Overview of the FAO GIAHS Programme

1st Regional workshop for Globally Important Agricultural Heritage Systems (GIAHS) in Azerbaijan

30th September 2021
11.00 Baku Time (9.00 CET)

Yoshihide Endo
GIAHS Coordinator
FAO
I. GIAHS Programme Operation
What is GIAHS?

Remarkable land use systems and landscapes which are rich in globally significant biological diversity evolving from the co-adaptation of a community with its environment and its needs and aspirations for sustainable development.
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 Programme Operation and Site Management

Member Country (Potential site) → FAO GIAHS Secretariat → Scientific Advisory Group (SAG) → GIAHS site and Member Country Implementation of Action Plan to Achieve Dynamic Conservation (Conservation +)

Proposal Making → Editorial Review → Evaluation and Designation of GIAHS sites → Action Plan

All possible Measures (new and ongoing) → All Stakeholders

Prior Informed Consent (PIC)

GIAHS Sites

- Action Plan Implementation
- Improvement of Agriculture and its Products
- Market Promotion
- Resource Management (Restoration & Conservation)
- Knowledge Sharing & Transfer
- Biodiversity Conservation
- Promotions of Cultures & Local Cuisines
- Tourism Promotion

GIAHS Programme Operation and Site Management

Scientific Advisory Group (SAG)

Improvement of Agriculture and its Products

Market Promotion

Resource Management (Restoration & Conservation)

Knowledge Sharing & Transfer

Biodiversity Conservation

Promotion of Cultures & Local Cuisines

Tourism Promotion
Multifaceted Nature of the GIAHS Programme (Relevance to FAO Activities)

- Agro-Ecology
- Agro-Forestry
- Family Farming
- Agrobiodiversity/Biodiversity
- Climate Change
- Food Value Chain and labeling
- Pastoralism Hub
- Indigenous People
- Mountain Partnership
<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>Name</th>
<th>Title and Institute/Office/University/Ministry</th>
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</thead>
<tbody>
<tr>
<td>Africa</td>
<td>Kenya</td>
<td>Helida Oyieke</td>
<td>Chief Research Scientist at National Museums of Kenya</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>China</td>
<td>Min Qing Wen</td>
<td>Professor of Center for Natural and Cultural Heritage Institute of Geographic Sciences and Natural Resources Research, CAS</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>Japan</td>
<td>Kazuhiko Takeuchi</td>
<td>Senior Vice-Rector of United Nations University (Tokyo)</td>
</tr>
<tr>
<td>Europe</td>
<td>Italy</td>
<td>Mauro Agnoletti</td>
<td>Associate Professor of University of Firenze</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>Brazil</td>
<td>Patricia Goulart Bustamante</td>
<td>Researcher of EMBRAPA (Brazilian Agricultural Research Corporation)</td>
</tr>
<tr>
<td>Near East</td>
<td>Tunisia</td>
<td>Slim Zekri</td>
<td>Associate Professor, Head of the Department of Natural Resource Economics, College of Agricultural &amp; Marine Sciences, Sultan Qaboos University</td>
</tr>
<tr>
<td>North America</td>
<td>Canada</td>
<td>Anne MacDonald</td>
<td>Professor in Sophia University Graduate School of Environmental Studies (Japan)</td>
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Governance and Working Structures

FAO
- Director General
- Office of Climate Change, Biodiversity and Environment (OCB)
- GIAHS Coordinator
  - GIAHS Secretariat
  - Ms Clelia Puzzo
  - General Staff
  - Ms Christiane Kessl

Independent Expert Group
- SAG Scientific Advisory Group

FAO Member Countries
- Japan
- China
- Italy
- Spain

Nomination
- Communication
- Report
- Guidance
- Voluntary Contribution

FAO Committee on Agriculture
II. GIAHS Sites in the World
62 GIAHS sites in 22 countries

- Asia: 40 sites
- North Africa: 8
- Europe: 7
- Sub-Saharan Africa: 3
- Latin America: 3
- North America (Mexico): 1
GIAHS Sites in the World

