Study Guide for Module 3: The Human Dimension

Overview:
This is the third and last foundational module for this MOOC, and it introduces humans to the systems framework developed in the previous two modules. In this module, you will thus explore social-ecological systems as complex adaptive systems. You will learn about social-ecological resilience and how it relates to ecosystem resilience and adaptive capacity. The Galapagos Islands will be used as a case-study to illustrate these concepts. In the second section, the notion of human well-being will be discussed, in particular with regards to how this framework can help us achieve more effective and equitable management decisions and policies. In the third section of the module, you will learn about adaptive governance, how it relates to adaptive management, and how it can help us 1) achieve more effective and equitable management decisions and policies and 2) tackle wicked environmental problems. The last section of this module focuses on participation, more specifically on why effective participation in environmental governance is needed, how it can improve management and governance and the requirements for effective participation. This will be explored using the case of the Green Belt Movement in Kenya.

Learning Outcomes:
Upon completion of this module, students will be able to:

- Outline the reasons why we need to integrate the human dimension in environmental management and governance
- Explain the concept of social-ecological systems as complex adaptive systems
- Apply the social well-being framework to analyze social-ecological systems and explain its usefulness for environmental management and governance
- Differentiate management from governance and contrast the three main environmental governance and management systems according to interactive governance theory
- Define adaptive governance and recognize its requirements
- Illustrate with examples how we can manage social-ecological systems through managing their feedbacks
- Summarize the basic requirements of effective public participation and explain why it is needed
Topic Outline

3.1 Inter-Relatedness between Social and Ecological Systems
   3.1.1 Why Do We Need to Integrate the Human Dimension When Dealing with Environmental Wicked Problems?
   3.1.2 Social-Ecological Systems
   3.1.3 Social-Ecological Systems
   3.1.4 Rethinking the Galapagos Islands as a Complex Social-Ecological System: Implications for Conservation and Management

3.2 Human Well-Being
   3.2.1 Defining Human Well-Being
   3.2.2 Social Well-Being Framework

3.3 Environmental Governance
   3.3.1 Introduction
   3.3.2 Governance
   3.3.3 Adaptive Governance
   3.3.4 Global Environmental Governance

3.4 Environmental Participation
   3.4.1 Potential Benefits of Participation
   3.4.2 Requirements and Challenges for Effective Participation
   3.4.3 The Green Belt Movement: Using a Systems Approach and Partnerships to Address Poverty, Health, Environmental Degradation and Women Empowerment

Important Concepts

- Social-ecological systems
- Social-ecological resilience
- Adaptive capacity
- Human well-being
- Adaptive governance
- International environmental governance
- Effective public participation

Study Materials:

- Readings:
  - Vaughan A., January 7, 2016. Human impact has pushed Earth into the Anthropocene, scientists say: New study provides one of the strongest cases yet that the planet has entered a new geological epoch. The Guardian. Available online:


- Videos:
  - Welcome to the anthropocene: http://anthropocene.info/short-films.php
  - How to apply resilience thinking: https://www.youtube.com/watch?v=hlwVqdV1xpl
  - Feedbacks in social-ecological systems (10:03): https://www.youtube.com/watch?v=sOmRob-7xM4
  - Video from National Geographic on the Galápagos Islands and its amazing terrestrial and marine biodiversity: https://www.youtube.com/watch?v=CCIacOeB9cs
  - Global Environmental Governance: Quest for Symphony: https://vimeo.com/5390040
  - Strides in Development: Wangari Maathai & The Green Belt Movement (8:51): https://www.youtube.com/watch?v=BOU7JOxKyo

Activities:
No special activity.

References


Additional Resources:
- Article and video: What is the Anthropocene and are we in it?
- Social-ecological innovations. Following the publication of a chapter in a new book titled “Social Innovation — Blurring Boundaries to Reconfigure Markets”, Dr. Per Olsson from the Stockholm Resilience Centre discusses the concept of “social-ecological innovation”

The Green Belt Movement
- Official website: http://www.greenbeltmovement.org
- Four million die from unsafe kitchens every year - A Green Belt Movement Story: https://www.youtube.com/watch?v=-z_ycx06ovQ