



COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

NANR 202: INTRODCUTION TO NATURAL RESOURCES MANAGEMENT

END OF SECOND SEMESTER FINAL EXAMINATIONS

APRIL 2023

LECTURER: DR. C. HOPE

DURATION: 3 HOURS

Section A. Answer all questions in this section

Definition Matching.

Below you will find a definition for each of the following terms: adaptive management, fortress conservation, integrated natural resource management, natural resource, and sustainable development. Write which term each of the following definitions describes. [1 mark each, 5 marks total]

1. Meets the needs of the present without compromising the ability of future generations to meet their own needs.
2. An approach that seeks to preserve wildlife and their habitat through the forceful exclusion of local people who have traditionally relied on the environment in question for their livelihoods.
3. Material occurring in nature that has actual or potential value to a natural system that supports living organisms.
4. Deals with uncertainty through a structured improvement of relevant knowledge, while seeking to minimize risks associated with ongoing management, which inevitably result from imperfect information about system response.
5. The responsible and broad-based management of the land, water, forest and biological resources base (including genes) needed to sustain agricultural productivity and avert degradation of potential productivity.

Section B. Answer all questions in this section

Identifications.

For each of the following sets of initials, write what the initials stand for and briefly describe how it applies to natural resource management. [4 marks each, 20 marks total]

6. SDG
7. TNC
8. UNEP
9. CCP
10. PRA

Section C. Answer all questions in this section

Listing and short answer.

Marks value as indicated. [25 marks total]

11. List the four activities in which Environmental Non-government Organisations are most often involved. Answer with a phrase or complete sentence for each. [4 marks]

12. List the four steps involved in adaptive management. Answer with a phrase or complete sentence for each. [4 marks]

13. Briefly explain what is meant by “the resource curse” as applied to African countries. [5 marks]

14. What is meant by the term “elite capture” as applied to Community Based Natural Resource Management? [5 marks]

15. Which three areas of life does sustainable development seek to balance? [3 marks]

16. What is Agenda 2063? Which multilateral organisation formulated it? [4 marks]

Section D. Short Essays. Answer three of these questions. [10 marks each, 30 marks total]

17. Discuss the impact of China on natural resource development in Africa in recent years. Who, if anyone, has benefitted from it? Who, if anyone, has been hurt by it?

18. A brother and a sister jointly own a small farm they inherited from their parents. The brother uses maximisation logic; the sister prefers optimisation logic. How would they differ in making future plans for their farm?

19. What are the methods and techniques used in both Community Based Natural Resource Management and Integrated Natural Resource Management to gain participation from community members? Give examples from the case studies we discussed.

20. Discuss how Top Down and Bottom Up approaches would differ when it comes to soil conservation.

21. What is meant by “Tragedy of the Commons”? What do “Tragedy of the Commons” proponents assume about how grassroots actors use natural resources? How does this differ from what those involved in Community Based Natural Resource Management and Integrated Natural Resource Management assume about grassroots actors’ use of natural resources?

22. The activities of small-scale gold miners silt up the river used by nearby farms for irrigation, wearing out the pumps prematurely and possibly polluting the water. You are assigned as an INRM facilitator to resolve the problem. What steps do you take in doing so? What are the possible conflict resolution methods you might use?

Section E. Long Essay.

Answer this question. [20 marks]

23. A quote from a 2021 FAO Report states “Recent assessments, projections and scenarios from the international community paint an alarming picture of the planet’s natural resources—highlighting overuse, misuse, degradation, pollution and increasing scarcity.” To what extent does this assessment

apply to African resources? What are the special challenges African natural resource managers face in addressing these problems? In your judgement, which, if any, of the natural resource management approaches discussed in class would be helpful in meeting these challenges? What other types of intervention or change might be needed?

End of Examination Paper