Massai Pastoral System Kenya

Soave Vineyards, Italy

Chinampas, Mexico City

Takachio Siibayama Japan
Floating Gardens, Bangladesh

Salt Valley of Añana, Spain

Hani Rice Terraces, China

Agroforestry in Mt. Kilimanjaro, Tanzania

Andean Agriculture, Peru
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
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.
Ingenious local traditional knowledge includes:

- Weather forecast: rain fall and pasture growth patterns
- Types of grass to be eaten by different kinds of animals (cattle, sheep, goat, etc.) and for other uses (such as medicine)
- Movement of wild animals
- Animal breeding
Case 4: 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
Chinampas in Mexico
Cascade Tank Systems in Sri Lanka (efficient water use)

Human made water reservoirs for agriculture well linked with those located downstream, as a result of a long term struggle for insufficient amount of water availability for rice production.
Wasabi Traditional Cultivation in Japan

- In a terraced method, water flows from the upper level fields to the lower levels and drains into rivers.
- Surface soil is sandy with high permeability.

Fig. 6 “Tatamiishi Style” Wasabi Field Mechanism
Fish Passes
Biotopes
Drastically Reduced Chemical Inputs
Winter Flooding
Small Ditches

Revival of Ecosystem Based on Traditional Knowledge/Practices

- Restoration of Biodiversity
- Harmonization with the Environment

GIAHS site in Sado Island (Japan)

Eco-labeling of local rice

Crested Ibis on Paddy Fields
Andean Agriculture (Cusco-Puno Corridor, Peru)

Unique Andean crops maintained with traditional agricultural practices and technologies
III Action Plan for Dynamic Conservation
Possible Measures for Dynamic Conservation and their Expected Impacts

1. Dissemination of GIAHS and the GIAHS site
2. Awareness Enhancement of the GIAHS site values
4. Improvement of Agricultural Resources/Infrastructures
5. Participation of rural residents in decision making
6. Empowerment of women in the rural community
7. Conservation and Sustainable Use of Agrobiodiversity
8. Sales Promotion of the Agricultural Products
9. Tourism, cultural activities and local cuisines

Expected Impacts

- Mind set changes of local farmers
- Promotion of agricultural production in the site
- Increased Incomes and welfare of family farmers
- Enhanced Values of agricultural products
- Conservation of agrobiodiversity/biodiversity
- Development of value changes for farmers
- Promotion of agrotourisms
**Selected Measures from the Action Plan in Nishi-Awa Steep Slope Land Agriculture System (Japan)**

