

GEOG 370 Geography of Sustainable Development

Name -----

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Final exam Q 4

Write an essay about agroforestry as one of the most effective means of sustainable development and environmental conservation. Give 4 examples from peer reviewed articles.

- Agroforestry is one of the most successful approaches of sustainable development.
- This type of agriculture fulfils the three requirements of sustainable development
- Which include economic benefits, people participation and experience as well as environmental conservation.
- It has been a sustainable agricultural land-management approach that has been practiced for centuries (it is an improved and modern sort of traditional agriculture).
- It is a technique that blends agriculture, livestock and forestry together in order to enhance crop productivity, profitability, and sustainability in a given unit of land.
- Agroforestry is economically sustainable because:
 - 1- the farm is small and easy to manage and sustained.
 - 2- it increases food security.
 - 3- As well as farmers' income increases because of the higher farm productivity
 - 4- Hence it reduces poverty rates.
 - 5- it increases employment. Since more agricultural labors are required.
 - 7 – On the other hand, agroforestry is an environmentally sustainable system because trees can help give back to the soil what agriculture has taken away –such loss of soil nutrients and soil erosion.
- As a result,
- A- it reduces the high rain variability and increases rainfall through transpiration of trees and
- B- it increases soil fertility through organic fertilizer (tree leaf - humus).
- Therefore, farmers do not relay on expensive and harmful inorganic inputs such as chemical fertilizer.
- Most important, it can simultaneously protect important natural resources in the area such as other forests from deforestation, arable lands and enhances cloud formation and increases rainfall.
- These benefits of agroforestry make it an extremely effective technique for attaining sustainable development.