

# **Summary Report of the CGIAR-NGO Committee on the Natural Resources Management (NRM) Consultation**

October 22-23, 1998

Washington D.C.

Given the importance that the CGIAR has given to NRM as a fundamental research pillar, and the comparative advantage that NGOs have in the field of NRM, agroecology and sustainable agriculture, the NGOC convened an NRM consultation involving 45 participants from NGOs, TAC, IARCs, Universities and NARIs.

The goal of the consultation was to initiate a dialogue among the various partners in order to define an NRM strategy congruent with both the CGIAR mission of poverty alleviation, food security and preservation of the natural resource base, and with a responsiveness to the needs and circumstances of the 1.2 billion resource-poor households located in marginal/fragile areas in the developing world.

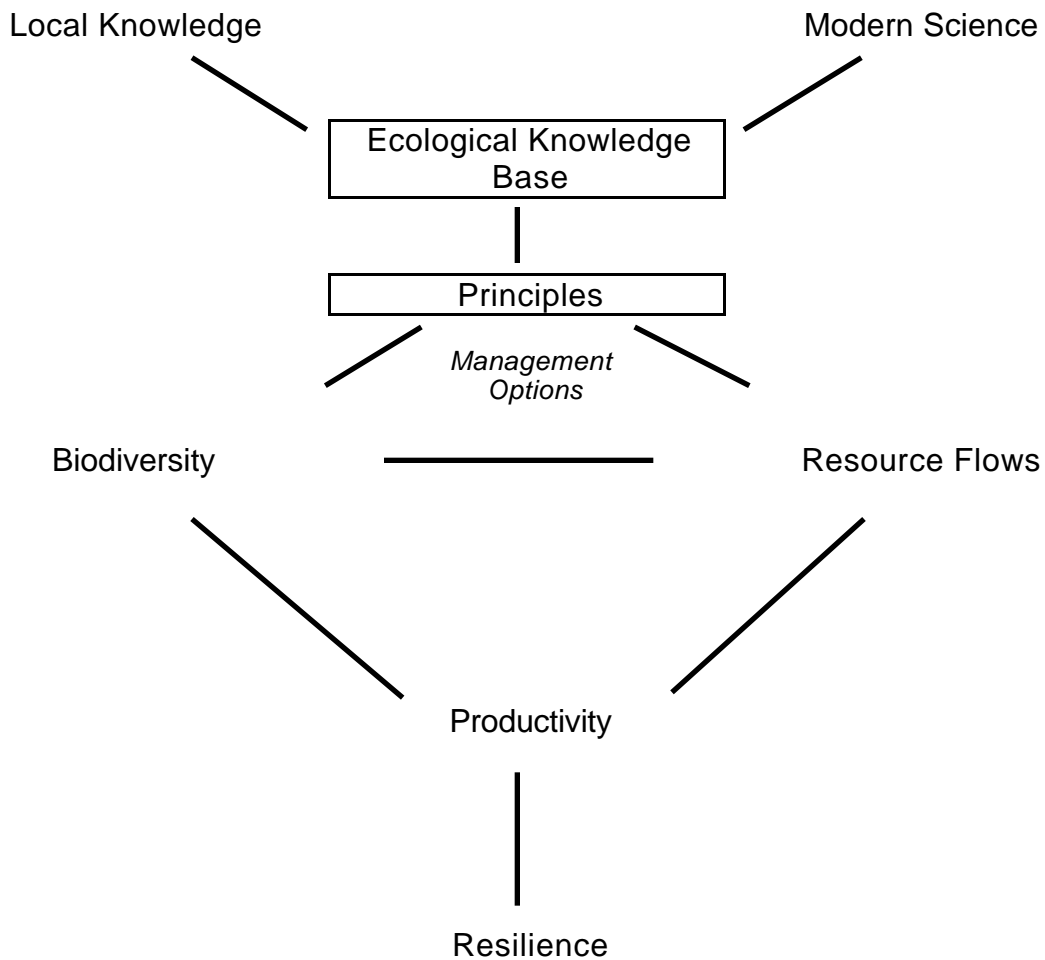
The consultation was organized in a manner that would provide guidelines to the CGIAR on three main NRM areas:

- The knowledge base of a pro-poor NRM strategy.
- The methodology for implementing a pro-poor NRM strategy.
- A definition of a policy environment to fit a pro-poor NRM strategy into a broader rural development agenda.

## **NRM knowledge base**

- Just as genetics and molecular biology provide the scientific basis for integrated gene management, the science of ecology should be the scientific paradigm that provides the principles to manage natural resources (soil, water and biological resources) in a sustainable manner.
- As ecology is engaged with complexity and interactions in complex systems, it provides an appropriate arena to facilitate a dialogue between scientists and local farmers whose traditional knowledge is also relational and complex in nature. In addition, ecological principles of diversity, adaptability, flexibility and stability cross over into the social scientific realm that deals with the complexity of social systems and their coevolution with natural resource management systems.
- The contributions to this ecological paradigm emerge from modern science as well as from local and traditional sources of knowledge.

- The fundamental ecological principles identified included:
  1. **Biodiversity** should be managed to ensure productivity, resiliency and ecosystem services.
  2. **Resource flows** should be managed to restore and maintain natural, human and capital resources.
  3. **Productivity** should be managed to ensure multiple products and services to satisfy ecological, economic and social needs.
  4. **Ecosystem resilience** should be managed to sustain economic services and productivity in response to changing conditions.
- These principles interact and have operational implications across different scales (field, landscape, watershed, etc.) in time and space. Their application translate into specific management and technological options that optimize the ecological function of agricultural and forestry systems, depending on environmental, social, cultural and economic circumstances specific to each target region.



### **NRM methodology**

- In order for the NRM guiding principles to translate into management options appropriate to poor farmers, methodological mechanisms must be in place so that technologies reach poor farmers and CGIAR goals are achieved. Such methodological mechanisms include:
  - β Effective partnerships which include farmer organizations
  - β Participatory research and development methods
  - β Empowerment of local communities in defining research agenda
  - β Scaling-up of successful local sustainable agriculture initiatives
  - β Development of indicators of sustainable NRM.
- In addition to serving as bridges for a dialogue on various forms of knowledge, partnerships are also effective mechanisms to implement concrete large-scale and long-term development programs that benefit poor farmers.
- Recognizing the heterogeneity and variability of rural communities and the need for site-specific NRM actions, decentralized approaches are needed for sharing and disseminating innovations derived from both traditional and modern science.

### **Linking NRM and rural development**

- Although appropriate NRM strategies are key to improving the livelihoods of poor farming communities, effective social organization, empowerment of communities, access to land, and enabling policies are also crucial for an NRM strategy to significantly impact poor farmers of the developing world.
- Policy research needs to be guided by policy requirements to achieve a pro-poor NRM and by a comparative policy analysis at both the macro and micro levels in order to identify policy interventions that will lead to poverty alleviation, food security and sustainable NRM.