Food and Agriculture Organization of the United Nations

SRE
SECRETARÍA DE RELACIONES EXTERIORES

Globally Important Agricultural Heritage Systems GIAHS

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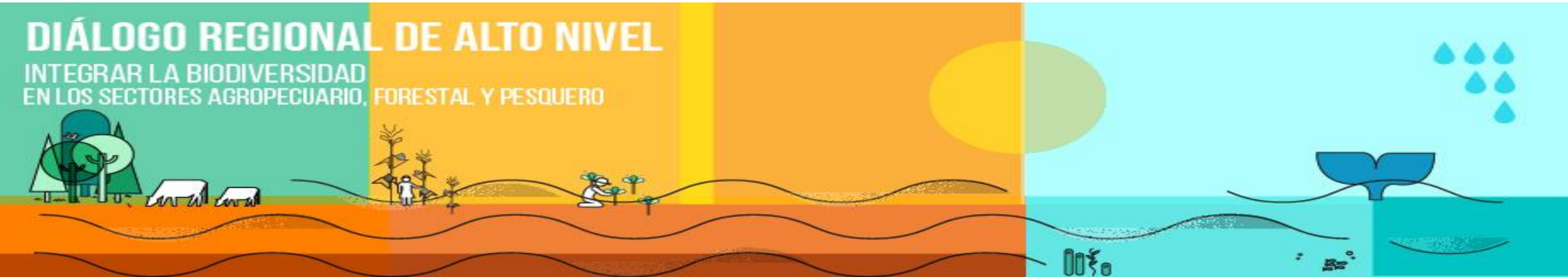
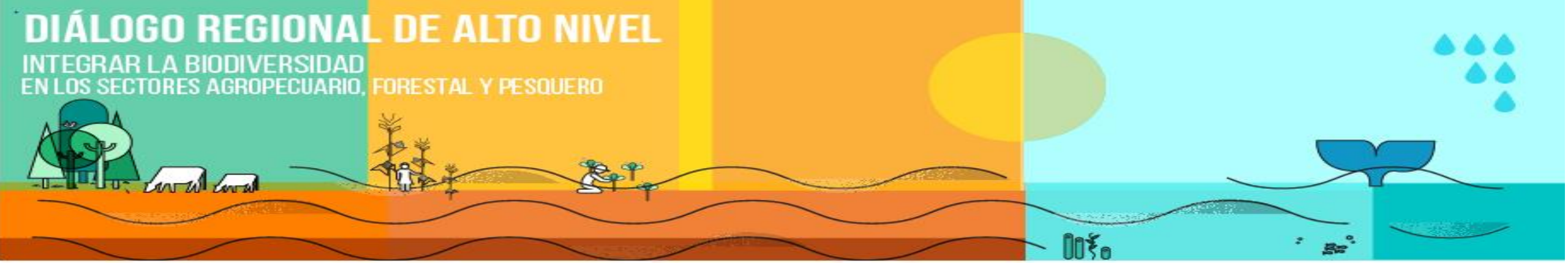
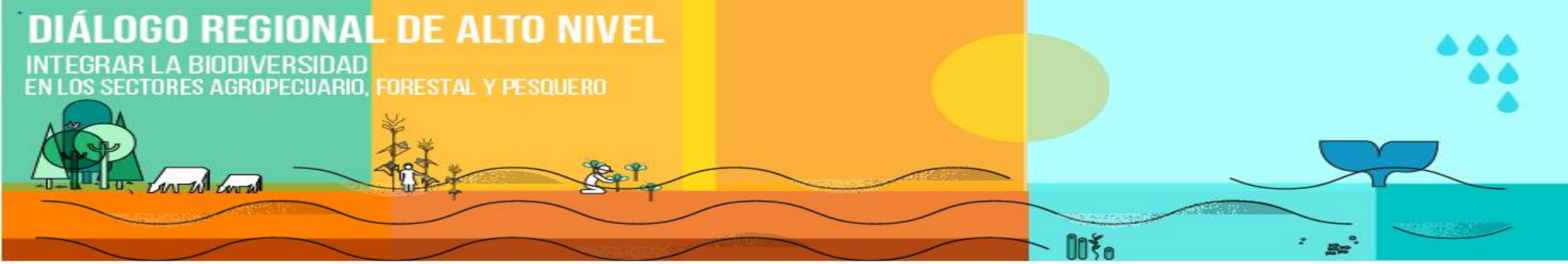




FAO GIAHS Programme

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) Conservation,
      (ii) Adaptation to contemporary conditions and
      (iii) Sustainable development of the site:
   2) Showcases for successful experiences for sustainable agricultural production



Dynamic Conservation

- Farmers, Local Community
- National and local government
- Policy makers, NGOs
- Academia, Researchers

