes have provided various ecosystem services to human beings including useful natural resources and have imbued local communities with a sense of their roots and identity. Furthermore, this initiative will be put forward at COP10 to be held in Japan, thus the name “*Satoyama* Initiative” has been proposed.

This paper was prepared based on the outcomes of discussions that took place at the *Satoyama* Initiative International Workshop, which was convened in Tokyo in March 2009 by the Ministry of the Environment of Japan, the Expert Meeting on the International *Satoyama* Initiative held in Tokyo in July, and on the Asia-Pacific Regional Workshop on the *Satoyama* Initiative Concept held in Penang, Malaysia in October 2009 by the Ministry of the Environment and UNU-IAS.

## II. Vision, Approach and Perspectives of the *Satoyama* Initiative

In light of previous discussions, the vision of the *Satoyama* Initiative is “realizing societies in harmony with nature.” These are societies that are built on positive human-nature relationships. In other words, they are societies where, through the maintenance and development of socio-economic activities (including agriculture, forestry and fishing) in alignment with natural processes, humans enjoy a stable supply of various natural benefits well into the future by managing and utilizing biological resources in a sustainable manner and thus maintaining biodiversity. For this purpose, it is proposed that a second look be taken at how human-nature relationships should function in these areas, and the following approach and perspectives which are aimed at maintaining and rebuilding landscapes where land may be used and natural resources utilized and managed in a more sustainable manner, are suggested.

### (1) The Three-fold Approach

In order to pave the way towards the attainment of the vision, “realizing societies in harmony with nature”, organizers of this workshop believe that activities must be conducted in accordance with the following three-fold approach. Firstly, an understanding of the diverse ecological services essential to human well-being

and the consolidation of wisdom on ensuring a stable supply of these services is indispensable. Discussion on the application of traditional knowledge to modern societies through the promotion of a fruitful knowledge dialogue is critical for a stable supply of these ecological services and to coexist in harmony with nature. Social mechanisms for supporting and promoting such endeavors is also vital. Each of these points is explained below.

i. Consolidating wisdom on a stable supply of diverse ecosystem services

Socio-ecological production landscapes supply a wide range of ecosystem services and values. Specifically, they facilitate the provisioning of various substances such as food, water and fuel which are essential for human life (provisioning services), and play a role in controlling damage by blight and insects, reducing soil erosion, improving water quality and carbon fixing (regulating services) as well as providing social, cultural, religious and psychological support (cultural services). They also play an important role as a platform for each of the above services in terms of nutrient cycling and soil formation among others (supporting services).

Natural resources must be utilized in a sustainable manner without damaging the balance and stability of ecosystems. Therefore, it is important that natural resource utilization and management by industries such as agriculture and forestry is conducted in such a way as to take advantage of natural processes and merge them with resource utilization so that a wide range of ecosystem services may be enjoyed. Doing so will ensure the circulation of natural resources and secure the reproductivity of organisms in these areas, thus strengthening the platform for human activities through the formation of healthy ecosystems.

It is conceivable that the formation of healthy ecosystems may contribute towards mitigating and coping with the effects of climate change by encouraging sustainable production systems, conserving and enhancing carbon sinks and reservoirs, reducing emissions and strengthening socio-economic foundations. It is important that the Initiative results in the consolidation of wisdom on systems that facilitate the stable provisioning of a wide range of ecosystem services.

The proactive unearthing of new ecosystem services that are in alignment with socio-economic demands, such as demand for local products, eco-tourism or for example provisioning of eco-friendly biomass resources, is also important.

ii. Integrating traditional ecological knowledge with modern science

Wisdom on the sustainable use, reuse and recycling of natural resources and harmonious co-existence of nature and human society is extensively passed down experientially, practically or traditionally. These provide important suggestions on natural resource utilization, management techniques and systems that are suited to the societies and ecosystems of those regions within the social and natural context of the area. To date, traditional ecological knowledge has contributed to the development of taxonomy, pharmacology, and agricultural science by providing information to modern sciences. In contrast to the perspective which views humans and nature as being pitted against one another, typical traditional wisdom is in many cases rooted in a world view in which people, animals, plants and other structures in the universe are linked to one another. The Initiative aims to develop production and management systems that are suited to prevailing socio-economic

circumstances and changes in the natural environment, such as climate change, by integrating modern scientific knowledge with views of nature, history, cultures, traditions and customs that produced each landscape while at the same time paying them due respect. By doing so, the Initiative will endeavour to maintain and enhance the productivity of regional industries such as agriculture and enhance human well-being.

