

Overview of the FAO GIAHS Programme

1st Regional workshop for Globally Important Agr<mark>icultural</mark> Heritage Systems (GIAHS) in Azerbaijan

> **30th September 2021 11.00 Baku Time (9.00 CET)**

> > Yoshihide Endo GIAHS Coordinator FAO



I. GIAHS Programme Operation



GIAHS Definition

What is GIAHS?

Remarkable land use systems and landscapes

which are rich in globally significant biological diversity

evolving from the <u>co-adaptation</u> of a community

with its <u>environment</u>

and its <u>needs</u> and aspirations for <u>sustainable development</u>

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

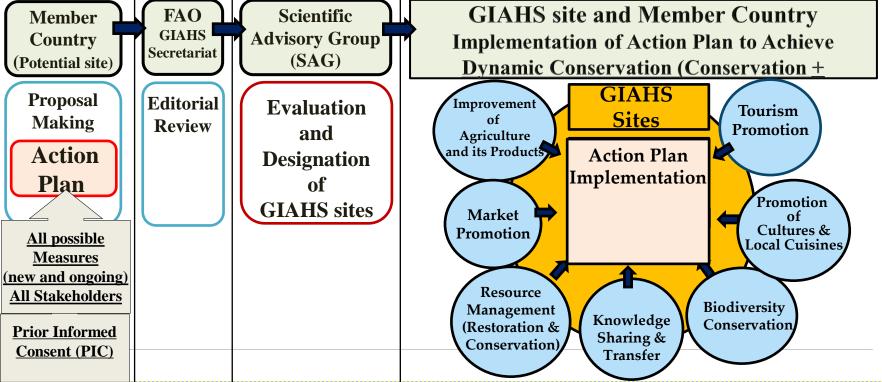
4.Cultures, value systems and social organisations

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

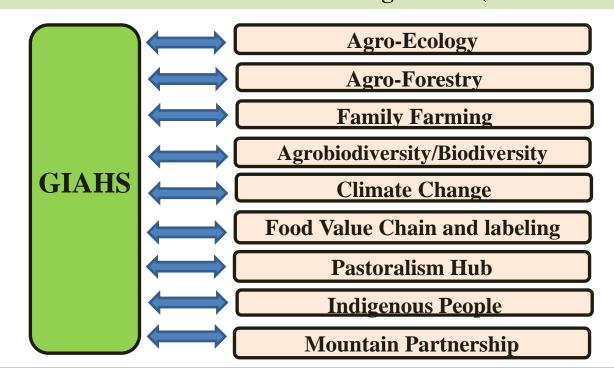
5. Landscapes and Seascapes Features

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

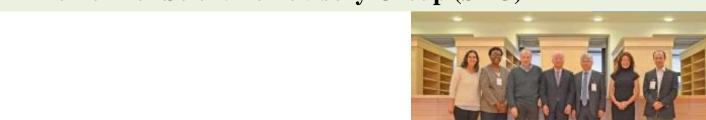
GIAHS Programme Operation and Site Management



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

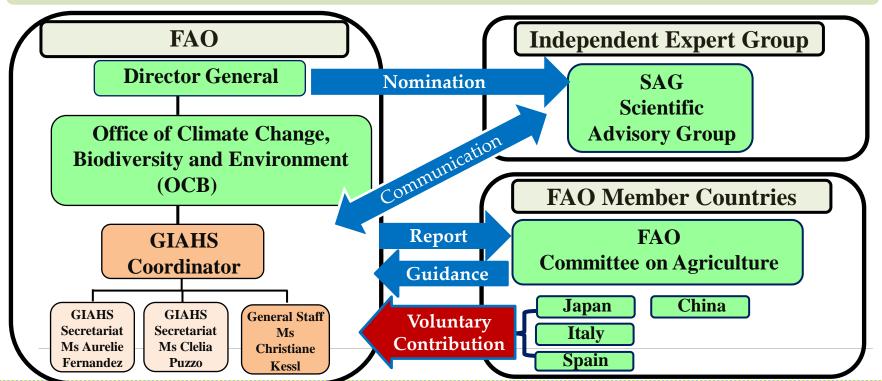


The Former Scientific Advisory Group (SAG)