Making Action Plan
AP should be made for Dynamic Conservation

All possible Measures to Achieve Dynamic Conservation

Implementation of Action Plan

Maintenance of Core Elements of GIAHS

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

Monitoring of its Impacts

Evaluation

Correction

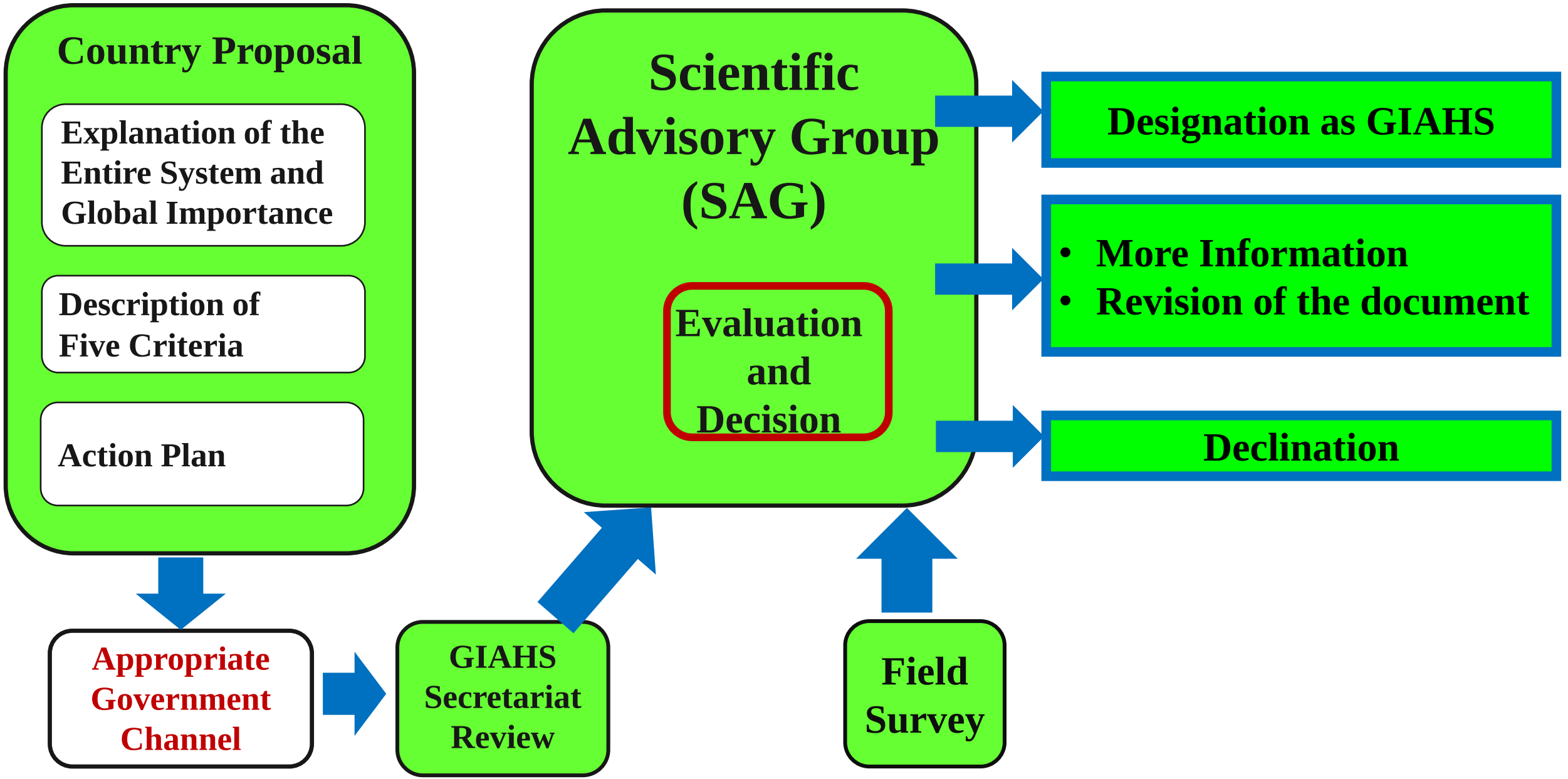
Possible Measures for Dynamic Conservation

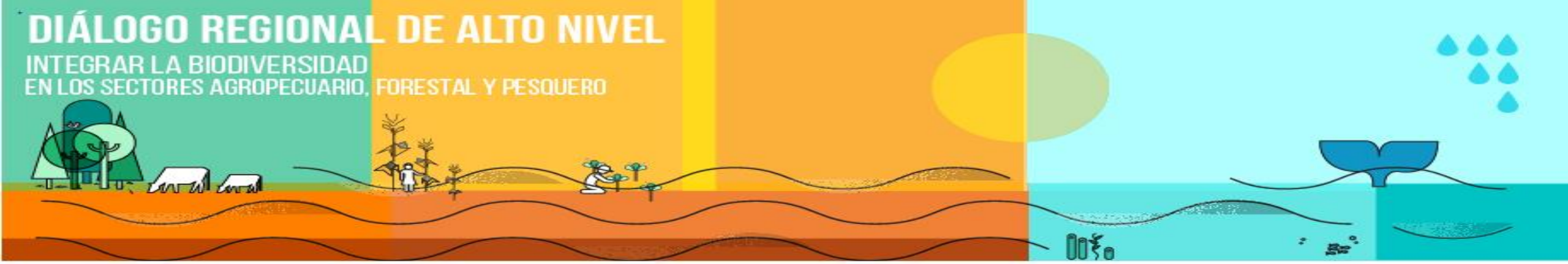
- Knowledge dissemination on GIAHS
- Strengthening the Systems and Capacity for Action Plan Implementation
- Improved Management of Agricultural Resources
- Conservation and Sustainable Use of Agrobiodiversity
- Improvement of agricultural production methods
- Sales Promotion of the Agricultural Products
- Promotion of tourism and cultural activities and local cuisine
- Empowerment of women and more involvement of local community in the decision making

