Present evolution versus history data for sustainable fishery in Tasaul Lake, Romania

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Abstract: Ecosystem-based management can be an important complement to existing fisheries management approaches. When fishery managers understand the complex ecological and socioeconomic environments in which fish and fisheries exist, they may be able to anticipate the effects that fishery management will have on the ecosystem and the effects that ecosystem change will have on fisheries.

Absent the political support will to stop overfishing, protect habitat, and support expanded research and monitoring programs, an ecosystem-based approach cannot be effective.

Basic ecosystem principles, goals and policies consist in:
- The ability to predict ecosystem behavior is limited.
- Ecosystems have real thresholds and limits which, when exceeded, can effect major system restructuring.
- Once thresholds and limits have been exceeded, changes can be irreversible.
- Diversity is important to ecosystem functioning.
- Multiple scales interact within and among ecosystems.
- Components of ecosystems are linked.
- Ecosystem boundaries are open.
- Ecosystems change with time.

The main Goals are:
- Maintain ecosystem health and sustainability.

Policies proposed:
- Apply the precautionary approach.
- Purchase “insurance” against unforeseen, adverse ecosystem impacts.
- Learn from other management experiences.
- Make local incentives compatible with global goals.
- Promote participation, fairness and equity in policy and management.

Key words: shallow lakes, fish stock assessment, population model, and sustainable development