Session 4 Empowering Local Communities through GIAHS



This session aimed at illustrating how GIAHS contributes to promote good governance and empower local communities. It took stock of multi-stakeholder processes formulated by Wageningen International and tested in the Philippines and China. The session discussed the importance of institutional arrangements at international, national and local levels to empower local people for sustainable development and natural resources management. Prof. Michael Stocking, University of East Anglia, U.K. and Vice-chair of the Technical Advisory Panel of the GEF, chaired the session.

Institutional mechanism in participating countries for dynamic conservation of GIAHS

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As the FAO-GIAHS initiative is ending its preparatory phase and approaching the full scale project implementation, the authors felt that, in participating countries, practitioners need further guidance. In the pilot systems and sites, it was observed that much participatory expertise (application of tools, involvement of a wide variety of stakeholders) is already in place or perceived unneeded in the particular situation. However, project management structures (plans, platforms, procedures), through which multi-stakeholder processes should be implemented, were neither conceptualised nor very functional. The new phase justifies the development of a project implementation strategy that stands on the shoulders of practitioners and anticipates future development issues of the GIAHS initiative. The authors first proposed to adhere to the following principles for the transformation of existing (threatened) agriculture heritage systems into future viable (flexible, adaptively managed) systems:

- the GIAHS project should promote self-determination of the GIAHS community, through appropriate institutional adaptations, to enable the GIAHS community to develop their system according to their own contemporary needs;

- while dynamic conservation of GIAHSs is a global concept, its implementation requires national policy frameworks and local institution building to support community-level dynamic conservation activities

- the GIAHS dynamic conservation concept should provide a promising alternative to mainstream agriculture development

GIAHS dynamic conservation is multi-disciplinary: agriculture / economy, biodiversity / environment, anthropology / culture and decentralisation / governance, all interact in a single GIAHS site. The GIAHS community is in charge of combining these different disciplines into a single coherent process of "dynamic conservation" of their system. A "consortium of organisations" is required with a multi-level network: the global level sets the definition the GIAHSs and communicates definition and recognition to lower levels; the national level develops a national policy framework for dynamic conservation of GIAHSs; the local (provincial, prefecture, region, district, county) level develops institutions in support of GIAHSs; and the community level actually ensures the dynamic conservation of the GIAHSs. Mandates and communication protocols should be formulated for each level.

For the initiation of the projects, it was proposed that FAO country office jointly with an appropriate local high government office (e.g. the GEF focal point) select a National Focal Point Institution (NFPI). A set of criteria was proposed for this selection. A National Focal Point should be appointed as part of a Letter of Agreement between the NFPI and FAO setting out the objectives, responsibilities, cooperation and implementation modalities, the reporting requirements, etc. A similar pattern of arrangements was proposed for lower levels. The authors then identified the prime tasks, the support needed, and the likely stakeholders for each action level (global, national, local, community).

They also outlined the main points to be addressed in project formulation at each of these levels. They emphasized that all action levels require services from each other and should be accountable to each other and ultimately to the local community. The conditions of withdrawal of project support should also be determined when self-sustained activities can proceed. A flow chart was proposed summarizing the methodological steps for the formation of GIAHS support project structures indicating for each step the protocol to be followed and the expected outcome. The authors supplemented their proposals with a series of guidelines regarding the project focus on the GIAHS community as ultimate beneficiary, the relations between management levels, the cooperation among stakeholders, the formation of project structures and the financial management.

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Recent Developments in Intellectual Property Rights and Indigenous Knowledge

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Dr. Bhatti first gave an overview of WIPO, its mandate, membership and structure. The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge (TK) and Folklore developed general principles and guidelines to prevent misappropriation of TK (e.g. patents on genetic resources by foreign firms), to apply the principle of prior informed consent (PIC) and to ensure equitable benefit sharing. 10 elements of TK protection were formulated in the form of questions to be addressed to determine the purpose, scope, criteria, ownership, the rights and their modalities of acquisition, their administration, their duration and the conditions of termination of the protection. These elements are being used to analyse and compare existing national legislations and other legislations in the process of development.

The draft of an international instrument on TK protection has been discussed among WIPO members for several years. Its present focus is on the substance of protection rather than the legal form, it may take, and on the prevention of TK misappropriation rather than the proliferation of new intellectual property rights.

The aim is to establish an internationally accepted legal doctrine on TK protection, listing its policy objectives, giving general guidelines and specific substantive principles, setting out the definition of misappropriation and identifying the different acts of misappropriation. Many countries and organizations already apply the key features of the draft. The work of WIPO on TK protection has a special relevance to the GIAHS in so far as the draft WIPO provisions cover traditional agricultural knowledge and recognize the communities as those who should be the main beneficiaries and actors in its protection. Further collaboration between WIPO and GIAHS should be mutually beneficial and are in line with the recent instructions given by the WIPO Committee to coordinate its work closely with the CBD and FAO Secretariats.





GIAHS Conservation Framework in China

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The pilot system selected to be part of the GIAHS in Longxian village is representative of the long history of co-evolution of the rice-fish agriculture in China.

This ecosystem, particularly its biodiversity, is now subject to multiple threats. Different kinds of agroecosystems are found in the area. Forests under multiple, integrated use cover 70% of the water catchment, the rest being occupied by paddies, home gardens, trees and hedges in the field and small livestock / poultry husbandry. 20 native rice varieties were identified (many are threatened), many vegetable species such as lotus roots, beans, taro, eggplant and numerous other native vegetables including 7 species of wild vegetables, and fruit trees such as the Chinese plum (Prunus Simoni) and mulberry.

