

Workshop “Manejo da Pesca Artesanal”

Paraty, Dec 2010

**How Can Agroecology Contribute
to Artisanal Fishery Communities
Sustainability?**

Sustainability Definition

The concept of sustainable agriculture is a relatively recent response to the decline in the quality of the natural resource base associated with modern agriculture.

The concept of sustainability although controversial and diffuse due to existing conflicting definitions and interpretations of its meaning, is useful because it captures a set of concerns about agriculture.

Today, the question of agricultural production has evolved from a purely technical one to a more complex one characterized by social, cultural, political and economic dimensions.

(Miguel Altieri, 2005)

Agroecology Definition

- Agroecology provides an interdisciplinary framework in which agriculture does not exist as an isolated entity, but as part of a dynamic interplay of contexts and demands.
- This dynamic constrain and define the "agroecosystem", the basic analysis unity in Agroecology.
- An agroecosystem exists amid contexts including climate, soil, plant genetics, social organization, government policies, and the personal beliefs and predilections of the agriculturist.
- Agroecology proposes a context or site-specific manner of studying agroecosystems, and as such, it recognizes that there is no universal formula or recipe for the success and maximum well-being of an agroecosystem.

Agroecology Principles

Despite the myriad of agricultural systems, most **traditional** agroecosystems share structural and functional commonalities:

- Combination of high species numbers and structural diversity in time and space;
- Closed cycles of materials and wastes through effective recycling practices;
- Reliance on local varieties of crops and incorporate the use of wild plants and animals;

Agroecology and Tradicional Culture

The species and genetic diversity of indigenous agroecosystems are the result of a complex coevolutionary process between **natural and social systems**, which resulted in criative strategies of ecosystem appropriation:

- Ability to recognize plant species;
- Ability to discriminate soil types, degrees of soil fertility and land-use categories

Indigenous peoples knowledge about ecosystems usually result in multidimensional productive strategies.

Agroecology Framework

Its is necessary to understand:

- "Ethnogenesis" of the Caiçara culture;
- The hybridism between the social and the nature systems;
- The present situation of agriculture;

Thus, it is necessary to create an Inventory, a system diagnostics to support new projects in Agroecology.

Agroecology and Social Component

- Any change in the relationship between human being and the bio-physical resources (looking for sustainability) is only possible if the farmer him/herself engages in **learning processes**.
- Sustainability in a social perspective: it is the outcome of the collective decision-making that arises from interaction among natural resource users and managers.
- It implies that the definition is part of the problem that resource users and managers have to resolve.

(Niels G. Röling, 1998)

Process of the Appropriate Learning Process

- This change in Learning Processes requires extension and innovation studies; requires fostering voluntary change in behaviour through communication and in innovation as an outcome of social interaction
- Participatory Learning – University and Community

Process of the Appropriate Learning Process

It is necessary a general agreement and a permanent dialogue to conceive and elaborate actions in education.

- Empowering people through education is a way to recognize local knowledge as important;
- Agroecology does not focus on specific technologies, but rather in the principles used by traditional agriculturalists. These Information is extracted from the environment by special cognition and perception systems that select for the most adaptive or useful information;
- Endogenous development is able to identify local and appropriate solutions.

Conclusion

Sustainable Agriculture is a complex subject

Agroecology is inherently multidisciplinary

Transformation to sustainable agriculture requires a fundamental change in learning processes.

Agroecology is based on a site-specific manner of studying agroecosystems

Traditional farming knowledge of local populations is fundamental for sustainable development

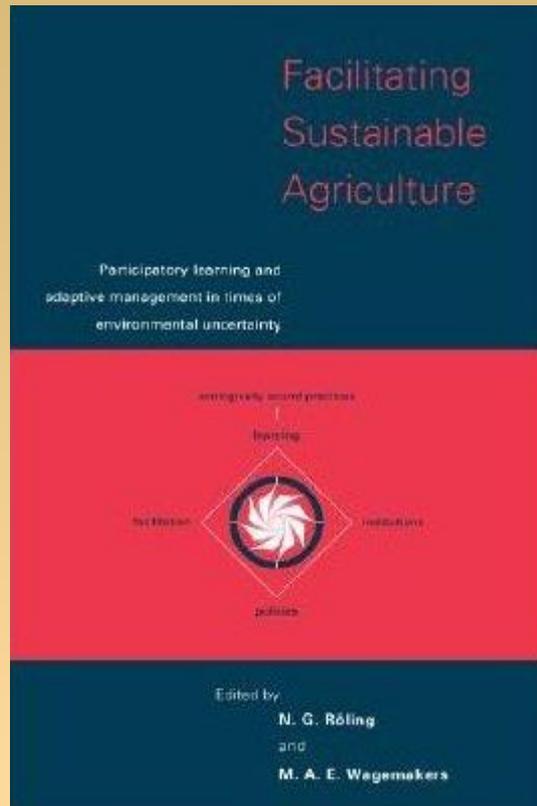
The appropriate learning process is an outcome of social interaction

Learning can be facilitated

Sustainable Rural Development is an emerging property of the endogenous efforts within the communities.

Empowering people for endogenous development is important to deal

Additional Informations



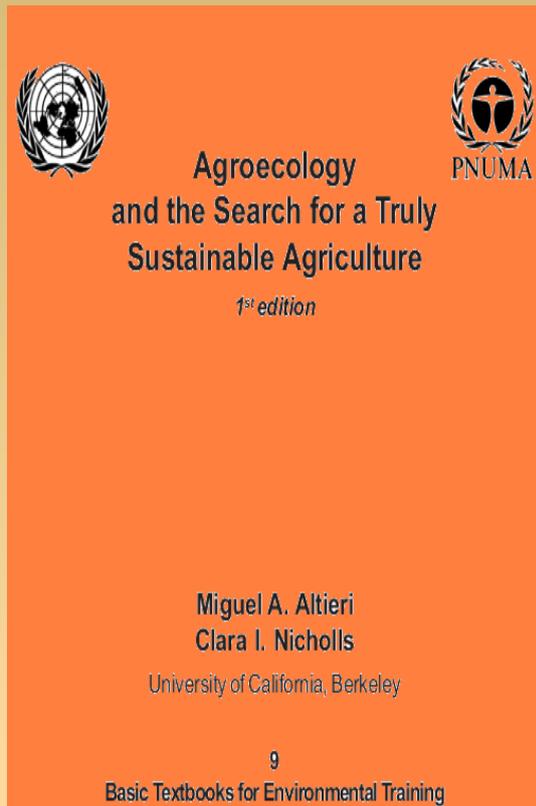
Facilitating Sustainable Agriculture:

Participatory Learning and Adaptive Management in Times of Environmental Uncertainty

Niels G. Röling

M. A. E. Wagemakers

Additional Informations



Agroecology

and the search for a Truly Sustainable
Agriculture

Miguel Altieri

Clara Nicholls

Additional Informations

Decreto Presidencial N° 7.532 de 04 de Novembro 2010:

Art. 1o A política de educação do campo destina-se à **ampliação e qualificação da oferta de educação básica e superior às populações do campo**, e será desenvolvida pela União em regime de colaboração com os Estados, o Distrito Federal e os Municípios, de acordo com as diretrizes e metas estabelecidas no Plano Nacional de Educação e o disposto neste

Additional Informations

“To successfully resist ongoing systems of domination, racial or ethnic stereotyping, and cultural hegemony, the first necessity of disempowered peoples, or of marginalized subcultural groups within a national society, is that of poetically constructing a shared understanding of the historical past that enables them to understand their present conditions as the result of their own ways of making history”
Hill, J. D. (1996: 811)

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