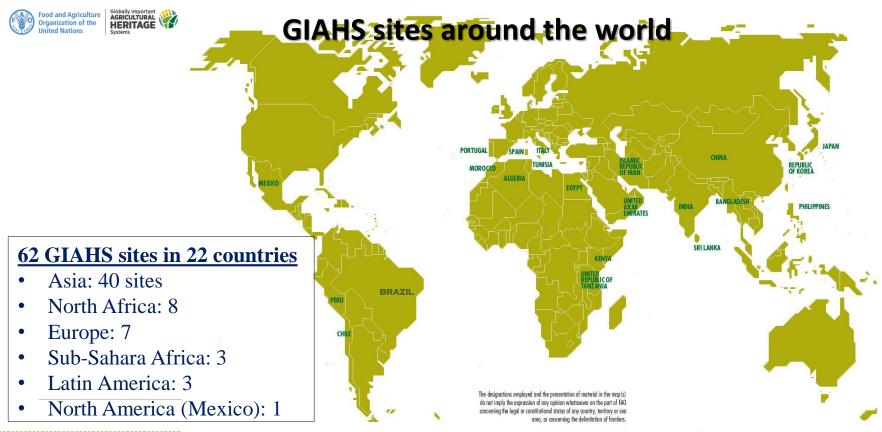
Region	Country	Name	Title and Institute/Office/University/Ministry
Africa	Kenya	Helida Oyieke	Chief Research Scientist at National Museums of Kenya
Asia/Pacific	China	Min Qing Wen	Professor of Center for Natural and Cultural Heritage Institute of Geographic Sciences and Natural Resources Research, CAS
Asia/Pacific	Japan	Kazuhiko Takeuchi	Senior Vice-Rector of United Nations University (Tokyo)
Europe	Italy	Mauro Agnoletti	Associate Professor of University of Firenze
Latin America and	Brazil	Patricia Goulart	Researcher of EMBRAPA
Caribbean		Bustamante	(Brazilian Agricultural Research Corporation)
Near East	Tunisia	Slim Zekri	Associate Professor, Head of the Department of Natural Resource Economics, College of Agricultural & Marine Sciences, Sultan Qaboos University
North America	Canada	Anne MacDonald	Professor in Sophia University Graduate School of Environmental Studies (Japan)

Governance and Working Structures



II. GIAHS Sites in the World

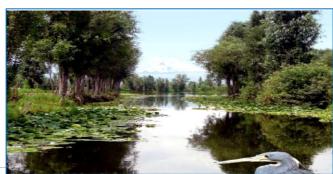




GIAHS Sites in the World



Massai Pastoral System Kenya



Chinampas, Mexico City



Soave Vineyards, Italy



Takachio Siibayama Japan







Floating Gardens, Bangladesh



Agroforestry in Mt. Kilimanjaro, Tanzania



Salt Valley of Añana, Spain



Andean Agriculture, Peru



Hani Rice Terraces, China



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

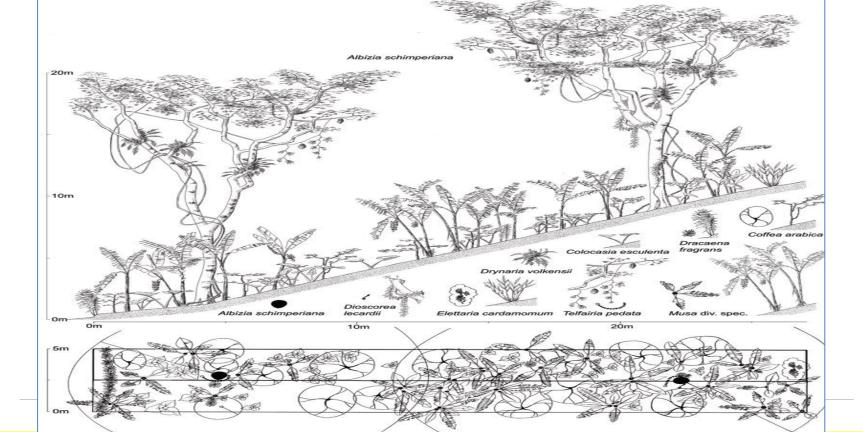
Provide sun shades and micro-climate for favourable conditions to all crop production and soil management















