



IUCN
WORLD PARKS CONGRESS
SYDNEY 2014



1
UNITED NATIONS
UNIVERSITY

IUCN WORLD PARKS CONGRESS, 17 NOVEMBER 2014 "HERITAGE SESSION"



**THE GLOBALLY IMPORTANT AGRICULTURAL
HERITAGE SYSTEMS(GIAHS) AS AN INSPIRING
SOLUTION TO ENHANCE RESILIENCE IN
SUSTAINABLE TRADITIONAL AGRICULTURE**

"Hani Rice Terraces" (Yunnan, China)

PROF. KAZUHIKO TAKEUCHI
Senior Vice-Rector, United Nations University

Challenges for Traditional Agriculture

Threats

- Rapidly disappearing in face of **social, political and economic changes**.
- Especially so in a **growing Asia**; industrial agriculture, monoculture, rural depopulation, aging society etc.
- Conservation of traditional agriculture is vital to the future of humankind, as an ecological/cultural resource of utmost global significance.

Strategies

- Dynamic conservation and management of traditional agriculture systems must link with preservation of cultural diversity and economic viability of the local farming populations.
- Study of **indigenous farming ways** can facilitate discovery of valuable agro-ecological principles for development of **sustainable agro-ecosystems** and **biodiversity conservation** strategies in both developed and less developed countries.

Solution

- Thus **Globally Important Agricultural Heritage Systems (GIAHS)** initiative was conceived by FAO to conserve traditional agricultural systems in 2002

Globally Important Agricultural Heritage Systems (GIAHS)

3

- An initiative started by FAO on the occasion of the 2002 Johannesburg Summit
- Designation framework to safeguard the world's shrinking traditional agricultural systems that contribute to sustainable development
- Identifies, supports and safeguards GIAHS and their **livelihoods, agricultural and associated biodiversity, landscapes, knowledge systems and cultures**
- Dynamic conservation concept of GIAHS as resilient, living systems



Hani rice terraces
(Yunnan Province, China)

World
GIAHS
sites map



- Today, **31 sites** are designated as GIAHS
- By region, **74% are in Asia**
(19.5% in Africa, 6.5% in South America)
- Located in emerging economies/developing countries, with the exception of Japan

(As of Nov 2014)

Resilience in GIAHS: A Holistic, Integrated Approach

4

GIAHS 5 Key Selection Criteria

1. Food & livelihood security



2. Biodiversity & ecosystem function



3. Knowledge systems & adapted technologies



4. Culture, value systems & social organisations (Agri-culture)



5. Remarkable landscapes, land & water resources management features



- GIAHS are selected on the 5 key criteria in which collectively, promotes a holistic, integrated approach of adaptive management and dynamic conservation
- Emphasize importance of human activities and role in conservation
- If well conserved, GIAHS are resilient to ecological, social and economic changes and disturbances

Resilience in GIAHS

5

Intercropping /Integration of plants & animals



Tea forests (China)



Rice-Fish Culture (China)

Rice terrace agro-ecosystems



Contour terracing
(the Philippines)



Terraced Rice Paddies
(Korea)

Resilience

Diversity of indigenous species



Quinoa of Andean
Agriculture (Peru)



Potatoes of Chiloé
Agriculture (Chile)

Biodiversity conservation for sustainable farming



Sado's Satoyama with Crested Ibis (Japan)

Aso Region, Kumamoto Prefecture, Japan

6



GIAHS: Managing Aso Grasslands for Sustainable Agriculture



Grasslands maintained through annual grass mowing and burning by volunteers

Sustainable use of grasslands by providing pastures for raising and grazing of *Aka-ushi* (red cow) and grass fertilizers for farming

- Aso region spreads over 1,079 km² around active volcanic craters, home to one of the world's largest caldera with a population of 67,000 people
- Designated as National Park(1934), GIAHS (2013), Global Geopark (2014) and applying for World Heritage (in preparation)
- Maintains its resilience because it is being dynamic conserved through human activities of sustainable use



Enhance Resilience of GIAHS

7

Enhance Resiliency

- Strengthen ecosystem functions and services
- **Integrate traditional and scientific knowledge**
- Create **Green Economy** to secure livelihoods



Irrigation ponds system
 (Kunisaki-Usa Integrated Forestry, Agriculture & Fisheries System, Oita)

Establish New Commons

- Inherit /revitalize traditional culture
- **Bring together multi-stakeholders** from local as well as urban areas



Ownership System for
 Rice Terrace Conservation
 (Satoyama with Crested Ibis, Sado)

Create New Business Models

- Brand local products
- Add value to agriculture through a **regional multi-industrial system** approach
- Promote agri-tourism and alternative livelihoods



Branding of "Noto Terrace Rice"
 (Satoyama & Satoumi, Noto)

- Resilience of GIAHS can be further strengthened by **enhancing its resilience to ecological and social changes**, encouraging **multi-stakeholders participation** by **establishing "new commons"**, and **creating innovative new business models** in agriculture and its related industries

THANK YOU

8



United Nations University (Shibuya, Tokyo)