Expected Outcomes

- Positive 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
- Further promotion of harmonization of agriculture with the environment
- Development of value changes for GIAHS site farmers

GIAHS Designation Process



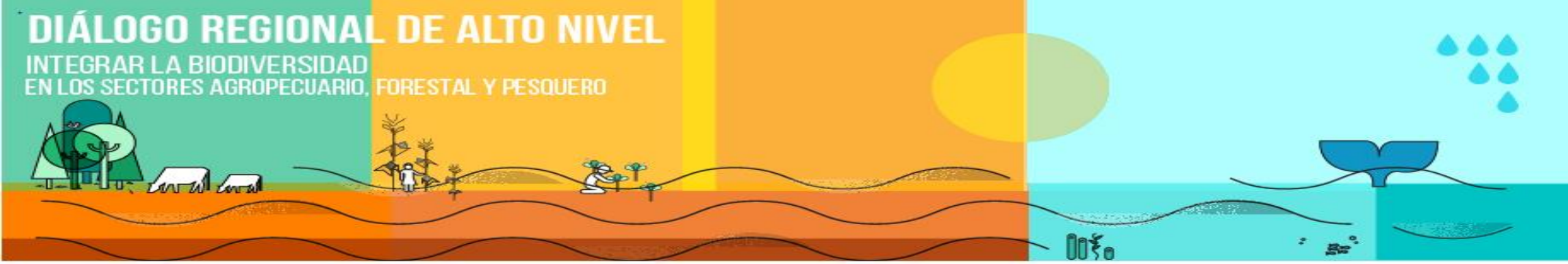


II. GIAHS Sites in the World

List of designated GIAHS sites

52 sites in 21 countries

Countries	Name of sites/systems	Year
Algeria	1. Ghout System (Oases of the Maghreb)	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
	9. 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
	15. Diebu Zhagana Agriculture-Forestry-Animal Husbandry Composite System	2017
	16. Zhejiang Huzhou Mulberry-dyke & Fish-pond System	2017
	17. Traditional Mulberry System in Xiajin's Ancient Yellow River Course	2018
	18. Rice Terraces in Southern Mountainous and Hilly Areas, China	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
	26. Sado's Satoyama in Harmony with Japanese Crested Ibis	2011
	27. Managing Aso Grasslands for Sustainable Agriculture	2013
	28. Traditional Tea-grass Integrated System in Shizuoka	2013
	29. Kunisaki Peninsula Usa Integrated Forestry, Agriculture and Fisheries System	2013
	30. Ayu of the Nagara River System	2015
	31. Minabe-Tanabe Ume System	2015
	32. Takachihogo-Shiibayama Mountainous Agriculture and Forestry System	2015
	33. Osaki Kodo's traditional water management system for sustainable paddy agriculture	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	38. Oases System in Atlas Mountains (Oases of the Maghreb)	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
UAE	52. Al Ain and Liwa Historical Date Palm Oases	2015



Case 1: Floating Garden in Bangladesh

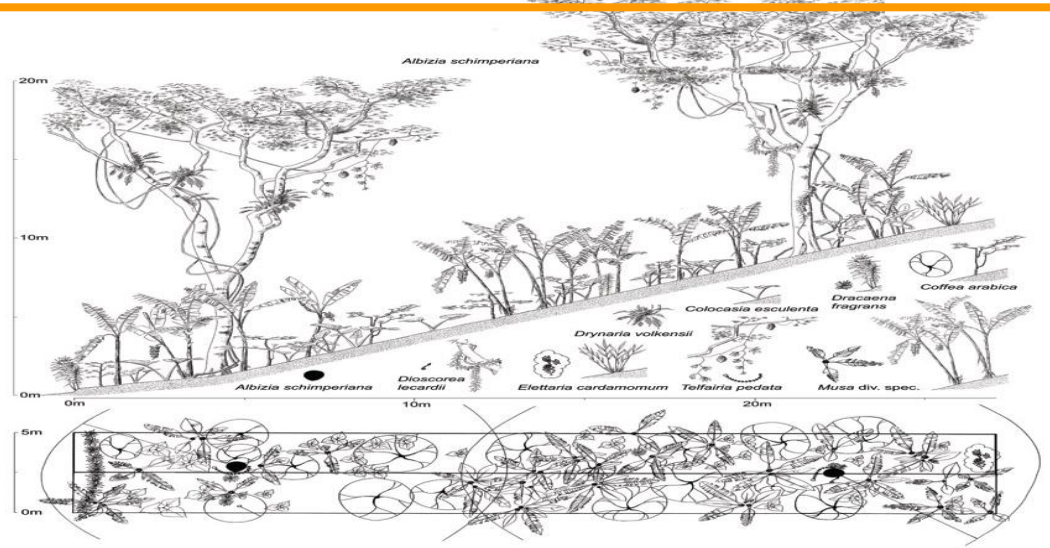
- Use invasive plants and other organic material to produce the floating bed-garden
- Multi-crop production and use of the degraded floating bed as fertilizer
- Require low energy input