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Measures</th>
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<tbody>
<tr>
<td><strong>1. Support to new or young farmers</strong></td>
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(1) Measures to:  
➢ increase new farmers  
➢ empower women  
➢ bring people back to the region for farming  
(2) Education for new farmers  
(a) Subsidies and facility development support for young new farmers  
(b) Agri-tech schools for education on farming techniques/management  
(c) Delivery of newsletters/local agricultural products to people from this region;  
(d) Development of an agricultural model unique to this area for post-retirement new farmers;  
(e) The initiative by women farmers group to promote the sales of local farm produce.  
(f) Promotion of farm labour contracts by the local Agricultural Cooperatives |
| **2. Farmland conservation** |  
(a) Farmland conservation advisors are appointed who assess the state of farmland and propose conservation measures to the village’s business representatives.  
(b) Use of direct payments to mountainous regions by the Japanese MAFF for expanding cultivation and restoration of abandoned lands |
| **3. Promotion of Branding** |  
(a) Approving regional products which convey the quality and techniques of the region |
| **4. Creating new business through food, farming and tourism** |  
(a) A business study group was formed (by local farmers, tourism, trade and manufacturing businesses, local government, urban companies) to create new businesses and services connecting the diverse industries of food, farming and tourism |
| **5. Cross-industry collaboration and business creation** |  
(a) Promotion of the collaboration among agriculture, forestry, food companies, traders and manufacturers for development of brand and new value-added products and new sales channels;  
(b) Conservation of the local crops and food culture by providing products and foods to school lunch, farmer’s restaurants and hotels  
(c) Sales of local products at farmers markets |
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| **Conserving/Improving the production system** | i. Conserving the traditional drying floors;  
   ii. Improving the environmental sustainability (prevention of soil erosion, biodiversity, renovation of old trees).  
   iii. Technological improvements (Tools, agricultural machinery, farming techniques, drying)  
   iv. Actions to prevent the abandonment of vine growing lands (for young people) |
| **Marketing strategies** | i. Promotion (products promotion in retail outlets, food fairs and sports events, strengthening with consumers through SNS)  
   ii. Synergies between companies. Business collaboration;  
   iii. Product diversification; |
| **Conserving and transmitting agricultural heritage** | i. Handicraft linked to the productive system;  
   ii. Conserving and transmitting the heritage used for production;  
   iii. Conserving and transmitting cultural richness; |
| **Promoting tourism** | i. Tourist itineraries;  
   ii. Gastronomy;  
   iii. Involving citizens in agricultural tasks |
| **Research and dissemination** | i. Research and Studies (e.g., research of climate change impacts on grape growing and raisins production, collaborating with the European Institute of Mediterranean food, etc.)  
   ii. Dissemination of information on this GIAHS site. |
Certification of Agricultural Products in compliance with specific practices in the GIAHS sites

**Shizuoka Tea Site**
- **Authentication** of the Tea produced with the traditional method (Chagsaba method)

<table>
<thead>
<tr>
<th>認定区分</th>
<th>認定表示</th>
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<td>5～25%未満</td>
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<tr>
<td>25～50%未満</td>
<td>![Leaf Icon]</td>
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<tr>
<td>50%以上</td>
<td>![Leaf Icon]</td>
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- 150 tea producers have gained certificates.
- **Incentives** for conserving the traditional method.

**Sado Island Site**
- **Eco-Labeling** for the Rice produced to ensure biodiversity and coexist with the natural birds

**Ecosystem Revival**
- Winter Flooding
- Special Ditch
- Biotope

**Chemical Reduction**
- Drastically Reduced

Labelling
Activities in GIAHS sites for Dynamic Conservation
Market Promotion of Agricultural Products from GIAHS sites

➢ Sales Promotion at Trade Fair, Product Exhibition
➢ Development of short supply chains (farmers market)
➢ Finding a niche market
➢ Use of Digital technology (block chain)
➢ E-commerce
➢ Ensuring the quantity and quality of agricultural products
➢ Development of new products
➢ Certification of quality, compliance with the production methods
➢ Branding
➢ Ecolabeling
➢ Transmission of specific features of GIAHS sites to consumers
Activities in GIAHS sites for Dynamic Conservation
Market Promotion of Agricultural Products from GIAHS sites

Logo and Labelling designed by individual GIAHS sites

Chile
Japan
Portugal
China
Korea
There are many GIAHS sites which have been actively working to develop and promote different types of tourism: agrotourism, eco-tourism, gourmet tourism.

**Activities in GIAHS sites for Dynamic Conservation**

**Actual Cases of Agrotourism/Rural tourisms in GIAHS sites**

- **Nishi-Awa Steep Slope Agriculture site** (Japan)
  - Establishment of a specific local organization as a coordinator of the tourism (Sora-no-go)
  - Well arranged menu of activities for tourists
  - Active acceptance of student for educational tour
  - Taking advantage of the unique features of the local environment, cultures and agriculture (GIAHS site).
  - Enriched information in the homepage with multiple languages ([https://nishi-awa.jp/english/](https://nishi-awa.jp/english/)) and brochures

- **Chiloé Island site in Chile**: Promoting the link of tourism with gastronomy using local agricultural products in GIAHS site.

