

## GLOBALLY IMPORTANT AGRICULTURAL HERIATGE SYSTEMS (GIAHS)

Working Group on Sustainable Agriculture and Rural Development Carpathian Convention 27 September 2018 Yoshihide Endo GIAHS Coordinator FAO



# I. GIAHS Concept and Operation





# GIAHS Programme

- 1. GIAHS have been formed in harsh geographic/environmental conditions and transferred by farmers for many generations;
- 2. FAO GIAHS programme is to identify and designate the remarkable agricultural systems of global importance.
- 3. Purpose of the GIAHS programme:
  - 1) **Dynamic Conservation** of the sites, namely:
    - (i) <u>Conservation</u>, (ii) <u>Adaptation to contemporary conditions</u> and (iii) <u>Sustainable development</u> of the site:
  - 2) Showcases for successful experiences for sustainable agriculture

### **Dynamic Conservation**



Policy makers, NGOs

Academia, Researchers

**Maintenance of Core Elements of GIAHS** 

- **Adaptation to Contemporary** Environment
- Social/Economic **Development**

**Making Action Plan** AP should be made for **Dynamic Conservation** 

Measures to **Achieve Dynamic** Conservation

All possible

**Implementation** of

**Action Plan** 

**Monitoring of** its Impacts

Correction

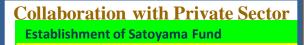
Evaluation

### **Possible Measures for Dynamic Conservation**

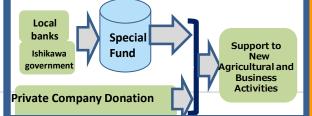
- 1. Awareness Enhancement/Information Dissemination of GIAHS
- 2. Strengthening the Systems and Capacity Building for Action Plan Implementation
- 3. Improved Management of Agricultural Resources
- 4. Conservation and Sustainable use of Agrobiodiversity
- 5. Improvement of agricultural production methods
- 6. Sales Promotion of the Agricultural Products
- 7. Promotion of tourism/cultural activities/local cuisine
- 8. Establishment of Finance Supply Mechanisms

# Actual Measure taken for Dynamic Conservation -The Cases in Ishikawa (GIAHS sites in Noto)-

Establishment of the Executive Organization -- "Noto Regional GIAHS Executive Committee"



Ishikawa Provincial Government and local banks established a special fund for GIAHS promotion. With the operational profit from the fund and voluntary donation from private companies are jointly used to support business activities.



#### **Branding agricultural products**

 Specific local brand was established to certify that the agricultural products are produced in the site in a way to contribute





**Sales Promotion in large cities** 







#### **Activities for Biodiversity Promotion**





#### **Human Resource Development**

In collaboration wit local universities, education on agriculture and ecology, Sasayama are carried out to nurture those who will support the local agriculture in the GIAHS site.



### Workshop, Seminars and Conference





Promotion of Exchanges with Urban residents and local agro-tourism



Promotion of Agro-Tourisms/ Participatory agricultural tour/Educational tour

Local Cuisine Promotion





Rice Field Ownershi

### Five Criteria for GIAHS Designation

#### 1. Food and livelihood security

The proposed agricultural system contributes to food and/or livelihood security of local communities.

#### 2. Agro-biodiversity

Agricultural biodiversity, as defined by FAO as the variety of animals, plants and micro-organisms that are used directly or indirectly for food and agriculture, including crops, livestock, forestry and fisheries.

#### 3. Local and Traditional Knowledge systems

Maintain local and invaluable traditional knowledge, ingenious adaptive technology and management systems of natural resources, including biota, land, water which have supported agricultural

#### 4.Cultures, value systems and social organisations

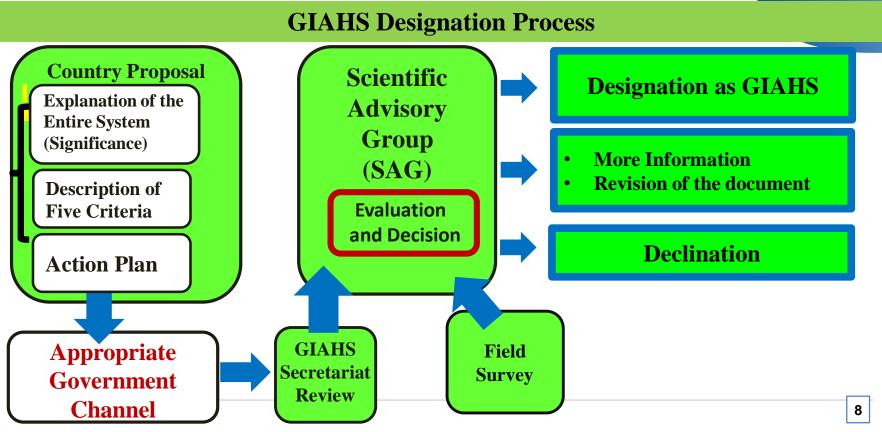
Cultural identity and sense of place/Social organizations, value systems and cultural practices associated with resource management and food production