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

Case 2: Agroforestry on the slope of Mt. Kilimanjaro

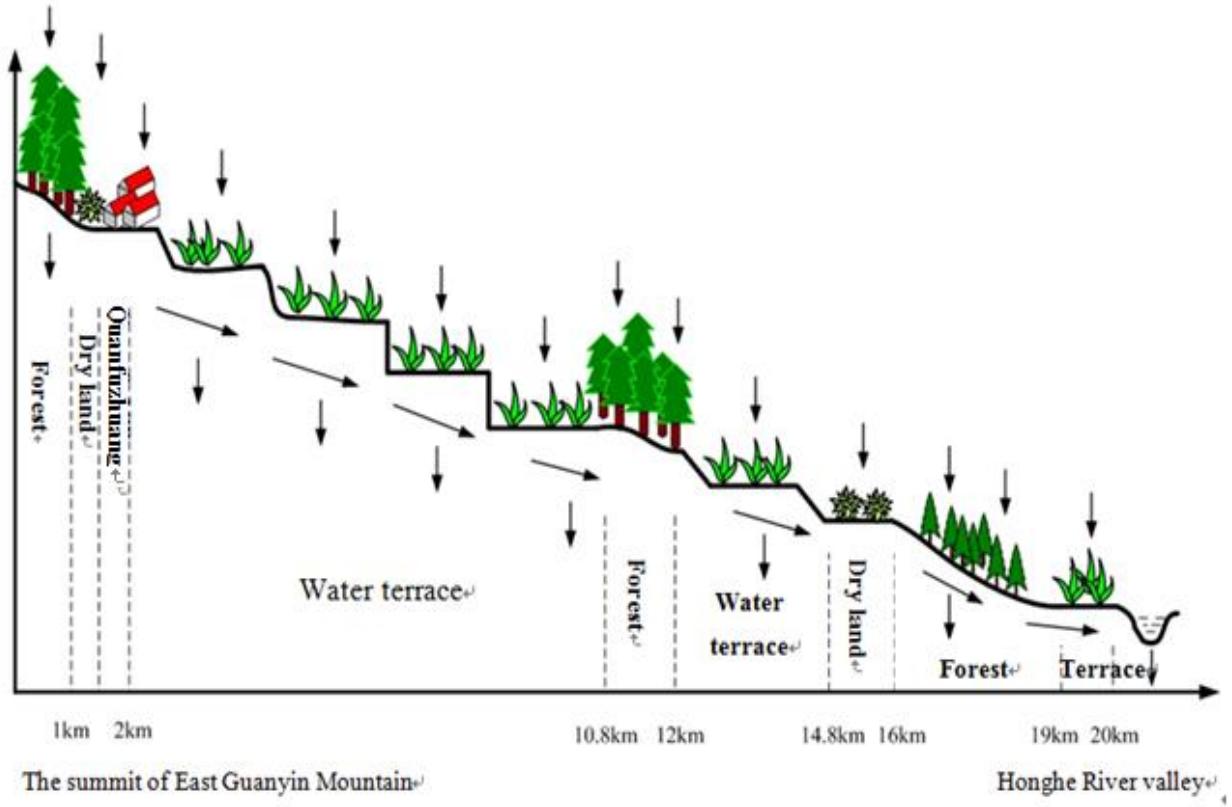
- Mix cropping system featured with several layers of vegetation
  - Endemic timbers, banana, coffee/fruit trees as well as staple crops