Maasai Pastoral System: Kenya and Tanzania







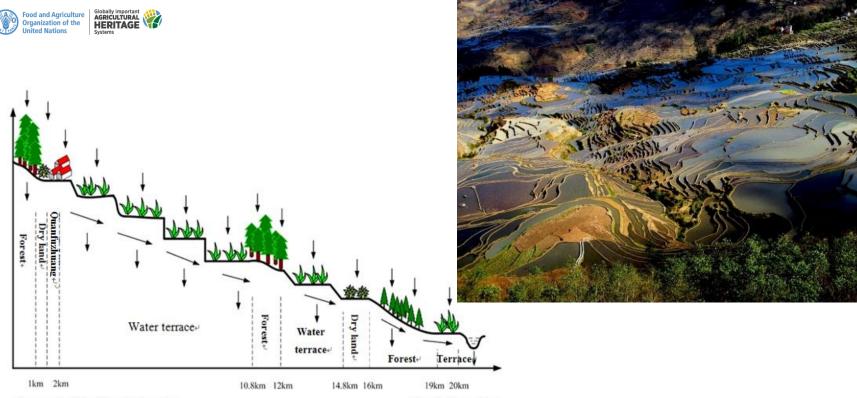
- ➤ Ingenious local traditional knowledge includes;
 - Weather forecast: rain fall and pasture growth patterns
 - Types of grass to be eaten by different kinds of animals (cattle, sheep, goat, etc.) and for other uses (such as medicine)
 - Movement of wild animals
 - Animal breeding