#### **5. Landscapes and Seascapes Features**

GIAHS sites represent landscapes or seascapes that have been developed over time through the interaction between humans and the environment, and appear to have stabilized or to evolve very slowly

### **GIAHS Proposal Documents PLS See the Proposal Template**

- 1. Explanation on the Significance of the Proposed GIAHS Site
  - Explain the global importance;
  - The <u>Historical Background and Contemporary Relevance</u> of the site.
  - Summarize the Features and Characteristics of the system
- 2. Explanation on the Characteristics of the Proposed Site 5 Criteria
- 3. Action Plan for the Proposed GIAHS Site



### The Impacts of GIAHS Designation

The followings are general expected impacts whose degrees may change depending on the sites.

- Mind set changes of the farmers and other stakeholders;
- Enhanced public attention to the site and enhanced awareness of general public to sustainable agriculture traditional practices, agrobiodiversity;
- Many measures and actions (public and private) can be taken for good management of the GIAHS site;
- Promotion of product sales and agro-tourism;
- Conservation of endemic varieties and species;

### II. GIAHS Sites in the World



Year

21 countries

Globally Important
AGRICULTURAL
HERITAGE
Systems

Countries

	Algeria	<ol> <li>Ghout System (Oases of the Maghreb)</li> </ol>	2011
	Bangladesh	2. Floating Garden Agricultural Practices	2015
	Chile	3. Chiloé Agriculture	2011
	China	4. Rice Fish Culture	2005
		5. Wannian Traditional Rice Culture	2010
		6. Hani Rice Terraces	2010
		7. Dong's Rice Fish Duck System	2011
		8. Pu'er Traditional Tea Agrosystem	2012
		Aohan Dryland Farming System	2012
		10. Kuajishan Ancient Chinese Torreya	2013
		11. Urban Agricultural Heritage — Xuanhua Grape Garden	2013
		12. Jiaxian Traditional Chinese Date Gardens	2014
		13. Xinghua Duotian Agrosystem	2014
		14. Fuzhou Jasmine and Tea Culture System	2014
		<ol> <li>Diebu Zhagana Agriculture-Forestry-Animal Husbandry Composite System</li> </ol>	2017
		16. Zhejiang Huzhou Mulberry-dyke & Fish-pond System	2017
		<ol> <li>Traditional Mulberry System in Xiajin's Ancient Yellow River Course</li> </ol>	2018
		<ol><li>Rice Terraces in Southern Mountainous and Hilly Areas, China</li></ol>	2018
	Egypt	19. Dates production System in Siwa Oasis	2016
	India	20. Saffron Heritage of Kashmir	2011
		21. Koraput Traditional Agriculture	2012
		22. Kuttanad Below Sea Level Farming System	2013
	Iran	23. Qanat Irrigated Agricultural Heritage Systems, Kashan	2014
	Italy	24. Olive groves of the slopes between Assisi and Spoleto	2018
	Japan	25. Noto's Satoyama and Satoumi	2011
		<ol><li>Sado's Satoyama in Harmony with Japanese Crested Ibis</li></ol>	2011
		<ol> <li>Managing Aso Grasslands for Sustainable Agriculture</li> </ol>	2013
		28. Traditional Tea-grass Integrated System in Shizuoka	2013
		<ol><li>Kunisaki Peninsula Usa Integrated Forestry, Agriculture and Fisheries System</li></ol>	2013
		30. Ayu of the Nagara River System	2015
		31. Minabe-Tanabe Ume System	2015
		32. Takachihogo-Shiibayama Mountainous Agriculture and Forestry System	2015
		<ol> <li>Osaki Kodo's traditional water management system for sustainable paddy agriculture</li> </ol>	2017
		34. Nishi-Awa Steep Slope Land Agriculture System	2018
		35. Traditional WASABI Cultivation in Shizuoka	2018
	Kenya	36. Oldonyonokie/Olkeri Maasai Pastoralist Heritage	2011
	Mexico	37. Chinampas Agricultural System in Mexico City	2017
	Morocco	<ol><li>Oases System in Atlas Mountains (Oases of the Maghreb)</li></ol>	2011
	Peru	39. Andean Agriculture	2011
	Philippines	40. Ifugao Rice Terraces	2011
	Portugal	41. Barroso Agro-Sylvo-Pastral System	2018
	Republic of Korea	42. Traditional Gudeuljang Irrigated Rice Terraces in Cheongsando	2014
		43. Jeju Batdam Agricultural System	2014
		44. Traditional Hadong Tea Agrosystem in Hwagae-myeon	2017
		45. Geumsan Traditional Ginseng Agricultural System	2018
	Spain	46. Malaga Raisin Production System in Axarquia	2017
		47. Salt production system of Añana	2017
	Sri Lanka	48. The Cascaded Tank-Village System in the Dry Zone of Sri Lanka	2017
	Tanzania	49. Engaresero Maasai Pastoralist Heritage Area	2011
		50. Shimbue Juu Kihamba Agroforestry Heritage Site	2011
	Tunisia	51. Gafsa Oases (Oases of the Maghreb)	2011
_	LIAF	52 Al Ain and Liwa Historical Date Palm Oases	2015