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

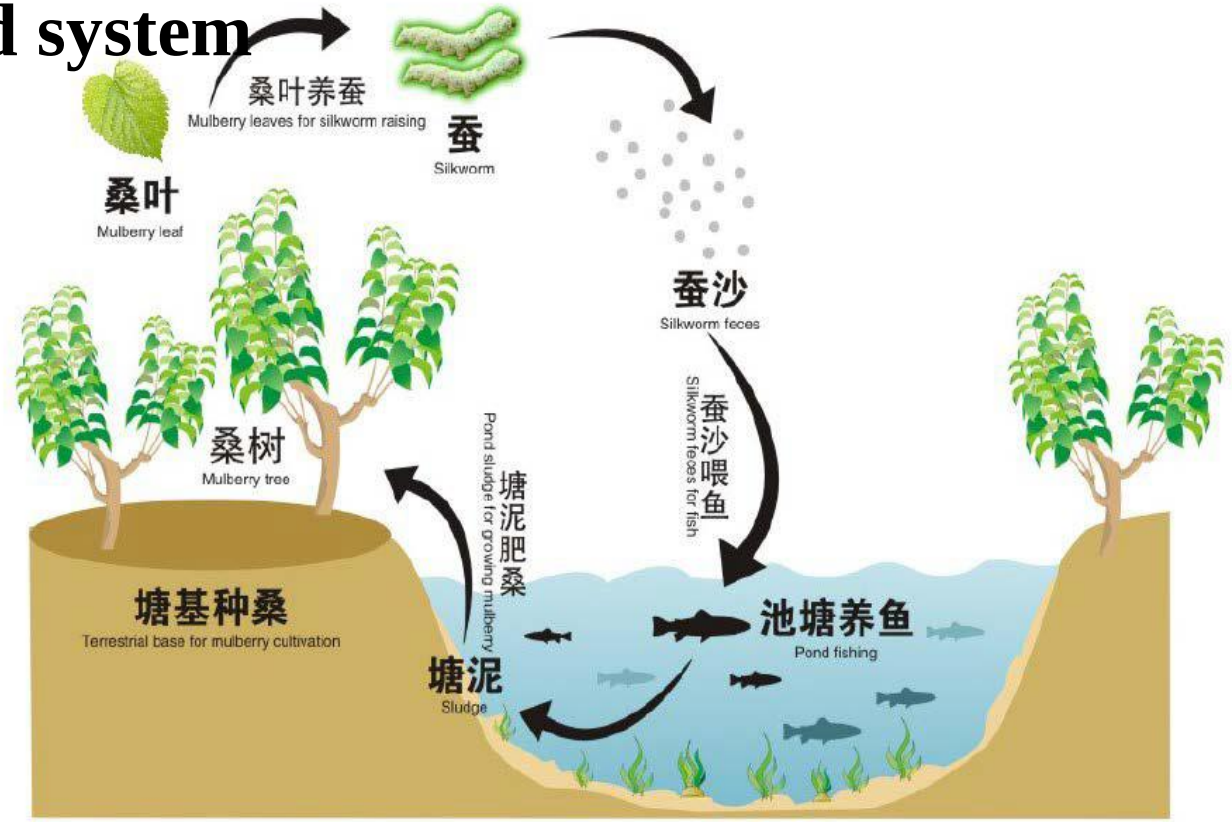


Source: Hemp, A., Biodiverse Conserve (2006) 15：“The banana forests of Kilimanjaro Biodiversity and Conservation of the agroforestry system of the Chagga Home garden

Case 3: Hani Rice Terrace (China)

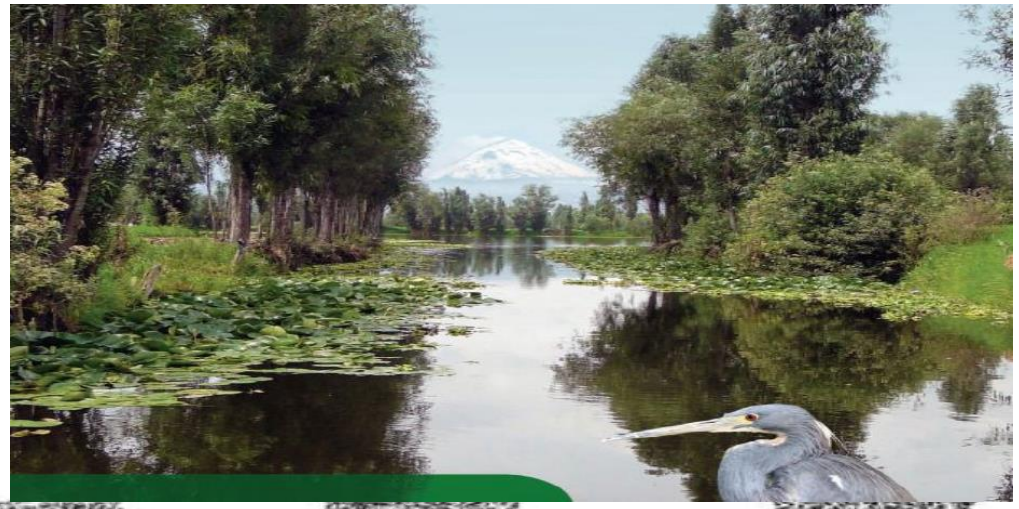


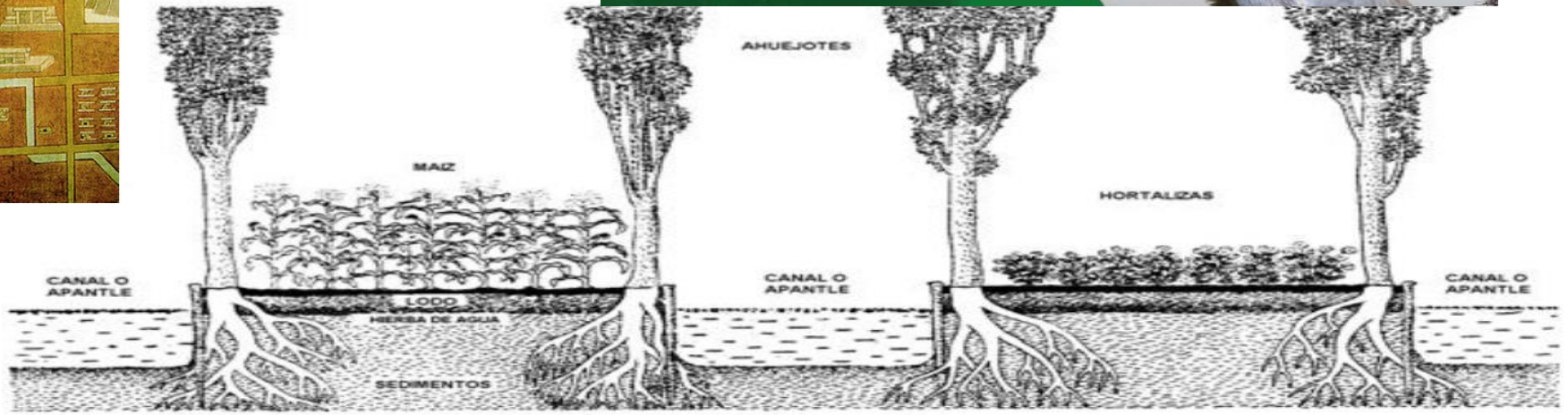
Case 4: Agro-Ecological production System: Zhejiang Huzhou Mulberry-dyke & Fish-pond system