The application of modern science in accordance with this approach may also offer opportunities to significantly increase agricultural productivity in ways that sustain or enhance ecosystem services and biodiversity in many landscapes. Examples include minimum tillage and agroforestry, domestication and improvement of traditional crops, and the incorporation of patches and networks of natural habitat in and around farmed areas that link with protected areas.

### iii. Creation of a “New Commons” or co-management system

“Commons” may be viewed as the system for co-managing natural resources on a “shared” basis, between “public,” or belonging to national or regional government entities, and “private” or belonging to individuals. In order to facilitate the sustainable utilization of natural resources, not only must human-nature relationships be brought in line with one another, human relations and social mechanisms must be the ones that make this possible.

The issue of switching to economies that evaluate biodiversity and ecosystem services properly in order to achieve sustainable usage and management is critical. Although there are many examples of sustainably co-managed resources which have been practised for a long time by communities, discussions currently underway that deal with this topic around the world are still insufficient. Through this initiative, new participants such as urban residents and the private sector that previously had only a tenuous relationship with the commons will play an active role and endeavour to maintain and develop the commons further. It opens new pathways for socio-ecological production landscapes based on the promotion of local dynamics involving a broad range of stakeholders sharing different types of knowledge.

Based on various social standards and values such as sustainability, the new associations and mechanisms will be viewed as new commons which will no longer be co-managed by local residents only.

## (2) Perspectives

The maintenance and rebuilding of socio-ecological production landscapes in various areas in accordance with the approaches outlined above, in other words, putting the sustainable utilization and management of natural resources into practice, will, in concrete terms, necessarily entail the following ecological and socio-economic perspectives.

### i. Resource use within the carrying capacity and resilience of the environment

Excessive burdening of the ecosystem and loss of biological diversity, and the knowledge associated with its conservation, will weaken the resilience of the ecosystems and lead to changes (for the worse) in their quality. For example, the grazing of domestic livestock and the gathering of firewood which are beyond the

regenerative capability of plants on that land, salt accumulation caused by the irrigation of cultivated crops to a level that exceeds the required amount of water, the cultivation of agricultural crops in areas that are unsuited to those crops and other practices cause land to deteriorate. On the other hand, in areas such as forests, grasslands and agricultural areas where unique biodiversity was once maintained to some extent by the effects of human activities, the abandonment of such activities has altered the composition of flora and agrobiodiversity in these areas, in some cases, burdening the ecosystems. Thus, it would be beneficial if such areas continued to be maintained through the sustainable use of natural resources. For these reasons, it is important that the characteristics of biodiversity and ecosystems in each area are well understood. In other words, it is essential that natural characteristics such as topographical features, soil, climate and landscape structure and processes are understood, that careful consideration is paid to the carrying capacity and resilience of the environment, and that the relationship between an ecosystem's provisioning and regulating services is highly valued. Therefore, it would be advantageous if the sustainable utilization of the natural environment was linked to the stabilization and enhancement of agricultural productivity from a long-term perspective. Furthermore, in view of the fact that ecosystems are in a continual state of flux and therefore involve a degree of uncertainty, application of adaptive management is important so that ecological services may be utilized at an optimum level within the carrying capacity and resilience of the environment. When implementing such adaptive management, it would be beneficial if plan formulation, monitoring, assessments and plans/projects are flexibly reviewed from an integrated perspective of the broad landscape.

ii. Cyclic use of natural resources

When promoting the appropriate utilization of ecosystem services, discussions must be held around how such services should be utilized and managed in consideration of the circulation of natural resources, given natural land features that include the topography, soil and climate of the area and special structural and process-related characteristics of each landscape. For example, all over the world, forest leaf litters and plant debris produced by agricultural land and livestock manure are used in fields as compost. Furthermore, as the efficient utilization of biomass fuels in local areas will result in a reduction in the volume of carbon dioxide produced (carbon dioxide is produced by the combustion of fossil fuels), much attention is being focused on this area as it will be instrumental in the realization of low carbon societies. When carrying out the kind of endeavours described above, a comprehensive cross-sectional approach will be required to ensure that the circulation of natural resources between different types of land usage functions effectively.