There are 6 native breeds of carp (red, black, white, variegated carps), and 5 other species of fish, amphibians, snails. In the catchment, 62 forest species are used, of which 21 as sources of food; 53 medicinal herbs are found as well as wild cats and snakes. The rice-fish farming ecosystem provides multiple goods and services: food security (rice production); quality nutrition and income generation (consumption and sale of fish); prevention of malaria (mosquito larvae are eaten by fish); conservation of biodiversity; biological pest control and health improvement due to the reduction of pesticide use.

This ecosystem also contributes to the carbon and nutrient cycles and to soil and water conservation and restoration. Its ingenious approach therefore demonstrates how economic and social benefits can be harmonized with the essential ecological benefits and the maintenance of local culture and traditions. Historical records show that this system was already in use 1700 years ago and already displayed a wide biodiversity. Since 1949, rice-fish agriculture developed quickly in many Chinese provinces but its biodiversity and its ecosystem functions are now under threat as a result of the growing areas under intensive rice monoculture and fish farming enterprises producing higher yields at lower cost. These modern systems using excessive applications of chemicals are detrimental to food safety. Their negative impacts on ecological services and environmental protection are seriously undervalued. Several obstacles impede the conservation and development of rice-cum-fish farming. Specific

laws or management regulations on GIAHS conservation do not exist. The intended role of the ecological restoration project is not fulfilled and concrete measures to protect endangered species are lacking. The main reasons are insufficient investments and the shortage of useful research results. Moreover, bio-cultural diversity conservation is still at the initial stage. The local authorities give it low priority compared with economic development.

The establishment of a GIAHS institutional framework and multi-stakeholders participatory mechanisms is therefore necessary. The analysis of the GIAHS (functioning, characteristics, threats, challenges and opportunities) should first be conducted. A preliminary assessment should be initiated regarding the policy, regulatory and incentive environments in order to identify appropriate supportive measures and remove perverse incentives. For the full scale GIAHS project, management, monitoring and evaluation methods should be established and further elaborated. Capacity building of the weakest and most vulnerable stakeholders should be launched that directly benefit farmers and encourage their participation.

In closing, Prof. Min outlined an adaptive management strategy and a master plan for the dynamic conservation of traditional rice-fish agriculture in China, identifying, at different levels, the priority tasks, the support needed and the likely stakeholders to be involved. Traditional rice varieties would be gradually re-introduced. Incentives would be granted to start local industries, eco-tourism and organic farming. Local traditions, customs and cultures would be surveyed and promoted. A multi-level stakeholder process would be developed with local, provincial, national and international linkages to spread the dynamic conservation approach and mobilize social group participation. A set of registration criteria, a list and a network of the rich Chinese Agricultural Heritage Systems would be established under the guidance of a national steering committee, a national technical advisory committee and local implementation committees.

The GIAHS project is located in the Island of Chiloe of the Lake Province of Chile. It covers 9,181 sq. km mostly under forest and small scale agriculture, with coastal fisheries and a national park of about 43,000 ha. Its population (154,766 inhabitants) still includes 10% of native mapuche/huilliche origin. The island is particularly rich in biodiversity and natural resources with many endemic species of fauna and flora. The major land use is that of small family farms growing potatoes as main staple (the island is a center of origin of the crop with some 200 local varieties of potato being preserved). Potato cultivation is rotated with wheat and forage legumes for the control of pests and diseases. Organic fertilizers are used. The remoteness of the island has favoured the production of a wide range of local vegetables and medicinal plants. Animal production is also diversified but mostly seasonal due to the shortage of feeds in winter. The forest is a source of multiple goods and services: firewood, wood for house building, boat construction and cottage industries, fodder and medicinal plants but is subject to deforestation for pasture and agriculture development and for wood industries.

Four processes of change are now threatening the self-sustaining production systems and rural societies of the island. The globalisation trends are changing the local way of life and consumer habits. The prices of many basic agricultural products and commodities of the island are decreasing. The rapid industrial development of local salmon production, mussel production and wood panel fabrication is changing the labour market and causes multiple environmental degradations. Rural migration and urbanization are also changing the population patterns (less than 44% is now rural). Although education and income levels improve concurrently, young people tend to leave agriculture for work in the cities.

As a result, the rural societies, previously based on the mutual exchange of their local products and services, tend to change with young people working in the cities and in industry and old people in the countryside looking after their traditional crops and farm animals. The accumulated knowledge and experience as well as the culture of these rural societies tend to disappear concurrently. In view of these growing threats, a number of opportunities should be seized to maintain the unique identity and characteristics of Chiloe agriculture. Efforts are already under way to remedy the situation by developing infrastructures, tourism, rural micro-enterprises, amenities and recreational centers in rural areas of the island. Niche markets are promoted for local products, including labelled organic farming products. Ecotourism is developed by preserving the natural beauties of the island, its unique local culture and its traditions. This alternative mode of development should be supported with appropriate legislations, regulations, norms and incentives. It should be supported with a number of other measures: programmes of rural education, capacity building, and cultural activities; environment and natural resources protection projects; norms for the control of the social and environmental impact of industries; and certification systems for clean development products and organic farming products.

These initiatives should be implemented and controlled by the local communities. To this end, these communities have to be made fully conscious of the unique qualities of their environment and mode of living. They should be well informed, trained and organized in order to have the necessary capacities, powers



and strengths to manage the ongoing changes while preserving their heritage of values, traditions, natural resources and modes of production. They should also acquire the capacities to establish a constructive dialogue with, and formulate their own requests to the authorities in charge of rural development. This empowerment of local communities should ultimately demonstrate the vast potentialities of an alternative mode of development, both sustainable and equitable, as essential conditions of the success of the GIAHS Chiloe agricultural system.