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

Case 6: Chinampas in Mexico

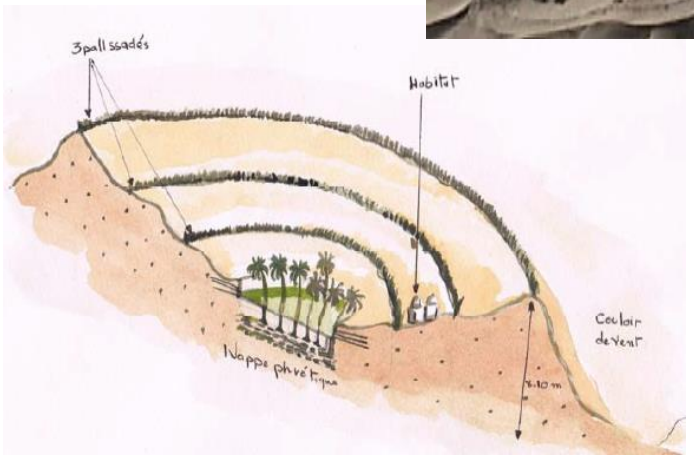




Case 7: Gout Oases systems in Algeria

- No irrigation system in the desert
- Use of natural wind to create cavities
- Multi-cropped system complying all organic requirements
- Adapted way of life to the Saharian desert

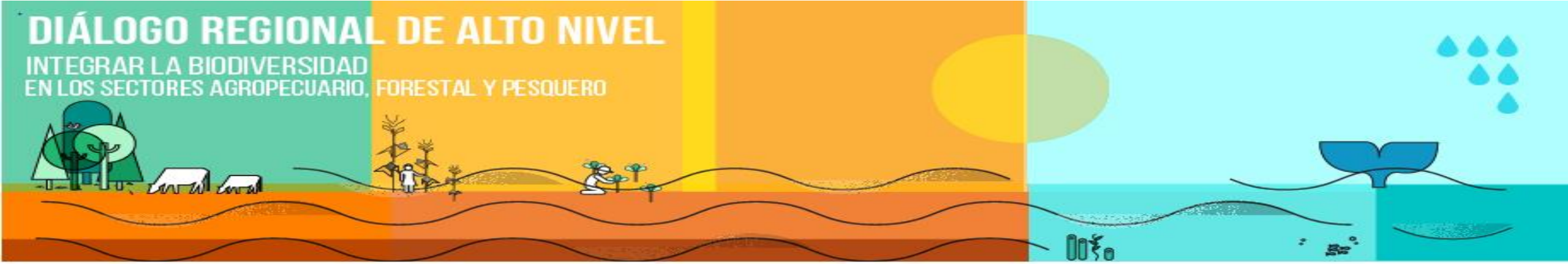
- **High adaption to arid areas with water and sand management**
- **Combatting desertification**



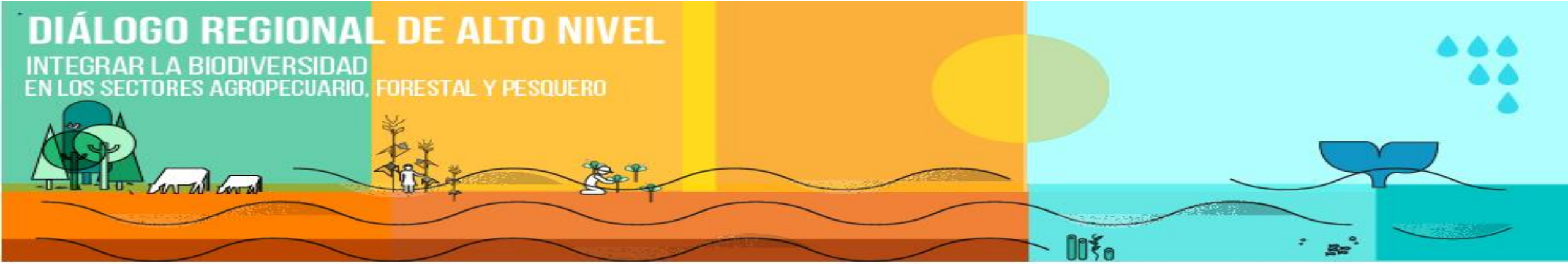
Case 8: Local Crop Varieties in Chiloe Island (Chile) and Andean Agriculture (Cusco-Puno Corridor, Peru)

- Many endemic varieties of potatoes, garlic and sheep
- Unique Andean crops maintained with traditional technologies

- Famers' long term efforts for risk reduction against fluctuation of climate conditions
- Contribution to food security and biodiversity conservation



III. GIAHS and Agrobiodiversity



1. The nature of GIAHS sites from agrobiodiversity

- Many GIAHS sites have valuable local varieties and species.
- Such GIAHS sites have maintained specific cultures, practices and traditional knowledge to promote conservation of local species.

