

## BOX 3.1 | The Ecosystem Approach

The Ecosystem Approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. It is based on the application of scientific methodologies focused on levels of biological organization which encompass the essential processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of ecosystems. The Ecosystem Approach can be understood in terms of its 12 Principles and five points of operational guidance.

### 12 PRINCIPLES

1. The objectives of management of land, water and living resources are a matter of societal choices.
2. Management should be decentralized to the lowest appropriate level.
3. Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.
4. Recognizing potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context. Any such ecosystem-management programme should:
  - a. Reduce those market distortions that adversely affect biological diversity;
  - b. Align incentives to promote biodiversity conservation and sustainable use;
  - c. Internalize costs and benefits in the given ecosystem to the extent feasible.
5. Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the Ecosystem Approach.
6. Ecosystems must be managed within the limits of their functioning.
7. The Ecosystem Approach should be undertaken at the appropriate spatial and temporal scales.
8. Recognizing the varying temporal scales and lag-effects that characterize ecosystem processes, objectives for ecosystem management should be set for the long term.
9. Management must recognize that change is inevitable.
10. The ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity.
11. The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.
12. The Ecosystem Approach should involve all relevant sectors of society and scientific disciplines.



Organic agriculture, Sitio Tabidiao village, Negros, Philippines—farmers plant rice using this system of rice intensification in flooded paddy fields.  
*Joerg Boethling  
/ Alpha Presse*

### FIVE POINTS OF OPERATIONAL GUIDANCE

- I. Focus on the relationships and processes within ecosystem.
- II. Enhance benefit-sharing.
- III. Use adaptive management practices.
- IV. Carry out management actions at the scale appropriate for the issue being addressed, with decentralization to lowest level, as appropriate.
- V. Ensure inter-sectoral cooperation.