- **Oasis GIAHS sites such as Gouht System in Argelia and Gafsa site in Tunisia**
Activities in GIAHS sites for Dynamic Conservation
Actual Cases of Agrotourism/Rural tourisms in GIAHS sites

Construction of infrastructures for GIAHS sites visitors
➢ Cycling roads in “Fascia olivata Assisi-Spoleto”
➢ Plates for visitors on the stories behind olive trees (Ancient Olive Trees Territorio Sénia, Spain)
➢ Museum

Increasing number of tourists China, Fish and Rice Site

Increasing number of tourists, Shizuoka, Tea Site
Establishment of the Executive Organization -- “Noto Regional GIAHS Executive Committee”

Establishment of Special Fund in collaboration with Private Sector (Satoyama Fund)

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 to conservation of the site.

Sales Promotion in large cities and trade fairs
Activities for Biodiversity Promotion

Human Resource Development

In collaboration with 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 Ownership
Observations: Achieving Good Outcomes of Dynamic Conservation of GIHAS sites

1. Many GIHAS sites have high potentials to achieve good performance of conservation and development, taking advantages of the distinctive features of their GIHAS sites.
2. For this purpose, well-arranged action plan must be made and implemented.
3. There should be an organization/association to coordinate the activities of action plan.
4. Cooperation among national and local governments, private sectors, NGO, research institutes and local communities (farmers) are important.
5. Utilization of effective methods, tools and approaches are essential.
6. All activities for dynamic conservation, including tourism promotion, should contribute to conservation and development of agriculture and farmers in GIHAS sites. (These income generating activities are not to replace agriculture.)
7. The experiences of GIHAS sites can be shared with and applied to other rural areas for their development.
IV. GIAHS Proposal Making
Before starting an application to GIAHS

➢ Ensure that local farmers and farming communities in the potential site
  • fully understand the GIAHS both in the application process and after the designation;
  • agree with and are involved in the whole GIAHS process.

➢ Ensure the involvement of all relevant stakeholders including national and local governments, researchers, farmers and local industry in the GIAHS activity.
GIAHS Proposal Development

Structure of a GIAHS Proposal Document


I. Summary Information Table

II. Executive Summary

III. Significance of the proposed system

IV. GIAHS selection criteria
   ➢ Food and livelihood security
   ➢ Agrobiodiversity
   ➢ Local and traditional knowledge systems
   ➢ Cultures, value systems and social organizations
   ➢ Landscape and seascape features

V. Action plan for dynamic conservation
III. Significance of the proposed system

This chapter describes the **global importance** of the proposed agricultural system with emphasis on its heritage values at the global level (unique features that qualify the system as GIAHS.)

**PART A Specific values and features:** The specific values and unique features of the proposed system that distinguish the system as a GIAHS site.

**PART B Historical relevance:** Historical development of the system, highlighting the main processes that have historically contributed to the evolution of the proposed system.

**PART C Contemporary relevance:** How the system contributes to addressing contemporary global issues and challenges such as food security and nutrition, social and economic welfare, climate change adaptation, rural development and conservation, and the sustainable use of biodiversity, among others.

**PART D Comparative analysis:** Differences and peculiarities of the proposed system compared with other similar agricultural systems in the same country and/or in other countries.
GIAHS Proposal Development

Action Plan

➢ Identify, assess, and analyze threats and challenges

➢ Detailed description of concrete actions ongoing and/or new,

➢ How each action will respond to the threats and challenges.

➢ The main responsible stakeholder in each activity

➢ Concrete and feasible time frame for the implementation of each action.

➢ Indicate a tentative budget estimate and the funding sources.

➢ How monitoring and evaluation of the implementation and impact of the Action Plan will be undertaken.
GIAHS Proposal Development

Other Important Aspects for a GIAHS Proposal Document

**Land Use Map** with clear boundaries of the proposed GIAHS site (pls see the Annex of the Guidelines)
Thank you very much for your attention
If you have any question, please write to
giahs-secretariat@fao.org
Please visit our site: http://www.fao.org/giahs/en/
Muchos Gracias