

GEOG 1000 – Assignment 5

Article: Global Consequences of Land Use

Authors: Foley, J. A., R. DeFries, G. P. Asner, et al. 2009

Date Due: Monday April 14, 2014

Total Marks = 26 (8% of total grade for class)

Late penalty = 10% per day late to a maximum of 3 days.

PLEASE PRINT ANSWERS AND BRING TO CLASS BY THE DUE DATE

Make sure to include your: Name; Student ID; and Email

The assigned reading out of Science magazine uses remote sensing data and a review of other datasets to examine the consequences of land use as a global issue. This article also combines much of what we have learned in Geog1000 and should be an interesting final assignment for this course.

Questions: Answers should not exceed one page in total (for all three questions).

1. A) What is the underlying dilemma currently faced by humanity with regards to the use of land for natural resources? (Total = 4 marks)
2. Throughout the article, many comparisons have been made between human use of natural resources and subsequent degradation of the local environment. A) Describe 3 ways in which humans have been able to improve the extraction and use of natural resources through technological advancement (3 marks: 1 mark each), whilst at the same time degrading another natural resource they require, in the process (6 marks: 2 marks each). B) Describe the effect of the resulting degradation on the local population (even if it isn't discussed) (3 marks: 1 mark each). For example, increased urbanization ... lowered fish stocks that are depended on for food. (Total = 12 marks)
3. Using the "Local-scale" case studies as an example (on the last page), provide your own example of a case study (can be real or hypothetical) where we might see a "win-win-win" scenario that would address environmental, social and economic benefits (1 mark for the example). Describe each of the environmental, social, and economic benefits that might come about from your hypothetical or real example (3 marks each). Some examples to get you started might include: initiating a community garden; creating an urban forest; urban gardening on flat rooftops; marshland reclamation along the Oldman River, renewable energy use (e.g. individual home

owners feeding back into the grid for increased revenue), etc. Doesn't need to be focused on Lethbridge (Total = 10 marks).