



# Forestry and development

*By the Raw Materials Group*

Most of the material published in the first volume of RMR has dealt with minerals and their role in the world economy and world politics. This is the field in which the Raw Materials Group has specialized and in which we will continue to concentrate our research and documentation work. Minerals will hence be in focus in volume two as well, but we will also cover other sectors of the global economy, primarily those where qualified research on the economic and political role of TNCs has been carried out or is in progress. Forestry and the forest industries is one such sector. The similarities between forestry and mineral extraction are often not recognized by researchers, development planners and, most important, political decision makers.

Minerals are, as a rule, seen as the prime example of so called non-renewable resources, whereas forest resources are generally regarded as renewable. Forests are indisputably biologically renewable. But the slow regeneration process in the temperate zones makes this distinction highly theoretical, at least from the corporate point of view. The borderline between non-renewable and renewable resources is thus not particularly distinct and highly influenced by economic and political considerations.

## Forests – how renewable?

Most resources are widely distributed over the earth – minerals as well as forests, but only the most concentrated and easily accessible have been exploited. When a mineral deposit or a forest area has become "unprofitable", the corporations have moved on to another. The driving force in this process has been a small number of large corporations based in the developed capitalist countries. However, despite abundant resources this profit maximizing policy has inevitably led to rising costs for the TNCs.

If we look at the raw material for the veneer and plywood industries, the logs from the largest trees are often hundreds of years old, tropical hardwoods as well

as temperate softwoods. The availability of large trees of the most attractive species is limited and the exploitation must be carried out further and further away from the final market.

To counter this tendency the TNCs have spent and are spending large sums on improved technology, ie in prospecting, exploration and transports. Here the similarities between mining and forestry are striking.

From an economical point of view (at least in the capitalist world) it is unimportant whether it takes a million years to regenerate a resource (petroleum) or 100 to 1 000 years (log for veneer). Both are beyond the planning horizon of any TNC.

It should also be emphasized that there is no sharp demarcation line between the larger logs that are used in saw mills and the smaller logs that go to pulping and to the production of fibre board and particle board. This is especially so since the links between different branches in modern forest industry are very much stronger than before. An important part of the raw materials used in the pulp industry is in fact chips and particles from sawmills, besides waste from forests.

## Larger trees

There might be a certain competition for the larger trees with longer regeneration periods between the different sectors, but these trees normally go to the sawmills. In a natural forest this timber is first depleted and it will take a long time to regenerate, which means dramatically increased interest costs if/when reforestation takes place. As in the case of minerals, corporations active in this branch must continually look for new deposits at greater and greater distances from available transportation facilities, processing industries and the consumer market. Even if the long term price of sawn timber has risen more than the price for lesser dimensions the former is now challenged by substitution from other materials and is thus sensible to price competition.

## Lesser trees

For the lesser wood dimensions used by the pulp and board industries there are also important similarities with minerals and other non-renewable resources. The regeneration period is, even in Southern Sweden, on average around 70 years for these dimensions and it can be twice as long in Northern Sweden, not to speak about Siberia with its new large forest industries. Over time this will increase the transportation costs and the raw material will be considerably more expensive. The alternative to continued production will then be a writing off the production facilities as soon as possible and a move to a new area with virgin forests.

In other words, *only in the tropical and subtropical countries with a sufficient rainfall, wood raw materials could really become renewable in an economic sense* However, not even in these zones the regeneration time is short enough to make

forest resources renewable regardless of how they are exploited. An authority with a longer planning perspective than the short sighted TNCs is clearly needed to balance the corporate interests.

Forest plantations shorten the regeneration period further. Under democratic state control such plantations could considerably improve the possibilities of the "third world" countries to compete with the TNCs, which have their main forest resource bases in the temperate zones.

## A restructuring of the world forest industry?

Thus, to speak of renewable forest resources presupposes, from the practical, long term point of view, a massive transfer of forest industries to the tropics.

The implications of such a radical restructuring of the global industry are far reaching. One of the most important

questions it raises is whether it is a realistic alternative, compatible with the political and economic demands of the "third world" for a New International Economic Order.

Large, highly mechanized plantations in the tropics with a small number of selected genetically improved species is a possibility with great economic potential for the developing countries, but it also raises a number of very complicated economic, social and ecological questions. For example, in the natural tropical forest there is a large number of different species, but in a plantation only one, which could cause unforeseen ecological imbalances.

These questions can only be solved through continued research and a broad democratic discussion by the peoples in all countries concerned, in the "third world" as well as in the developed industrialized countries. ■

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## INFORMATION FOR AUTHORS

### General

Raw Materials Report welcomes contributions on any aspect of raw material supply and resources policies. Papers submitted should be original articles or revised and updated versions of papers delivered at conferences and meetings or comprehensive summaries of longer works such as a doctoral thesis.

### Length

Articles could be either full length papers, 5 000-10 000 words, or shorter comments and notes, book reviews, resource datas etc. Critical comments on previous articles in RMR are also most welcome. Only articles written in English can be accepted.

### Typescripts

Manuscripts should be submitted in dupli-

cate. They should be typed in double space with 5 cm margin, preferably with 40 strokes per line (including space-strokes). Tables and figures should be on separate sheets. A summary, maximum 100 words and a brief biographical note will be helpful. References should be typed in the end of the article in the following manner:

Robert Jensen, Theodore Shabad and Arthur W Wright, editors, *Soviet Natural Resources in the World Economy*, The University of Chicago Press, 1983, pp 83-95.

J Skea, "Electricity Supplies for the Primary Aluminium Industry", *Resources Policy*, March 1980, pp 60-70.

### Illustrations

Authors are encouraged to send black-and-white or colour photographs, maps, drawings etc. which will be returned directly after use.

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## Addenda

From Theodore Shabad, the author of the study of the Soviet aluminum industry published in Vol 1 No 4, we have received the following corrections to Table 1:

4 should read	248	not 148
4b	150	not 50
5	2 500	not 2 100
	1 900	not 2 900
Nepheline	600	not 200

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## Erratum

In Vol 1 No 4 p 71, the increase in "third world" steel production from 1972 to 1981 should be 110 per cent, not as stated 52 per cent.