

GIAHS and Farmers Innovation

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Summary

Throughout centuries, generations of farmers, herders and forest people have developed complex, diverse and locally adapted agricultural and forestry systems, managed with time-tested ingenious combinations of techniques and practices that have usually led to community food security and the conservation of natural resources and biodiversity. These microcosms of agricultural heritage can still be found throughout the world covering about 5 million hectares, providing a series of cultural and ecological services to humankind such as the preservation of rural unique landscapes and agrobiodiversity, including traditional forms of farming knowledge, local crop and animal varieties, and autochthonous forms of socio-cultural organization. These systems however are rapidly shrinking, victim to modernization and other technological and economic changes.

Once these systems disappear, their unique agricultural legacy and associated environmental and cultural local and global benefits will be lost forever.

In order to prevent the furthering of this process, the Food and Agriculture Organization of the United Nations (FAO) and other international, national and local partners have joined forces to raise world-wide recognition of the importance of these systems for local/global biodiversity conservation and ensuring of food security and have initiated a program for mobilizing human and material resources in various countries, to dynamically conserve and manage such biodiverse and culturally based systems sustainably. The project Globally Important Ingenious Agricultural Heritage Systems (GIAHS) will initially focus on 10 selected sites located in several countries of the developing world. The values of such sites not only resides on the fact that they offer outstanding aesthetic beauty, are key in the maintenance of globally significant agricultural biodiversity, include resilient ecosystems that harbor valuable cultural inheritance, but also have sustainably provisioned multiple goods and services, food and livelihood security and quality of life for millions of people. In addition such agricultural sites offer promising models of sustainability as they are well adapted to their particular environment, rely on local resources, are small-scale and decentralized, and tend to conserve biodiversity and the natural resource base.

Therefore, these systems comprise a Neolithic ecological and cultural legacy of considerable importance to humankind and it is imperative that they be considered globally significant resources to be protected and preserved as well as allowed to evolve. This should be done regardless of the fact that values of

indigenous people may be different from the global community despite the fact that species and habitats valued by local people have global significance. Much of the concern for the global community is the alarming loss of biodiversity and associated environmental services; while for local communities such issues may also be important, their real concerns, needs and perceptions usually remain hidden to outsiders.



Inherent to the concept of GIAHS is an acknowledgement that indigenous knowledge has intrinsic merit, and holds development potential. Case studies reveal that there exists a diversity of local and traditional practices of ecosystem management, including systems of biodiversity management and soil and water conservation. Many authors talk about rural populations as being *inventively self-reliant*, and that resource-poor farmers, *continuously experiment, adapt and innovate*. These notions are crucial if we are to think of GIAHS within a framework of “dynamic conservation”. Innovation, indeed, is the dynamic that leads to the development of tradition. It could boldly be premised that rural peoples in GIAHS hold many of the potential answers to the production and preservation challenges affecting their rural landscapes.

Recognizing this fact, is strategic for stimulating the innovative processes inherent within local communities. The GIAHS process must accept that there are real possibilities of building on local traditions and environmental knowledge instead of relying on often inappropriate technologies from outside.

Undoubtedly, the ensemble of traditional crop management practices used by many resource-poor farmers represents a rich resource for modern workers seeking to conserve GIAHS. In a given GIAHS system, farmers may use a diversity of techniques which tend to be knowledge-intensive rather than input-intensive, but clearly not all are effective or applicable, therefore modifications and adaptations may be necessary.

But what modifications should be made? The challenge is to maintain the foundations of such modifications grounded on farmers' rationale and knowledge. The challenge for agroecologists and other professionals involved in the GIAHS process is to be able to recognize the local practices that have ecological function or a role in resource management. A case in point is biodiversity conservation, which in many cases is a consequence of traditional management systems and not an objective and practice in itself. So the focus of the work should be more on how such practices contribute to biodiversity enhancement rather than on trying to figure out how farmers preserve biodiversity. It is not a matter of romanticizing traditional agriculture or to consider development per se as detrimental, but if the interest lies in "improving" GIAHS sites through a dynamic conservation process, researchers must first understand and build on that agriculture that is to be changed, rather than simply changing or replacing it.

Most local farmers have intimate knowledge about the ecological forces that surround them, however their experience is limited to a relatively small geographical and cultural setting. A given practice documented from one social group may not be present in the next social group. Such intimate local experience, cannot be matched by generalized knowledge of the ecologist, yet sophisticated training of the ecologist cannot be matched by the experiential knowledge of local farmers, despite the fact that ecologists may be unable to appreciate the rich texture that comes from detailed knowledge of local farmers. This is why a "dialogue of wisdoms" is necessary among GIAHS professionals and traditional farmers. In fact it is an essential prerequisite to the development of a truly ecologically sound and culturally sensitive GIAHS process that the people who own the knowledge be part of the planning process. Local skills can be mobilized through participatory development approaches, combining local farmer knowledge and skills with those of external agents in the design and diffusion of appropriate farming techniques.