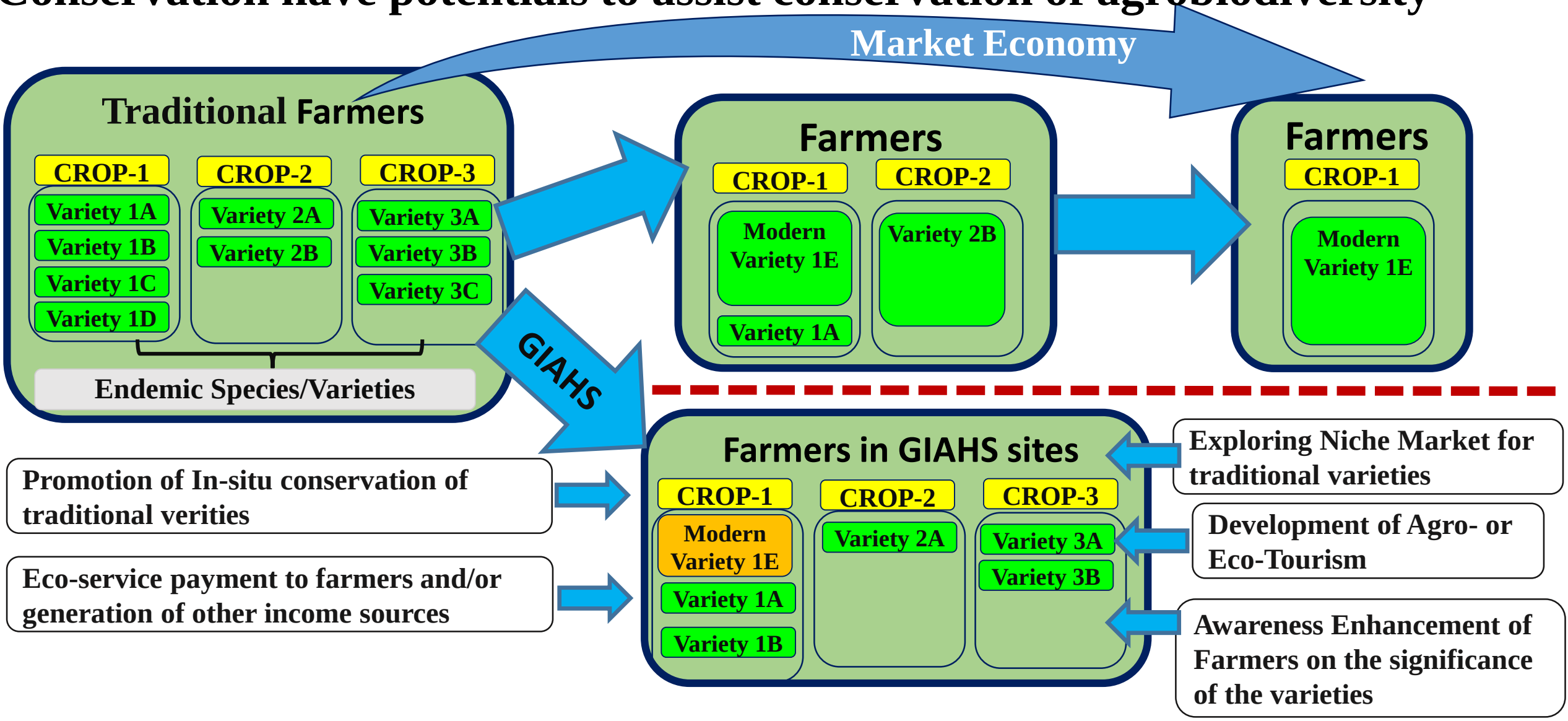
2. The effects of implementation of the measures for action plan

- The combination of several actions that are taken for dynamic conservation of the GIAHS site (after such a site is designated as GIAHS) can contribute to conservation of agrobiodiversity.

Example of 1 : Specific Practices which have contributed to maintaining agrobiodiversity in Chiloe Islands in Chile (GIAHS site in Chile)

- Farmers have maintained many local varieties of potatoes for a long time;
- Farmers have many opportunities to exchange seeds of potatoes, together with knowledge such as how to grow them, their specific characteristics;
- Farmers have small home gardens to test new seeds they obtained and make decision to select some varieties for planting in their fields based on this test.
- The criteria for selection of varieties to be planted in the field are not single but multiple, ranging from resilience to diseases/drought, to productivity/quality.
- Female farmers are decision makers as to which types of potatoes should be planted.
- The diversity of potato varieties in the fields itself have been of dynamic nature and ever changing.

Conceptual Framework of 2: Combination of the measures for Dynamic Conservation have potentials to assist conservation of agrobiodiversity



Example of 2: Case Study of effective combination of measures for conservation of agrobiodiversity (this is the case of non-GIAHS site)

Case in Japan; Yamagata Province (Shonai area) where many unique local verities of vegetables have been produced. The following measures promotes production of local vegetables.