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

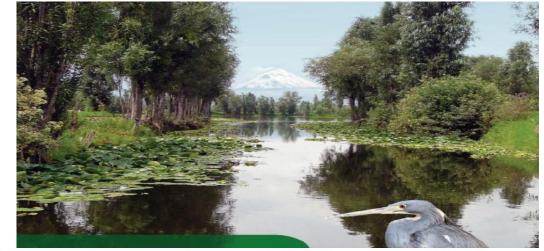


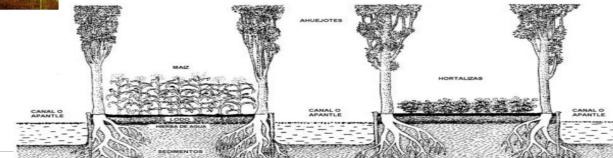
The summit of East Guanyin Mountain

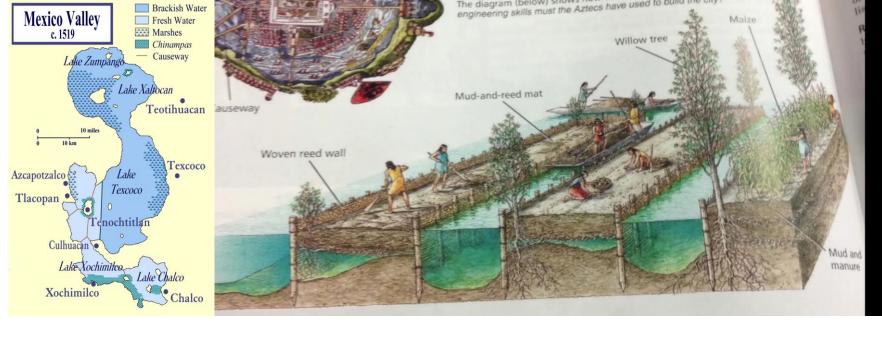
Honghe River valley

Chinampas in Mexico





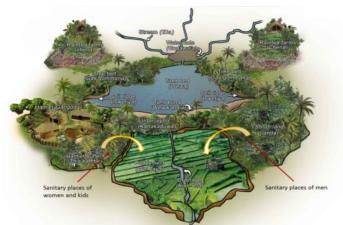


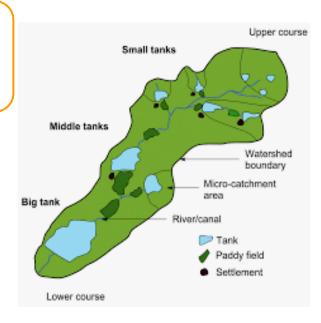




Cascade Tank Systems in Sri Lanka (efficient water use)

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

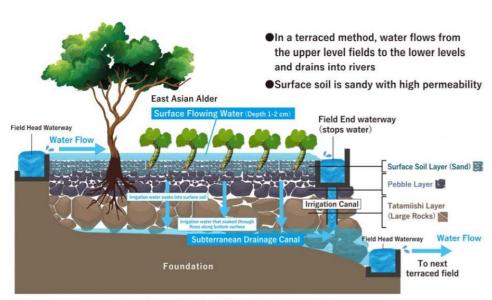


Fig. 6 "Tatamiishi Style" Wasabi Field Mechanism





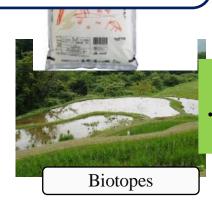


Small Ditches

Fish Passes

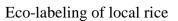
Revival of Ecosystem Based on Traditional Knowledge/Practices

GIAHS site in Sado Island (Japan)



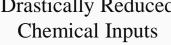
- Restoration of **Biodiversity**
- Harmonization with the **Environment**







Drastically Reduced **Chemical Inputs**



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 3. Basic Framework for Action Plan Implementation 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 famers
- 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)			
Strategies	Measures		
 Support to new or young farmers (1) Measures to: increase new farmers empower women bring people back to the region for farming (2)Education for new farmers 	 Subsidies and facility development support for young new farmers Agri-tech schools for education on farming techniques/management Delivery of newsletters/local agricultural products to people from this region; Development of an agricultural model unique to this area for postretirement new farmers; The initiative by women farmers group to promote the sales of local farm produce. Promotion of farm labour contracts by the local Agricultural Cooperatives 		
2. Farmland conservation	 Farmland conservation advisors are appointed who assess the state of farmland and propose conservation measures to the village's business representatives. Use of direct payments to mountainous regions by the Japanese MAFF for expand cultivation 		

and restoration of abandoned lands

lunch, farmer's restaurants and hotels Sales of local products at farmers markets

Approving regional products which convey the quality and techniques of the region

A business study group was formed (by local farmers, tourism, trade and manufacturing

businesses, local government, urban companies) to create new businesses and services

Promotion of the collaboration among agriculture, forestry, food companies, traders and

Conservation of the local crops and food culture by providing products and foods to school

manufacturers for development of brand and new value-added products and new sales channels;

connecting the diverse industries of food, farming and tourism

3. Promotion of **Branding**

and tourism

creation

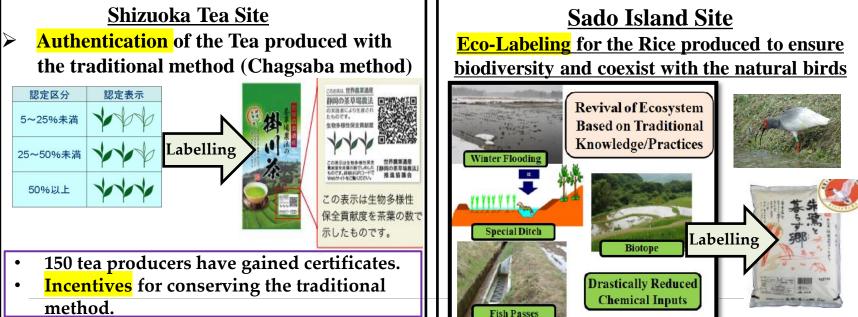
4. Creating new business through food, farming

