

Globalization and Fisheries Management: what does it mean for educators?

Christine M. Moffitt

U S Geological Survey

Cooperative Fish and Wildlife Research Unit

University of Idaho

with Frances Gelwick

Department of Wildlife & Fisheries Sciences

Texas A & M

Outline

- **Current situation**
- **Challenges in higher education**
- **Potential approaches**
- **Reflect on future**

Marine and Freshwater Fisheries Management

- **FW / SW have maintained somewhat separate existence**
- **Greater number traditional programs inland fisheries management**

Developing and Developed World

- **Global markets and demand for access**
- **Recreation**
- **Food – market and subsistence**
- **Need for education**

Challenges to Educational Systems

- Economic resources
- Competition between programs within and among institutions
- Pace of change
- Demographic challenges

Increase Participation of Diverse Stakeholders

- **Recruitment and retention of minorities--majorities??**
 - **Women**
 - **Aboriginal peoples**
 - **Hispanics**
 - **Asian**
 - **African Americans**

Economic Realities

- **Academic programs faced with reduced funds for discretionary spending and program development**
- **Increased federal oversight of external funding**
- **Universities have developed an entrepreneurial vision for survival**

Focus & Dilemma for Traditional F & W Programs

- **Local or regional perspective of state /provincial agencies**
- **Need for mixing of ideas, and skills to integrate local with larger issues**
- **Policy relevant information needed at all levels**

National and International Needs

- **Focus research and educational themes to integrate understanding ecological functions and biodiversity**
- **Knowledge of communities, governance, and the needs of developing countries for food safety, and sustainable resources**

Can We Develop Sustainable Natural Resources?

- **We must weave the our disciplines to understand and face the international challenges**
 - **Environmental**
 - **Social**
 - **Economic**

The Future Challenge

- Future leaders need to have access to spatially explicit information of many sources
- Future leaders need expertise in policy and social/economic factors
- Future leaders need sensitivity to multi-cultural views and approaches

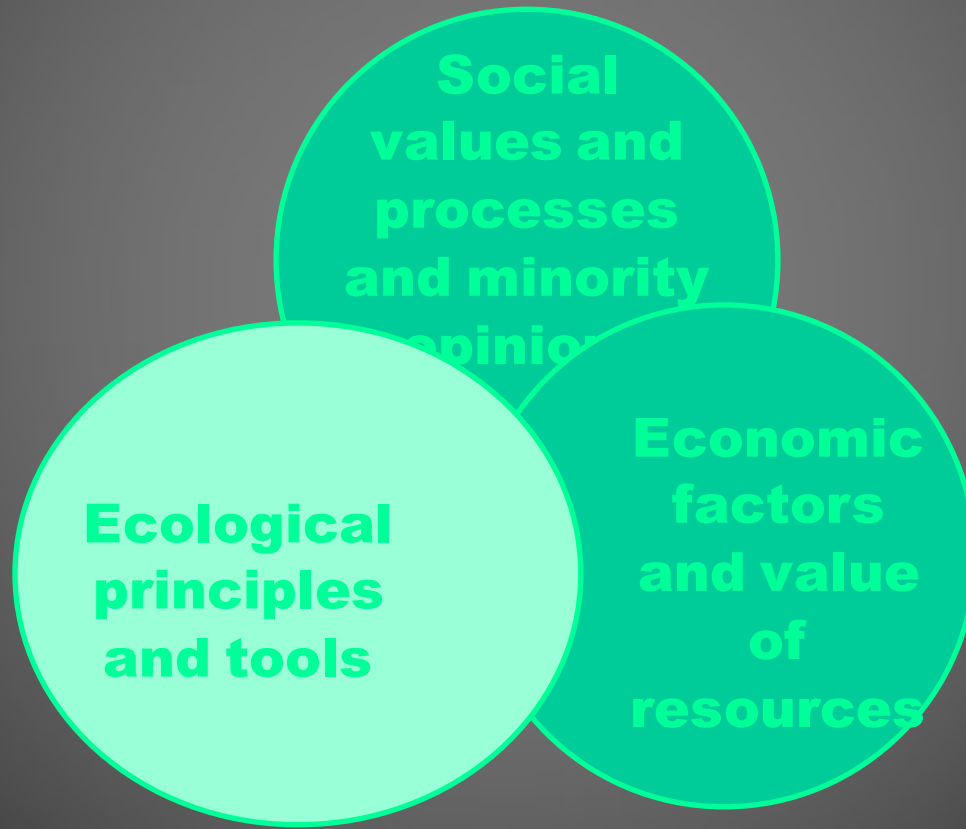
Global Communities Needs

- **Integrated and sophisticated skills in modeling and ecology**
- **Threats from invasive species from increased commerce and transport**
- **Climate change**

Interpersonal skills

- **Training in methods for co-management**
- **Negotiation skills**
- **Decision making tools**

Bridging Ecology, Culture and Governance



Recommendations

- **Foster exchanges among programs using technological tools e.g. web classes, Skype ...**
- **Recognize the need to train for global service and needs**
- **Foster sense of responsibility among students to global issues**