iii. Recognition of the value and importance of local traditions and cultures

The recent rise of interest in the biological and cultural dimensions of diversity, the interactions between them and their connection to social and economic development has resulted in an increased awareness of the crucial role that local traditions and cultures play in sustainable development. However, traditional land and resource utilization, and management practices are continually being lost in the midst of modernization. Moreover, local forms of knowledge and practices have also tended towards an increased homogenization, which in turn has determined a reduction of both biological and cultural diversity. Therefore, it is important that we pay due

respect to the unique histories, cultures and traditions that produced these landscapes as well as to the pride and efforts of local residents who continually nurtured them, by scientifically explaining the natural and social rationale behind such practices which contribute to the maintenance and revival of local cultures. When new projects are started in communities, it will be necessary to forge fair and balanced relationships between the relevant parties by incorporating deeply entrenched local knowledge with modern science. Through these, the value of socio-ecological production landscapes will once more be recognized by local residents and, by imbuing local communities with a sense of unity, it will stimulate the invigoration of rural villages. Thus, these landscapes may encourage a reduction in the population drain that occurs when people leave rural areas to seek work and other opportunities in cities.

iv. Natural resource management by various participating and cooperating entities

The participation and cooperation of various entities in each stage from planning to implementation is likely to enhance the feasibility and sustainability of discussions and practices of natural resource utilization and management. The creation of mechanisms that are based on a broad geographical area and a wide-ranging perspective are required in order to share the burdens and benefits of a region so that not only the landowners, but all of the local residents and various interested parties who are beneficiaries of the relevant ecological services may also participate and work cooperatively with one another in managing the area. Such mechanisms have the potential to bridge the existing gap between rural and urban areas. Socio-ecological production landscapes answer the needs of urban consumers and tourists who wish to regain knowledge of local cultures, consume typical products and contribute through their consumption patterns to the sustainable use of natural resources.

Activities such as green tourism, which promote co-existing and interactive relationship between cities and rural areas, and fishing communities playing a role in the management of forest conservation projects in catchment areas are just some examples of how this concept works. It would also be beneficial if stakeholders and parties from a broad cross-section of fields and industries (for example scientists and the private sector) participated actively.

v. Contributions to local socio-economies

As opposed to the commercial practice of large-scale, single-crop and mono-activity landscapes, socio-ecological production landscapes include multifunctional activities that lead to the production of provisioning (food, fibers, energy) as well as regulating and recreational services. A major potential effect of such systems is to foster sound economic development, while preserving the environment and cultural values. They have the potential to reconcile economic and social development with environmental conservation and the preservation of local diversities. For the purpose of sustainable land usage and natural resource utilization and management, it is essential that these are balanced with regional development. In order for this to happen, socio-economic systems that allow local residents to play an active role in sustainably utilizing and managing natural resources while preserving their local ecological knowledge must be developed in order to allow them to seek out the various socio-economic benefits and possibilities that exist in socio-ecological production

landscapes such as job creation (livelihoods, income), social security and the invigoration of businesses that are rooted in local industries and communities. This will entail economic and technical assistance so that the autonomy of the communities associated with land and natural resources are enhanced and communities' initiatives to operate socio-ecological production systems are facilitated. Education on the importance of sustainable natural resource utilization and management and the enhancement of local capacities will also prove vital, as will the development of the personnel who will be at the core. For the communities' revitalization, new values must be created for resources through such things as ecotourism development, the environmentally-conscious utilization of biomass resources, certification schemes for environmentally-sound agricultural methods and crop production, the development of locally-specific "baskets of goods and services" and farm-fresh schemes that directly link consumers with producers. The creation of new values for resources may facilitate assessment and valuation of the contributions made by socio-ecological production landscapes to human well-being such as food and resource security, and poverty alleviation. It is also important to evaluate the cultural and educational benefits arising from socio-ecological production landscapes as well as the social benefit of maintaining and rebuilding communities, i.e. social foundation and a sense of identity, properly, in the pursuit of maintaining/rebuilding socio-ecological production landscapes.

### III. Framework for advancing the *Satoyama* Initiative and Activities

#### (1) Framework for advancing the *Satoyama* Initiative

The Japanese Government and UNU-IAS propose to establish a partnership, "the International *Satoyama* Partnership (tentative)", towards the achievement of the long-term goal of "realizing societies in harmony with nature", that is principally aimed at increasing the number of cases where effective activities are implemented in accordance with the concept of this Initiative throughout the world. The formulation of shared global strategies including goals, activities, framework, timeframe, budget and ways of raising funds, through a steering committee to be set up, is proposed.