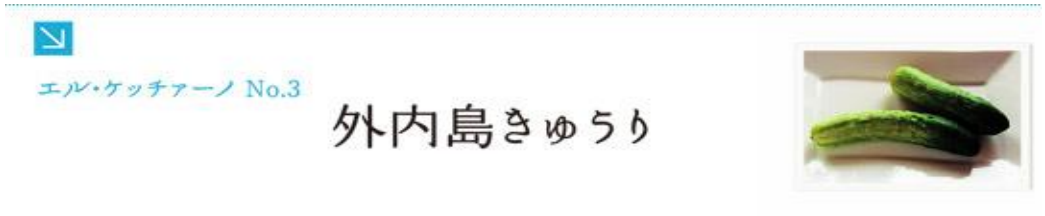
1. A special voluntary group to conserve local varieties was established which organizes many event and research activities.

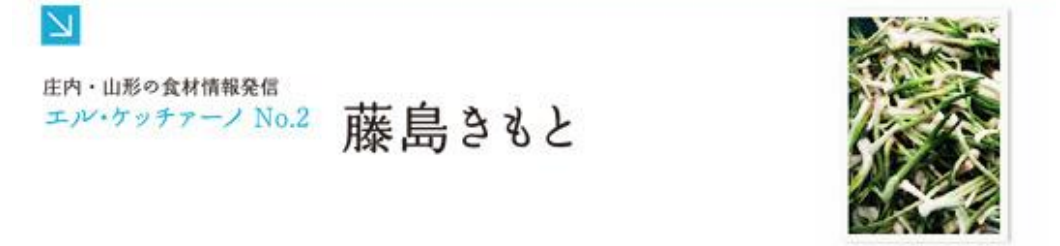
2. A travel company organizes a study tour on a commercial basis to visit the production site of unique local vegetable to see specific production method (slash and burn) and to enjoy local cuisine using this vegetable.

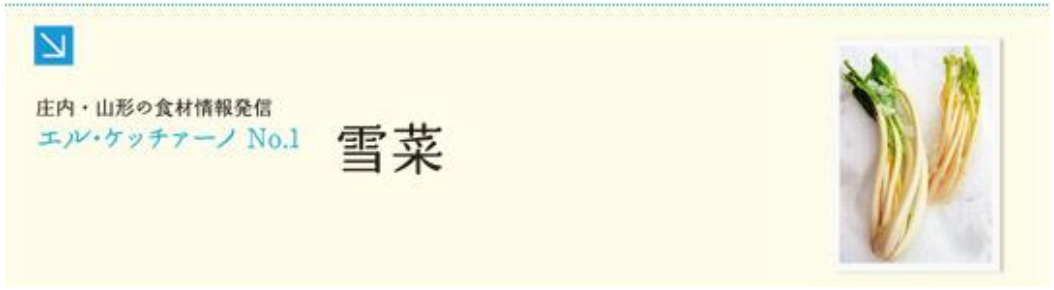
The Pictures and Information provided by Humming-Tour Corp(Niigata JPN).

3. There is also **educational plans** to let children learn about production of these local vegetables including opportunities to grow and harvest.

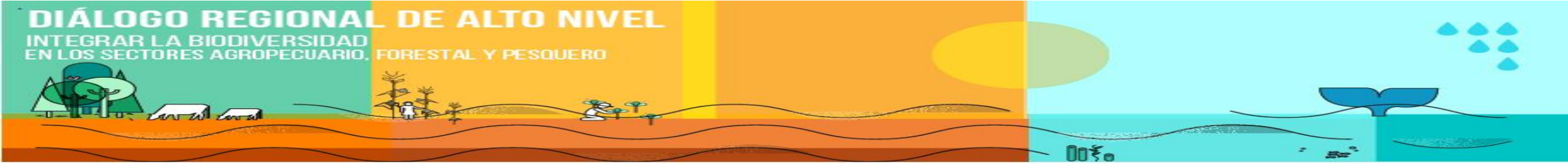
4. There is also a **local restaurant** (Italian) where the shef creates unique menu using local varieties of vegetables.







The similar activities can be seen in Chloe islands in Chile and Peru using local varieties of potatoes and Andean cereals such as Quínua.

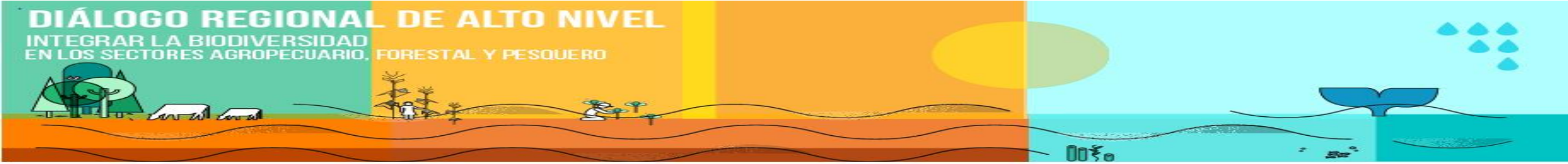


Conclusion from these observations

1. In many cases, GIAHS sites have specific local varieties supported by certain traditional practices and knowledge to maintain agrobiodiversity.
   - **Maintenance of and strengthening these functions are important.**

2. Combination of several measures for dynamic conservation could contribute to conservation of agrobiodiversity in GIAHS sites.
   - **More concrete experiences in GIAHS sites are necessary.**

3. In some cases, this GIAHS approach could be applied to other areas (which are not GIAHS) where unique local varieties have been maintained.



Gracias por su amable atención