Name of sites/systems



### Case 1: Floating Garden in Bangladesh

- Use invasive plants and other organic material to produce the floating bed-garden
- Multi-crop production and use of the degraded floating bed as fertilizer
- Require low energy input

Result of adaptation by the farmers to the floods and arable land pressure



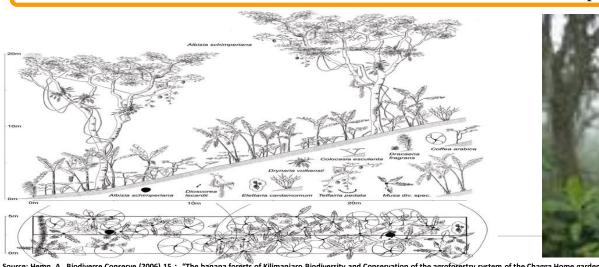




### Case 2: Agroforestry on the slope of Mt. Kilimanjaro

- Mix cropping system featured with several layers of vegetation
  - Endemic timbers, banana, coffee/fruit trees as well as staple crops

Provide sun shades and micro-climate for favourable conditions to all crop production and soil management







### **Case 3: Hani Rice Terrace (China)**

- Magnificent landscape
- Land management with integration of forests, habitations and rice paddy fields = highly adapted water management in dry season threatened area
  - Maintenance of locally adapted rice varieties

Adaptation to harsh dry season and mountainous areas into highly productive and sustainable production system

The summit of East Guanyin Mountain

1km 2km

19km 20km Honghe River valley√

Terrace

Forest-

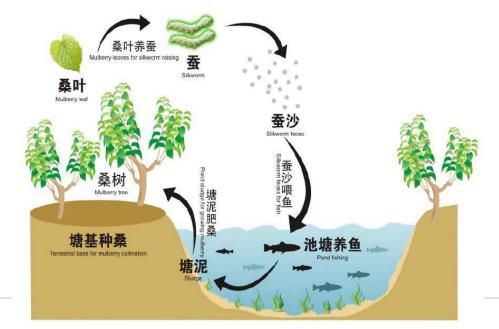
terrace.

14.8km 16km

10.8km 12km



# Case 4: Agro-Ecological production System Zhejiang Huzhou Mulberry-dyke & Fish-pond system





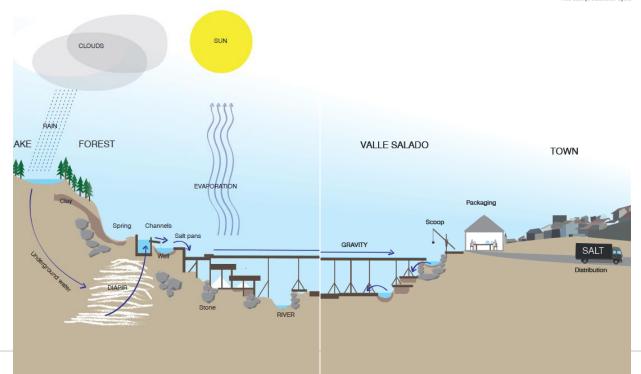


### Case 5: Salt Production System of Añana, Basque Country, Spain









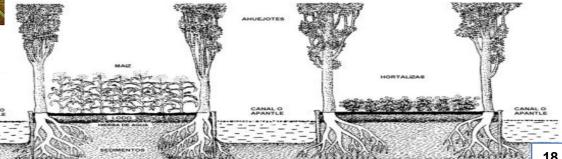




### **Case 6: Chinampas in Mexico**





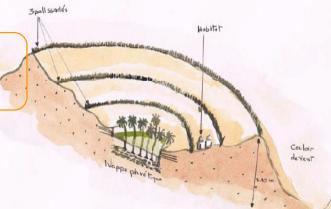




### Case 7: Gout Oases systems in Algeria

- No irrigation system in the desert
- No need to use machineries: Use of wind to create cavities
- Multi-cropped system complying all organic requirements
- Adapted way of life to the Saharian desert
  - High adaption to arid areas with water and sand management
  - Combatting desertification





# Thank you!

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