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Oil Wealth and the Fate of the Forest: a comparative study of eight tropical countries

Sven Wunder, 2003, Routledge, 456pp, ISBN 0415278678

On first reading the title one might expect that *Oil Wealth and the Fate of the Forest* could be about how petroleum development causes environmental impacts and direct forest damage. Or perhaps one may hold the conviction that poverty is the greatest enemy of conservation and that the book describes how mineral wealth could help alleviate poverty and thus lead to improved forest conservation. It does neither. Rather, this book takes a hard analytical macroeconomic approach in an attempt to determine the impact of mineral wealth on those sectors and activities within economies that cause forest degradation and destruction.

The book is primarily about 'Dutch disease', which in general terms could be described as the macroeconomic impact of large economic rents generated by mining and oil production on other sectors of the local economy. The large inflows of foreign exchange resulting form mineral development often cause effective exchange rates to rise which in turn reduces the economic viability of other non-mineral export sectors of the economy. The author's main thesis is that Dutch disease causes the agricultural and logging sectors to lose international price competitiveness due to the high value of the local currency unit. Less investment in agricultural and logging activities results in lower levels of forest degradation and destruction. This basic thesis is complicated, however, by the policy response and expenditure patterns of the respective governments to the new-found wealth.

The early chapters describe the analytical framework and also identify some

of the key assumptions and analytical challenges. The challenges primarily relate to the varying definitions of what constitutes 'forest' and also the variations in measurement and evaluation techniques between different studies and organisations. These differences sometimes result in widely diverging views about the rate of forest loss in some of the case studies. The author also identifies the principal drivers for forest protection which may result from the economic impact and use of mineral rents, as well as those factors and policies which may serve to increase forest loss.

The book studies in-depth eight oil and mineral producing nations in the tropics with varying levels of forest cover. Five detailed case studies, of Gabon, Venezuela, Cameroon, Ecuador and Papua New Guinea, are carried out and the other three. Mexico. Nigeria and Indonesia, are combined into a single chapter. Each case study is well researched and presented using a range of local and international sources. Each presents a well structured and systematic case for the impact of mineral wealth on forests, during periods of both boom and bust, and assesses the impacts of various government policies and infrastructure initiatives on the extent and rate of forest loss. Each of the case study nations conform to a greater or lesser extent to the underlying thesis that Dutch disease protects the forests with differences mostly explained by an analysis of government policy and infrastructure initiatives.

In the process of discussing drivers for forest conservation or loss, the author identifies that the principal factor contributing to forest protection is the loss of price competitiveness in the agricultural and logging sectors. Other important factors include the tendency of mineral-rich countries to spend their new-found wealth on urban development and increases in non-

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tradable items such as government salaries. This compounds the impact of the loss of economic viability of cash crops and encourages rural-urban migration. Decreasing rural population results in less pressure to clear forests for crops.

Governments that focused agricultural extension activities on increasing the intensity of cultivation (on food crops) tended to reduce forest loss, whereas those that promoted extensive pastoral farming (primarily beef cattle) tended to increase pressure for forest clearance. Governments that put resources into improving road and rail infrastructure also increased pressure on the forest by improving access and transportation routes for loggers and farmers.

The ultimate outcome for each case study country was a canvas of conflicting economic and policy outcomes of greater and lesser significance, some of which tended to improve forest conservation and some of which contributed to loss.

The author acknowledges early in the book that the direct deforestation effects of oil and mining ventures are generally very minor in the context of national forest loss. He makes a strong case that underlying and indirect economic factors are far more powerful in driving the forest impacts. This was not a popular conclusion among some protection non-government organisations. A quick web search on the title resulted in the discovery of some vociferous attacks on the author's conclusions and apparent support for mineral sector development. But the detractors clearly miss the point that the author has not made any value judgements about whether mineral wealth is good or bad. He has merely identified a number of economic outcomes of mineral wealth and how they impact on forest loss.

The book concludes by making a number of policy recommendations for ways to

reduce forest loss in countries that receive mineral rents. This section puts the author in the very difficult position of trying to justify that some of the effects of Dutch disease are positive (for forests), when most development economists see the broader economic impacts of elevated effective exchange rates as reducing development effectiveness. The reader is left with the impression that it is very difficult to achieve both broad based economic development as well as forest conservation from the traditional paradigms of economic development. For example, increasing road infrastructure and improving agricultural extension activities in order to spread incomes to the rural poor results in forest clearing to make way for agricultural production. This may be a win for poverty alleviation but clearly a lose for the forests.

It appears to be the author's view that mineral wealth is beneficial in terms of forest conservation, especially if governments promote development strategies which favour urbanisation and rural depopulation, discourage the eating of domestically produced beef, promote importation of food products, and allow rural infrastructure and roads to degrade to the point where agricultural and logging activities are no longer viable in remote and forested areas. This is not a recipe which most development economists would accept as a viable long-term sustainable development strategy for tropical developing countries.

Routledge also do their bit for forest conservation with this book. By using a size 7 font they minimise the amount of paper consumed in producing the book, which is laudable, but it makes for heavy going for the over 40s suffering from progressively declining eyesight.

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