The International *Satoyama* Partnership will comprise of participating international agencies, national and local governments, civil societies, private companies, NPOs/NGOs, universities, research institutions and other organizations that will work together to maintain and revitalize socio-ecological production landscapes where human-nature relationships, with regards to land and natural resources use/management, are sustainable. Such a partnership has the potential of establishing a unique and innovative dialogue and collaboration platform involving diverse stakeholders and paving the way for an interdisciplinary, holistic and systems-based approach to knowledge production and sharing. Those who participate in the Initiative will be encouraged to provide practical information on related activities to be stored as case studies in the database.

In order to decide on a direction to advance the *Satoyama* Initiative, a steering committee consisting of organizations which are active will be set up and meetings held on a regular basis. The Japanese government and UNU-IAS will play a core role in the Secretariat of the Partnership for the time being. Major roles of the Secretariat include collecting case studies and developing a database, enhancing networking activities, disseminating information through the portal site, and administering the steering committee.



## (2) Activities

The main activities in the current agenda are described below. Each box provides information about the relevant activities of potential partner organizations of the International *Satoyama* Partnership. At present, the Government of Japan (Ministry of the Environment), UNU-IAS and other relevant entities are engaged in discussions on how new cooperative projects should be developed through the International *Satoyama* Partnership.

- i. Collecting, analyzing and deriving lessons from case studies and promoting the dissemination of information related to technology.

There is a need to reorient the knowledge and experiences acquired in the course of the past decades towards strategies that would promote the sustainability and productivity of socio-ecological production landscapes.

Examples which illustrate the sustainable use/management of natural resources in socio-ecological production landscapes and their benefits to human well-being will be gathered and analyzed. Examples gathered will be integrated into a searchable database which would include a search function based on region. This will enable people to refer to lessons that were derived from individual case studies. In order to avoid duplication and to be efficient, the database will be linked to existing databases of partners.

Examples gathered will be analyzed and the social systems and technology supporting sustainable use/management of natural resources in the landscape will be reviewed. Based on the results, information on effective social systems and technologies will be disseminated through the portal site so as to promote their application in the field based on their character and regulatory conditions.

The vision of the **World Agroforestry Centre (ICRAF)** is a rural transformation in the developing world as smallholder households strategically increase their use of trees in agricultural landscapes to improve their food security, nutrition, income, health, shelter, energy resources and environmental sustainability.

The Centre's mission is to generate science-based knowledge about the diverse roles that trees play in agricultural landscapes, and use its research to advance policies and practices that benefit the poor and the environment. ICRAF is expected to make important contributions to the *Satoyama* Initiative, through its research on tree, shrub and palm components of agroforestry systems, and on understanding ecosystem processes in production landscape mosaics.

**Conservation International (CI)** seeks to predict, test, and demonstrate the human well-being benefits of conserving our global biodiversity. Because the primary threat to most biodiversity is the conversion of natural habitats, the primary societal response must be to safeguard these key biodiversity areas through protected areas and other means. The conservation of such sites provides numerous benefits to human well-being including climate change mitigation and adaptation, and maintenance of hydrological processes and cultural values. However, while such site level conservation is essential, it must often be embedded within regional level approaches to ensure that socio-ecological landscapes and seascapes are managed in ways which ensure the maintenance of important ecological processes, as well as sustainable production and bundled ecosystem services. For example, the survival of no less than 20% of threatened mammal, bird, turtle, and amphibian species urgently requires such regional level action; especially those which occur in freshwater and marine biomes (Boyd et al. 2008 *Conserv. Lett.* 1: 37 C43). CI sees great potential to harness these data to provide underpinning biodiversity conservation goals for *Satoyama* Initiative, as well as numerous opportunities to use CI field demonstrations (variously labeled as “biodiversity conservation corridors”, “conservation growth poles”, and “green economies”) as examples within the *Satoyama* Initiative.