5. Cross-industry collaboration and business

Selected Measures from the Action Plan in Malaga Raison Production Site (Spain)				
Strategies	Measures			
• Conserving/Improving the production system	 i. Conserving the <u>traditional drying floors</u>; ii. Improving the environmental sustainability (<u>prevention of soil erosion</u>, <u>biodiversity</u>, <u>renovation of old trees</u>). iii. <u>Technological improvements</u> (Tools, agricultural machinery, farming techniques, drying) iv. Actions to <u>prevent the abandonment</u> 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. 			

Activities in GIAHS sites for Dynamic Conservation BD Conservation/Certification Systems

Certification of Agricultural Products in compliance with specific practices in the GIAHS sites



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 (famers 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





















China

Korea

Activities in GIAHS sites for Dynamic Conservation Actual Cases of Agrotourism/Rural tourisms in GIAHS sites

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

- Nishi-Awa Steep Slope Agriculture site 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/) and brochures



• Chiloe Island site in Chile: Promoting the link of tourism with gastronomy using local agricultural







• 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"

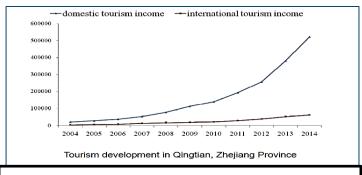




> Plates for visitors on the stories behind olive trees (Ancient Olive Trees Territorio Sénia, Spain)







Increasing number of tourists China, Fish and Rice Site



Increasing number of tourists, Shizuoka, Tea Site

Activities in GIAHS sites for Dynamic Conservation The Cases in Ishikawa (GIAHS sites in Noto)

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.



Special Fund Support to New Agricultural and 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 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 Ownership

1. Many GIAHS sites have high potentials to achieve good performance of conservation and development, taking advantages of the distinctive features of their GIAHS sites.

Observations: Achieving Good Outcomes of Dynamic Conservation of 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 GIAHS
- sites. (These income generating activities are not to replace agriculture.)

 7. The experiences of GIAHS 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.

Structure of a GIAHS Proposal Document

Please see Guidelines for Developing a GIAHS Proposal Document (http://www.fao.org/3/ca8465en/ca8465en.pdf)

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 <u>values and unique features</u> of the proposed system that distinguish the system as a GIAHS site.

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

PART C Contemporary relevance: How the system <u>contributes to addressing contemporary global issues and challenges</u> 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: <u>Differences and peculiarities of the proposed system</u> compared with other similar agricultural systems in the same country and/or in other countries

Action Plan

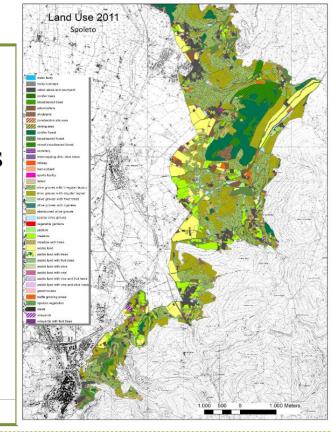
- ➤ Identify, assess, and analyze <u>threats and challenges</u>
- Detailed description of concrete actions ongoing and/or new,
- ➤ How each action will respond to the threats and challenges.
- How each action will respond to the uneats and chanenges.
- The main <u>responsible stakeholder</u> in each activity

Plan will be undertaken

- > Concrete and feasible <u>time frame</u> for the implementation of each action.
- Indicate a tentative budget estimate and the funding sources
 - Indicate a tentative <u>budget estimate and the funding sources</u>.
 How monitoring and evaluation of the implementation and impact of the Action

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

