# Satoyama-like landscape

#### Yoshihiro NATORI

Senior Fellow
United Nations University Institute of Advanced Studies

25 July 2009 Elizabeth Rose Hall, UNU HQ, Tokyo, Japan



# Essence of the Satoyama-like landscape

- Satoyama-like landscapes are those landscapes that were formed by humans, who exerted an influence on the local natural environment as a result of a series of land usage and natural resources use/management.
- The quality of biodiversity of *Satoyama*-like landscapes is not compatible with that of pristine ecosystems but *Satoyama*-like landscapes may nuture unique biota.
- Various ecosystem services which Satoyama-like landscapes provide will contribute to the stability and improvement of human well-being.
- 人間が地域の自然に働きかけ、土地利用や自然資源の利用・管理を通じて形成されてきたランドスケープ
- 生物多様性の質は原生自然とは比較にならないが、特有のものを育むことが可能
- 多様な生態系サービスの提供を通じて、地域住民をはじめとする人間の福利の向上 に貢献



#### Essence of the Satoyama-like landscape (cont'd)

- The concept that human living in harmony with nature has influenced the way people think about regional planning in suburban areas.
- Traditional ecological knowledge, system and techniques has been introduced to other area as sustainable systems and methods.
- The focus of the Initiative is rebuilding sustainable relationships between human and nature.
- 近年は農林漁業の中で育まれた自然と人間の共存の仕方が、都市近郊に おける地域づくりの考え方にも影響
- また、ある農林漁業地域で育まれた伝統的知識や技術が、他地域で持続 的な方法として新たに導入される例もある
- 本イニシアティブの焦点は、持続的な自然一人間関係の再構築という点



### 1. Formation processes

#### Influences exerted by humans on local nature

- Agriculture, forestry and inland freshwater and coastal fishing activities are the central human activities. Their influences are longstanding and widespread.
- Traditional systems and methods are being reintroduced or applied to other rural areas.
- Even in suburban areas where relationships between human and nature tend to weak, new relationships with human and nature have been developed recently

#### 人間の地域の自然に対する働きかけ

- 農林漁業は、長期的に広範囲にわたって大きな影響を及ぼしており、中心的なもの
- 伝統的なシステム、技術の再導入や、応用されている地域
- 人と自然の関係が薄れがちな都市近郊地域でも、近年は新たな人間と自然との関係性が構築

# 2. Structure and Ecological Processes

- Mosaics of various land uses
- Functional relationships between each types of land use
- arranged in accordance with natural environmental and geographical conditions
- **Dynamic** land usage (e.g., shifting cultivation, the regular logging of forests)
- Vegetation composed of different stages of succession
- Utilizing the resilience of nature in an appropriate and positive manner
- Complex land usage that imitates the structure of natural ecosystems
- 異なる土地利用が**モザイク状**に配置
- 個々の土地利用の間が機能的に結びつく
- それぞれの土地利用は、自然条件や、地理的条件に応じた配置
- **動態的な土地利用**(移動耕作や、林地における定期的な伐採)
- 異なる遷移段階の植生
- 自然復元力を適切かつ積極的に利用した土地利用
- ・ 自然生態系の構造に模倣した複合的な土地利用



## 3. Usage and Management

- The harvesting and management of natural resources is performed by the local community on a shared basis
- There are rules which prevent the overexploitation of natural resources. (the time and frequency and quantity)
- In recent years, various entities including urban residents,
   NPOs, Industries have participated.

- 地域コミュニティによる自然資源の共同利用や管理
- 資源の過剰利用の防止につながるルールが存在(自然資源の 採取の量、時期、頻度など)
- 近年は、都市住民、NPO、企業なども含む、多様な主体が参加



### 4. Regional characteristics

- Various human-nature relationships based on each natural and socio-economic situations
  - developed through agriculture, forestry and fishing activities
  - developed through educational use or maintenance of forest by communities in suburban ares
- Various types of landscapes
  - Cultivated land and forests as a center, and grass land, irrigation ponds and ditches, and residential areas around.
  - Lakes or costal zones where aquatic resources such as fish and seaweed, are gathered and utilized,
  - Forest and agricultural land in suburban area
- 地域の自然的、社会経済的な状況の中で、様々な自然一人間関係性が構築
  - -農林漁業
  - -都市近郊における樹林地等の管理及び教育等
- 多様なランドスケープ
  - -耕地や林地を中心に、草地、ため池や水路、居住地
  - 魚や海草など水域からの自然資源を採取する湖岸や沿岸域
  - 都市近郊の樹林地や農地を内包するランドスケープ

# 5. Changeability

- Satoyama-type landscape has been changed into forms in accordance with prevailing socio-economic conditions or technological development.
- Sometimes the relationships were positive and sometimes the land and natural resources were used unsustainable manner.
- The concept of Satoyama-like landscape involves these changes.
- 社会・経済状況、あるいは技術の発達に応じて形を変化させて きた
- 良好な関係性が構築された時期、持続的でない土地・資源利 用のされ方が行われていた時期
- 里山的ランドスケープの概念はこのような変化を内包したもの



### 6. Biodiversity

- Biodiversity in satoyama-like landscapes relieve the decrease of biodiversity.
   Satoyama-like landscapes nuture different and unique biodiversity and could support pristine ecosystem.
  - Various types of habitats derived from mosaic type and dynamic land use systems
  - Unique biota are sometimes nurtured in satoyama-like landscapes as seen in Japan as a result of appropriate human intervention to nature.
  - Alternative habitats and buffer-zone-to-wilderness role
  - Creation of habitats and corridors in suburban areas
- 低下を緩和させるものとして、別のまたは特有の生物多様性を育むものとして、 あるいは原生的な自然生態系を支えるものとして、捉えられるべき
  - モザイク状あるいは動態的な土地利用によって生じる**多様なハビタット**
  - 自然に対する適度な人為的攪乱の結果として、日本でみられるように、特 有の生物相がはぐくまれることがある
  - 原生自然の代替生息地、またはその緩衝帯としての役割
  - 都市近郊地域におけるハビタットと移動経路の創出



#### 7. Ecosystem services and 8. Human well-beings

- Production of various types of food and other goods makes livelihood of local residents more stable.
- Healthy ecosystems as basis of agriculture, forestry, fishery and animal husbandry will contribute to the stable and improved livelihoods of the local residents and to steady supply of products to the residents in wider area including urban areas.
- Biodiversity and/or attractive sceneries will create opportunities for education and recreation by which enhancement of local economy can be achieved.
- Contribute to the formation of positive social relationships and improvement of human health.
- Contribution to the food security, poverty, energy and global warming-related issues
- 人々の生活に必要な多様なものを供給し、地域住民の生計の安定に寄与
- 農林漁業の基盤としての健全な生態系は、地域住民の生計、あるいは都市域を含む広範囲の地域の生産物の安定供給に寄与
- 里山的ランドスケープのもたらす良好な景観や生物多様性は、エコツーリズムや環境教育の機会を提供することで、地域住民の経済的な向上に貢献
- 良好な社会関係の形成や健康面の向上にも寄与
- 食料の安全保障、貧困、エネルギー、地球温暖化等の問題の解決に貢献