**Bioversity International** is one of the 15 agricultural research centres of the Consultative Group on International Agricultural Research. Bioversity undertakes research that enables farmers to better maintain and use agricultural biodiversity, particularly crop and forestry diversity. The organization works through partnerships to ensure that its research is relevant and reaches those who need it. Bioversity has worked with partner research institutions, civil society organizations, farmers and rural communities around the world on the maintenance of crop and other agricultural biodiversity on farms and in home gardens, often in socio-ecological production landscapes. This research increases our understanding of why, where, and how farmers throughout the world continue to maintain and use agrobiodiversity as part of their livelihood strategies. Bioversity is also hosting the Platform for Agrobiodiversity Research (PAR). The Platform is currently working on a framework for the identification and recognition of indigenous peoples and rural communities whose maintenance and use of agrobiodiversity figures prominently in their strategies for coping with climate and ecosystems changes, with a particular focus on socio-ecological production landscapes.

## ii. Promoting research

The partnership aims to conduct as many case studies as possible in various parts of the world. In addition to developing methods and tools for assessing ecosystem services provided by socio-ecological production landscapes for human well-being as well as promoting new research on various merits of these landscapes, measures for ensuring that the results of research are instrumental in policy and decision making will be discussed and proposed. It is intended that the results of the Sub-global Assessment of *Satoyama* and *Satoumi* in Japan (Japan SGA) will be made available and used for relevant activities through the portal site of the

*Satoyama* Initiative. Furthermore, participation of scientists and stakeholders engaged in Japan SGA in the international SGA network that has been evolving as a part of the follow-up to the Millennium Ecosystem Assessment will be facilitated, and will ensure that the outcomes of assessments and research on socio-ecological production landscapes are fully utilized in future global ecosystem assessments.

Relevant interdisciplinary research will be promoted by organizing and providing information collected through the case studies mentioned in i. above.

**UNU-IAS** is playing a pivotal role in the Sub-global Assessment of *Satoyama* and *Satoumi* in Japan (Japan SGA) which applies the Millennium Ecosystem Assessment conceptual framework to the Japanese socio-ecological production landscapes. This assessment is currently underway and its findings are expected to be published at CBD-COP10. The assessment of ecosystem services provided by such socio-ecological production landscapes — called *satoyama* and *satoumi* in Japanese — and their contributions to human well-being at the local, sub-national, and national levels, is the first of its kind even among the various SGAs being conducted throughout the world. The assessment process has enabled the Initiative to derive lessons from the Japanese cases and to identify gaps in knowledge and information for designing a research agenda on the relevant areas. Furthermore, the Initiative is conducting a research project with the aim of providing policy options for building sustainable societies in Japan by examining the contribution of ecosystem services and biodiversity to human well-being and by developing quantitative and qualitative scenarios to explore a plausible future for Japan, building on the outcomes of the Japan SGA.

**UNESCO** through the ecological and earth science division has recently become active in fostering the exchange of information and good practices on innovative sustainable territorial and rural development approaches based on the promotion of local diversities and the conservation of bio-cultural heritage.

The aim of this new UNESCO initiative is to improve the understanding of such initiatives and projects, which under several names share the same approach and similar objectives. The role and value-addition of UNESCO in relation to the sustainable management of socio-ecological production systems is the reliance on natural and social sciences, culture, education, communication and information to deal with issues related to these systems following a holistic approach. The Man and the Biosphere (MAB) Programme and the World Network of Biosphere Reserves, which aim at utilizing interdisciplinary approaches in the quest of solutions for reconciling development with the conservation and sustainable and equitable use of biological and cultural diversity, is in a unique position to contribute to collecting and disseminating information and experiences needed for the maintenance of sustainable bio-cultural landscapes.

Protected areas were defined by **IUCN** in 2008 as clearly defined geographical spaces, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. Of the 6 Protected Area Management Categories recognized by IUCN, Category V landscapes are very similar to *satoyama* and similar landscapes envisaged by the *Satoyama* Initiative. In 2008, IUCN released two investigative reports on the merits of Category V landscapes, which are protected areas where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

At the present time, Ministry of the Environment Japan, UNU-IAS and IUCN are engaged in discussions on IUCN issuing further investigative reports in collaboration with the *Satoyama* Initiative in the future, especially in the field of food security and the role of agro-ecosystems in the conservation of biodiversity. IUCN's work on wild relatives of domesticated plants, medicinal plants, and ecosystem services will also contribute to the Initiative.

### iii. Fostering bilateral and multilateral ODA projects and publicizing excellent case studies

The International *Satoyama* Partnership will join forces with donor organizations to promote the steering of more resources into projects for maintaining and rebuilding socio-ecological production landscapes. In concrete terms, this means that information on the policies, priority areas and application processes of various aid organizations will be shared. Furthermore, the Partnership will engage in discussions that will include aid organization representatives.

