Subsistence agriculture

Business, Industries

How is intensive subsistence agriculture distinguished from extensive subsistence cropping? Why, in your opinion, have such different land use forms developed in separate areas of the warm, moist tropics? Intensive agriculture is the primary subsistence pattern of large-scale, populous societies. It results in much morefoodbeing produced per acre compared to other subsistence patterns. Beginning about 5, 000 years ago, the development of intensive farming methods became necessary as the human population grew in some major river valleys to levels beyond the carrying capacity of theenvironmentusing horticulture and pastoralism.

The transition to intensive agriculture was originally made possible by water management systems and the domestication of large animals for pulling plows. This allowed farmers to get below the top soil to bring buried nutrients up to the surface. It also allowed farmers to maintain much larger fields of crops. Subsistence agriculture is performed by onefamily, typically. Enough food is generated for that one family to subsist or survive.

This is different than agriculture practiced in western capitalist countries, wherein the product is economically profitable, and not just limited to an amount of food produced that allows one family to subsist. Humid tropic conditions are found over nearly 50 per cent of the tropical land mass and 20 per cent of the earth's total land surface an area of about 3 billion hectares. Tropical Central and South America contain about 45 per cent of the world's humid tropics, Africa about 30 percent, and Asia about 25 per cent.

As many as 62 countries are located partly or entirely within the humid tropics. Agricultural systems and techniques that have evolved from ancient times to meet the special environmental conditions of the humid tropics

include the paddy rice of South-East Asia, terrace, mound, and drained field systems, raised bed systems (such as the chinampas of Mexico and Central America), and a variety of agroforestry, shifting cultivation, home garden, and natural forest systems.

These systems share common elements, such as high retention of essential nutrients, maintenance of vegetative cover, high diversity of crops and crop varieties, complex spatial and temporal cropping patterns, and the integration of domestic and wild animals into the system. Changes and land transformation in the tropics are occurring at a much faster rate; in some cases, areas are completely transformed and often degraded beyond economically feasible restoration within one generation.

Many of the traditional and ancient systems have been deeply modified or abandoned owing to economic, cultural, and social pressures. Question #2 What economic or ecological problems can you cite that do or might affect the gathering industries of forestry and fishing in North America? What is the maximum sustainable yield? Is that concept related to the problems you discerned? The agriculture, forestry, and fishing sectors are the cornerstone of industries that produce and market food, fiber, and fuel.

Collectively, the three sectors make up a huge component of the U. S. economy and are a major employer in the United States. Annually, these industries generate more than $1 trillion and create exports exceeding $68 billion. The National Institute for Occupational Safety andHealth(NIOSH) estimates that more than 5. 5 million workers are employed in agriculture, forestry, and fishing. These sectors also consistently rank in the top six most

hazardous occupations; fishermen and loggers have the highest fatality rates.

Collectively, the three sectors consistently have the highest injury and fatality rates of any U. S. industries, so the overall effect on the safety and health of exposed populations in agricultural, forestry, and fishing worksites is enormous. In population ecology and economics, the maximum sustainable yield or MSY is, theoretically, the largest catch that can be taken from a fishery stock over an indefinite period. Under the assumption of logistic growth, the MSY will be exactly at half the carrying capacity of a species, as this is the stage at when population growth is highest.

The maximum sustainable yield is usually higher than the optimum sustainable yield. This logistic model of growth is produced by a population introduced to a new habitat or with very poor numbers going through a lag phase of slow growth at first. Once it reaches a foothold population it will go through a rapid growth rate that will start to level off once the species approaches carrying capacity. The idea of maximum sustained yield is to decrease population density to the point of highest growth rate possible.

This changes the number of the population, but the new number can be maintained indefinitely, ideally. MSY is extensively used for fisheries management. MSY in most modern fisheries models occurs at around 30% of the unexploited population size. This fraction differs among populations depending on the life history of the species and the age-specific selectivity of the fishing method. However, the approach has been widely criticized as ignoring several key factors involved in fisheries management and has led to the devastating collapse of many fisheries.

As a simple calculation, it ignores the size and age of the animal being taken, its reproductive status, and it focuses solely on the species in question, ignoring the damage to the ecosystem caused by the designated level of exploitation and the issue of by catch. Question #3 How, in your opinion, do the concepts or practices of comparative advantage and outsources affect the industrial structure of advanced and developing countries? In economics, the theory of comparative advantage refers to the ability of a person or a country to produce a particular good or service at a lower marginal and opportunity cost over another.

Even if one country is more efficient in the production of all goods than the other, both countries will still gain by trading with each other, as long as they have different relative efficiencies. The outsourcing of U. S. jobs overseas is part of an economic movement that promises a better life -- indeed, a new beginning -- for many people in developing countries. It gives technologically savvy young people in countries like India livelihoods that move them into the ranks of the middle class. On the other hand, workers in industrialized nations are being displaced in large numbers.

Comparably well-paying jobs are not being created fast enough to make up for the positions headed offshore. Outsourcing has gained notoriety in recent months because of the accelerating volume of job transfers overseas and the sudden vulnerability of high-tech and service occupations that were once thought immune to trade displacement. Services that used to be nontradable (back-office operations, call centers, data management and accounting sectors) have now been made fully tradable because of advances in communications and computational technologies.

Location is increasingly insignificant in the provision of these services. Moreover, the ready availability of large pools of technically capable and computer-savvy workers overseas has eroded what traditionally had been considered the distinct preserve of the U. S. and other developed countries: sophisticated, high-end technologies. Developed countries, too, have been major beneficiaries, since their comparative advantage lies in the trade of manufactures, services, intellectual property and capital. Industrialized countries have been vocal in promoting trade openness in these areas and have fiercely defended the need torespectand enforce intellectual property rights (e. g. , pharmaceutical patents and software).

There are, of course, adjustment costs that accompany trade, since segments of local populations are hurt by open markets. Despite these costs, poor countries have subscribed to international trade rules and have slowly but steadily opened their markets in those economic sectors (especially manufactures and services) where industrialized countries have much to gain.

Having reaped enormous profits from free trade in those areas where they enjoy a distinct comparative advantage, developed countries violate procedural justice whenever they curtail or suppress the liberalization of markets in which they have a comparative disadvantage. This is exactly what the European Union, Japan and the U. S. have done in food markets, making poor countries unable fully to reap the gains of their comparative advantage (agricultural crops). The industrialized nations have steadfastly refused to open up trade in farm goods in an effort to protect farmers from being displaced by global trade. Works Cited:

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