Price of progress

Business

Roundwood or log production areas correspond with tropical rainforests, being found as a discontinuous band between twenty eight degrees north or south of the equator.

The countries that typically have roundwood forests exploit them for use as fuelwood, usually charcoal, but an increasing quantity is being used as export lumber. This latter use proves to be problematic as governments or individuals place greater emphasis on logging than on the production of foodstuffs and, more recently, this balance of trade has manifested itself as an energy crisis in exporting countries. Global efforts to alleviate such trade inequities have been ineffective if not counterproductive. Nowhere are the economic and environmental effects more visible than in the Southeast Asian realm, particularly in the country of Malaysia. For the purposes of the investigation, their effects will be observed in the context of this country, and will represent a microcosm of the world lumber trade.

First some cursory information; Malaysia is located at two degrees north, near the South China Sea and the Straight of Malacca. It was a British colony during the eighteenth and nineteenth centuries. Since the 1970s, Malaysia has made significant strides in transforming itself from solely a provider of commodities (wood), to becoming a provider of pharmaceuticals and an extensive service sector. However, in the states of Sarawak and Sabah, both on the island of Borneo, logging remains a powerful and profitable industry. Laterite soils predominate in tropical regions and Malaysia is no exception. Enumerated here are some common characteristics of laterite soils: • There is a low cation exchange capacity; that is the ability of the soil to absorb and retain cations, nutrients, is low.

• There is a low ph, between 4. 6 and 5. 4; furthermore, at this low level, toxic aluminum ions become water soluble. Uptake by plant root systems further contributes to this problem. • High mineralization rates in the tropics contributes to a low accumulation of organic matter, so necessary for its ability to regulate leaching, and wind, water exposure and consequent erosion.

Clearing of land for lumber (tree) plantations has a wide array of negative effects. First, the removal of potential producers of plant debris, the trees themselves, further strains the ecosystem to provide the necessary nutrients; that is, without mineralization of plant debris, no more nutrients can be added. Also resultant from the loss of the top soil horizon is potential erosion and loss of more soil horizons. Second, intensive use of laterite soils requires tremendous inputs of chemical fertilizers to replace the lost nutrients, pesticides and buffers to make the ph more conducive to growth. This use of chemical fertilizers has been associated with further nutrient deficiencies.

The use of pesticides contributes to potential mutualistic symbiont deaths; again this would result in denied plant growth. By converting land that could have been used for agriculture or other industry into tree plantations, an opportunity cost of conversion arises; that is using the land for forestry precludes any other use for that land. The implications of this are, first, decreased food production which may lead to undernutrtion of the people and increased food cost, assuming that food demand is inelastic. Second, the monoculture of specific roundwood trees will displace native wildlife, possible food sources, or sources of integrated pest management (which may result

in greater incidence of disease or crop blight). Thirdly, any land that is used for plantation is not used for the production of domestic fuel wood or for the use in a more profitable enterprise, i. e.

microchip processing. This last point becomes apparent when one considers the conditions of similarly developing countries: “ As a result of shortages and deforestations in such widely scattered areas as Nepal and Haiti, families have been forces to change their diets to primary dependence on less nutritious foods that need no cooking. Reports of villages reduced to only one cooked meal a day are common. With the average villager requiring a ton of wood per year, an increasing proportion of labor must be expended to secure even minimal supplies of fuel…between 250 and 300 workdays are needed to fill the yearly firewood needs of a single household.”(Fellmann et. al 344) Commodity prices as a whole dropped between thirty and forty percent between the years 1975 and 2000, whereas the prices paid for manufactured goods from developed nations tended to increase.

The obvious result is a severe cut in revenues derived from selling the commodity and buying the finished product. Some developing countries, Malaysia being no exception, in order to circumvent such importing costs, have favored a policy of manufacturing in country; however, when the products are to be sold, they are often met with tariffs and quotas, imposed to protect domestic producers. These trade inequities necessitated the United Nations Conference on Trade and Development, in 1964, whose main objectives were: 1. increase the values and prices of exports from developing countries, 2. create a system of import preferences for the manufactured products of developing countries, and 3. promote cooperation to stress trade

in developing countries, and recognition of their special needs The implications of the former two are an increase in both the gathering of lumber and manufacturing of lumber goods.

Such an increase will most definitely expedite the loss of the roundwood forests, and might lead to a proliferation of both industrial waste and greenhouse gases by countries whose environmental policies are not as stringent as those in developed countries. There has been a marked decrease in forested land in Malaysia over the past two decades even though Malaysia has taken an interest in sustainable forest management. This interest may be too late due to the lack of usable nutrients in the laterite soils. The environment is not the only victim of such land exploitation; people are not meeting their required caloric and nutrient needs, and industry is suffering due to a lack of a productive labor force, because the people are either malnourished or too busy finding fuelwood. The conditions experienced here are not irreversible; Japan, after years of exploiting their old growth forests, enacted a strict policy of conservation and their forests today account for sixty seven percent of the total land area. Bibliography Bretzler, Anja.

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