As the financial mechanism of the CBD, the **Global Environment Facility (GEF)** plays an important role in financing conservation and sustainable use programmes and projects of developing countries and countries with economies in transition. The GEF has been providing substantial support towards mainstreaming biodiversity into production landscapes and seascapes, in addition to its recognized role in supporting protected area systems worldwide. Through its projects, the GEF has helped integrate the sustainable use of biodiversity into the sectors of the economy that strongly impact biodiversity outside of protected areas, such as agriculture, forestry, fisheries, tourism and mining sectors. For example, the GEF has invested in many agro-biodiversity projects that revitalize traditional knowledge, sustainable forest management projects, and integrated ecosystem management projects with indigenous and local communities. The GEF's support is particularly centred on efforts to remove the barriers that prevent public and private sector actors from mainstreaming biodiversity. It supports the development of the policy and regulatory frameworks that promote and reward mainstreaming and builds the necessary institutional capacity. Moreover, in partnership with the private sector, it supports efforts to catalyze markets for biodiversity goods and services and promotes voluntary environmental certification to generate biodiversity gains through market mechanisms.

UNDP implements the **GEF Small Grants Programme (SGP)** as a corporate programme of the GEF. Through a decentralized governance mechanism, the SGP provides small grants directly to national NGOs, community-based organizations (CBOs), and indigenous peoples' organizations in over 120 countries worldwide. Since 2001, SGP has worked with the UNESCO World Heritage Centre and the United Nations Foundation (UNF) to develop a model for the collaborative governance of WH sites entitled 'Community Management of Protected Areas Conservation' (COMPACT). SGP has been consolidating its support to Indigenous and Community Conserved Areas (ICCAs) in collaboration with UNDP, UNEP-WCMC, various IUCN Commissions, Indigenous Peoples' networks, as well as international NGOs. The feasibility of creating linkages between the *Satoyama* Initiative and SGP is currently being explored in the following areas:

- Documentation of additional field studies and lessons learned of outstanding examples of agrobiodiversity conservation linked to traditional livelihoods and living cultural landscapes;
- Strengthen the linkage between the *Satoyama* Initiative and the global consortium on Indigenous and Community Conserved Areas (ICCAs);
- Consideration of the GEF SGP as "fast delivery mechanism" for possible partnership funding of socio-ecological production landscapes across the world.

**UNDP Environment and Energy Group (EEG)** has various programmes for scaling-up local action to improve the effectiveness of development interventions in the area of environment and energy, poverty reduction, governance, and conflict prevention and management. These programmes include the Biodiversity Programme; Community water Initiative (CWI); Energy Access Programme; Equator Initiative; Community-Based Adaptation (CBA); as well as the UN Reducing Emissions from Deforestation and Forest Degradation Programme (UN-REDD), in collaboration with UNEP and FAO. UNDP-EEG has been supporting the *Satoyama* Initiative concept development through introduction of potential sites for field studies. The feasibility of creating linkages between the *Satoyama* Initiative and UNDP/EEG on the following activities is being considered for further discussion.

- Additional field studies
- Support to UNDP programme countries to support sustainable use of biodiversity in production landscapes through safeguarding traditional livelihoods

**FAO's Globally Important Agricultural Heritage Systems (GIAHS) Initiative** seeks to promote the international and national recognition of dynamic conservation, including where necessary the revitalization of agricultural heritage systems and their key elements of global significance. The synergetic activities between GIAHS and the *Satoyama* Initiative are under discussion.

GIAHS Initiative works on three distinct levels of intervention: (1) at Global level, by identification, selection and recognition of GIAHS; (2) at National level, by capacity building in policy, regulatory and incentive mechanisms to safeguard these outstanding systems and promote them as sustainability benchmark systems; and (3) at Local level, by empowerment of local communities and providing technical assistance for sustainable resource management, promoting local knowledge and enhancing viability of these systems.

GIAHS Initiative endeavours to promote understanding, raise global awareness of and support for agricultural heritage systems worldwide by (i) working towards the establishment of long-term international efforts for their safeguard and promotion; (ii) encouraging national governments to devise policies that support and promote GIAHS in their countries; (iii) working directly with small farmers, family farming communities and other stakeholders; and (iv) sharing lessons learnt from the dynamic conservation of GIAHS sites with relevant institutions and GIAHS communities.

