Keynote Speech

Valuing Nature: The Satoyama Renaissance

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Satoyama is a Japanese concept for long-standing traditions associated with land management practices. These traditions have, in the past, allowed sustainable use of the resources encompassed by *satoyama* thus providing a historical model for environmental stewardship and resource management that contributes to human well-being. Foundational to *Satoyama* is the positing of a relationship of interaction between humans and their environment, coupled with the notion that properly maintained the relationship is mutually beneficial. It is for this reason that the concept of *satoyama* has importance not only for national policy-making in Japan, but may be applicable at the international level as well. The chief challenge with respect to the latter is determining whether or not *satoyama* can be scaled up and globalised such that they can deliver economic and human development opportunities to local communities in developed and developing countries.

The recently completed Japan *Satoyama Satoumi* Assessment (JSSA) shows that *Satoyama* can be seen as *a dynamic mosaic of managed socio-ecological systems producing a bundle of ecosystem services for human wellbeing.* The primary characteristics of these landscapes being:

1. *Satoyama* is a mosaic of both terrestrial and aquatic ecosystems comprised of woodlands, plantation, grasslands, farmlands, pasture, irrigation ponds and canals, with an emphasis on the terrestrial ecosystems.
2 *Satoyama* landscapes are managed with a mix of traditional knowledge and modern science (reflective of the socio-ecological contexts).
3. Biodiversity is a key element for the resiliency and functioning of *satoyama* landscapes.

Key findings from the JSSA include:
Mosaic composition: The critical feature of *satoyama* landscapes is the mosaic composition of different ecosystem types that are managed by humans to produce a bundle of ecosystem services for human well-being.
Drop in resiliency: *Satoyama* have undergone significant changes over the last fifty years which have caused a drop in the resiliency of the coupled socio-ecological production systems to provide a sustainable supply of ecosystem services.
Consequences for Humans and Biodiversity: Continued loss of *satoyama* landscapes has important and potentially negative consequences for human well-being and biodiversity. There is, however, still a need for more research on *satoyama* and the contribution they might have in the future for human well-being.
Integrated interventions: Unconnected and piecemeal approaches to address biodiversity change and to protect environmental resources have had only limited success.

Integrated approaches including citizen participation have been used increasingly over the past ten years and show potential for reducing biodiversity loss and maintaining sustainable flows of ecosystem services.

New "Commons" : Critical to the success of a more integrated and holistic approach to ecosystem management is creation of a new "commons," understood as a system co-management of ecosystem services and biodiversity within private and public land, and as a single system to produce a bundle of ecosystem services for direct and indirect use by society. The new "commons" could provide the basis for sustainable development in both developing and developed countries.

Key recommendations Include:

1. Develop policies that take a *satoyama* approach in managing natural resources. This approach recognizes the mosaic composition of ecosystem types and their inherent interlinkages.

2. The design of new of institutions under the lens of landscape governance that can manage both public and private lands is needed to govern the "new commons," allowing decentralised decision making on the use of land and water bodies within a mosaic structure of different ecosystem types.

3. Design institutions that complement the institutions of the new commons, which ensure the equitable access and use of ecosystem services provided by *satoyama*.

4. A ten-year research program be established with adequate funding and human resources to gain better understanding of the dynamics of *satoyama* landscapes, their linkages, and their relationship with human well-being and biodiversity, which can provide inputs to international assessment processes like the Intergovernmental Panel on Climate Change (IPCC) and the potential new Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).

5. Comprehensive, integrated assessments of potential *satoyama* landscapes across a number of developing and developed countries be initiated to establish baselines on ecosystem services, and to form an epistemic community of scholars and practitioners within and across countries who can continue to study and provide guidance to policy-makers on *satoyama* landscapes.

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