Linking Applied Ethnobotany to Social Learning

A Participatory Tool for the Promotion of Indigenous Plants Use in Matutuíne, Southern Mozambique

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Development-oriented research

- How to integrate natural and social sciences when looking at the multi-faceted questions of natural resource management?
- How to integrate all the major actors affected, including the local population, into negotiation and decision-making processes?
- How to integrate scientific and indigenous forms of knowledge in a search for and promotion of local potentials for development?
Transdisciplinary approach

• Interdisciplinarity
  – Identification of problems and solutions independently of disciplinary boundaries → integrated perspective

(Wiesmann, 2002)
Transdisciplinary approach

• Interdisciplinarity
  – Identification of problems and solutions independently of disciplinary boundaries
    ➞ integrated perspective

• Science and Society
  – Integration of knowledge and perceptions of non-scientific actors in a participatory process
    ➞ mutual learning

(Wiesmann, 2002)

Partnership-based project:
- Helvetas Mozambique (Maputo, Mozambique)
- Impacto Lda (Maputo, Mozambique)
- Centre for Development and Environment, University of Berne (Berne, Switzerland)
Context: Matutuíne District
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- High diversity and endemism of natural resources: coastal forests, semi-deciduous forests, bushes, savannas, wetlands
- Potentials: agriculture, forestry, hunting, beach tourism, ecotourism
Context: Matutuíne District

- Poverty: poor access to education and health care, poor infrastructures, weak institutions
- Degradation of natural resources: illegal hunting, deforestation for logging and charcoal, uncontrolled fires
Project objectives

Identification and promotion of sustainable indigenous plant use as an alternative source of income for rural communities

• Improving the living conditions of rural communities
• Reducing the pressure on the natural environment
Project activities

1) Preliminary baseline study
2) Participatory workshop to identify natural resources with a potential for commercialisation
3) In-depth study of the local systems of use and ecology of the selected resources
4) Preliminary market study
Participatory workshop: methodology

- Applied ethnobotany
- Participatory research

SOCIAL LEARNING PROCESS
Setting

• 2–weeks training workshop
• In the local context
• In the local language (*Ronga*)
• Facilitation by local moderators
Setting

• Mixed group of participants: representatives of local communities (traditional healers, local leaders, men, women, etc.), extensionists and development workers, researchers

• Researcher is only one among the other participants!
Mutual learning

Exchange of knowledge, experiences, and perceptions among the participants

Plenary discussions, group exercises, field observations and, games, dramas, etc.
Participatory tools

Preference ranking

Transect walks

Group interviews

Resource inventories
1st step: to reach a common understanding of „sustainability“

Themes:
- natural resources and their degradation
- land use systems and their impacts
- local and external actors involved with their converging or conflicting interests
- sustainable management of natural resources
- endogenous strategies for NR conservation
2nd step: identification of resources with potential for commercialisation

Long process of inventory, evaluation, selection, analysis, discussion, and negotiation...

- Focus on sustainability
- Integrated approach: ecological, socio-cultural, and economic processes involved in the local use of natural resources
Main results

- 17 natural resources jointly selected for showing a high potential for commercialisation and sustainable use
- Participants achieved an understanding of ecological processes in the local context and learned to identify local potentials, problems, and possible solutions related to development
Mulala (*Euclea natalensis*) – root used and sold in local market for teeth treatment and hygiene
Hungahunguana (*Hypoxix hemerocallidea*) – highly demanded medicinal plant sold in Maputo markets and exported to South Africa
Nala (*Hyphaene coriacea*) – Fermented drink sold locally
Further steps

1) Preliminary baseline study
2) Participatory workshop
3) In-depth study of the local systems of use and ecology of the selected resources
4) Preliminary market study
Follow-up project

- Identification and testing of options for selected resources production and transformation
- Sustainable production by local families and inclusion in the local market
- Identification of regional and international commercial networks

... was not carried out!
Strengths

• Combination of data collection with social learning process involving scientific and non-scientific actors
• Mutual learning provides a space for complementary forms of knowledge to meet
• Adoption of an integrated approach to natural resource management
• Involvement of local stakeholders in the identification of potentials for sustainable development and in the concrete project activities
Requirements / weaknesses

• Should be embedded within a long-term development project to ensure follow-up
• Careful preparation needed: participants, location, etc.
• Moderators with high facilitation capacities and flexibility: adaptation to group dynamics
• Humility and mutual respect, trust building: forms of knowledge, science and application, disciplines
• Potentially conflictual situations between participants
“Sustainable development“ itself, as a normative concept, can only be defined through social learning and consensus building between local and external, scientific and non-scientific stakeholders...
Thank you