#### iv. Promoting personnel and capacity development

The Initiative will encourage the implementation of training projects and thus promote the development of personnel and enhance the capabilities of community leaders and government officials who are involved in maintaining and rebuilding socio-ecological production landscapes. Topics may include ways to forge and sustain a collaborative vision for the landscape across sectors, technical information on biodiversity-friendly production practices and landscape design, and market and policy approaches to support socio-ecological production landscapes.

**JICA** recognizes nature conservation as an important area of international cooperation and aims to "achieve harmony between nature and human activities." Specifically, JICA emphasizes three conservation goals: sustainable use of natural resources by local residents, biodiversity conservation, and sustainable forest management. Within the contexts of these goals, JICA provides support that enables developing countries to develop mechanisms for conserving their natural environments with minimal external support. This assistance is pursued by combining policy and institutional improvement, organizational strengthening, establishment of reliable survey and monitoring systems, appropriate technological development, supporting sustainable livelihood activities, and raising environmental awareness. JICA has numerous activities for sustainable rural development which are relevant to the proposed *Satoyama* Initiative's activities. JICA plans to organize a *Satoyama*-themed training for participants from developing countries in 2010.

**United Nations University (UNU)**, as its response to the UN Decade of Education for Sustainable Development (2005-2014), launched the Education for Sustainable Development (ESD) Programme at its Institute of Advanced Studies (UNU-IAS). As one of the major activities of ESD Programme, UNU proposes the establishment of the Regional Centre of Expertise on ESD (RCE) and its networking. An RCE is a network of formal, non-formal and informal education and learning-related organizations which are mobilized to deliver ESD at the regional (sub-national)/local level. As of December 2009, 74 RCEs have been acknowledged by UNU all over the world. RCEs exchange information and good practices on ESD globally and have also developed several thematic networks. The RCE biodiversity thematic network discusses how ESD can contribute to the conservation and sustainable use of biodiversity, and is exploring the exchange of teaching materials.

**Ecoagriculture Partners**, an international NGO, coined the term ‘ecoagriculture’ to convey a vision of rural communities managing their resources to jointly achieve three broad goals at a landscape scale – what they refer to as the “three pillars” of ecoagriculture landscapes: enhance rural livelihoods, conserve or enhance biodiversity and ecosystem services, and develop more sustainable and productive agricultural systems. The linkages that would maximize the effectiveness of Ecoagriculture Partners and the *Satoyama* Initiative are under discussion. Ecoagriculture Partners’ programme includes various relevant elements:

- Leadership training course development, with courses developed and tested in Mesoamerica and East Africa. Each course is nationally and/or regionally focused.
- Documentation of case studies of ecoagriculture landscapes around the world
- The Landscape Measures Initiative to develop tools and methods for multi-stakeholder planning and monitoring landscape initiatives, and support development of landscape initiatives
- Market strategies for agricultural landscapes, including payments to farmers for ecosystem services, and eco-labelling of agricultural and forest products
- Mobilizing alignment of policies for agriculture and food security with policies for ecosystem management and climate change adaptation and mitigation, at various levels.

**Terroirs et Culture**, works in France, the Mediterranean and internationally.

Terroir is today defined as a geographical area with defined boundaries where a human community generates and accumulates along its history a collective production knowledge based on a system of interactions between bio-physical and human factors. The combination of techniques involved in production reveals originality, confers typicality, and leads to a reputation for a good originating from this geographical area.

Terroirs et Culture's four thrusts are:

- Stimulation of local development and training,
- Research and innovation;
- Facilitating the sharing of knowledge and experiences;
- Communication and collaboration.

The association supports a platform (Planète Terroirs) and an active network of actors to organize scientific reflections, debates and exchange of experiences on Terroirs.

Linkages which would maximize the effectiveness of Terroirs et Culture and the *Satoyama* Initiative are under discussion.

#### v. Promoting network activities

Information sharing between various entities interested in the activities of the *Satoyama* Initiative will be encouraged through a portal site. Information will be disseminated and awareness raised about socio-ecological production landscapes so as to promote the Initiative and to ensure that the concept of the Initiative is reflected in the natural resource and land usage-related activities of each entity.

The Secretariat will promote network activities among members on the portal site particularly through the operation of member sites, and, by actively disseminating information, simultaneously encourage more entities to have an interest and participate in the activities of the Initiative. Workshops for the purpose of encouraging information sharing within regions may also be considered.