WOOD AS A STRATEGIC MATERIAL

by Kenneth S. Rolston, Jr., executive vice president, American Pulpwood Association, Washington, D.C.

Over the medium and long run timber can provide a major contribution to improving the balance of payments caused by the increase in oil prices. It can do so without causing severe shortages at home. This is basically the position held by most senior executives in the forest industry and I'll try to discuss briefly some of the factors necessary to fulfillment of their prognosis.

First, however, let's look at the other side.

Let's not export our logs until we know we have enough timber for our own uses. Let's not back ourselves against the wall. Let's cut off exports and provide for our home industry. We can change later is we see we have an adequate supply.

This is a warning from a "Friends of the Earth" spokesman calling for an export ban on logs from National Forests.

In further support of the shortage advocates, Bruce Zobel of North Carolina State University in an article in American Paper Industry magazine predicted shortages of quality pine and hardwood in the South.

If our forests are to become strategic in the sense that sufficient excess production will be available for export, policy corrections will have to be made and these must be based on careful analysis of a number of controlling factors. The first is the world-wide market situation and prospects.

In recent years there has been a rapid increase in the worldwide use of wood. Population growth is one factor but other important influences are improvement in the standard of living, technological changes resulting in new products, acceptance of more species as industrial raw material, and use of wood for fuel as oil prices increase. Demand in Europe and Japan is expected to show fast growth. Projections indicate European demands will double by 2000, primarily for pulp and paper products. Limited European timber supplies are expected to result in major annual deficits as high as seven billion cubic feet. Japan is already dependent on imports for over half of its requirements and this deficit situation is predicted to increase for at least several decades until her forests may be able to improve their yields.

We're familiar with predictions of U.S. demand in the year 2000; double for paper and board and substantial for lumber and plywood. In that year we'll have 55 million more people and expect a much higher standard of living.

The FAO predicts world demand to rise by 45 billion cubic feet in the 1975 to 1990 period, nearly 50 percent. Fuelwood is expected to account for 20 billion cubic feet and pulpwood for 15 billion cubic feet in that period leaving an increase of 10 billion cubic feet for sawlogs and panel products.

If we accept the premise that the markets will be there, where will the wood come from?

A recent study for the American Pulpwood Association made by Jaako Poyry, a worldwide forestry consulting firm, looked at the worldwide supply of wood along with present and future demand to the year 2000.

The firm identified Japan, Europe, the United States, China, and India as areas that will need more wood than they can supply. On the other hand, Canada, Siberia, Brazil, tropical Africa, Indonesia, and Burma are expected to have surpluses. These regions will have problems and drawbacks that will prevent actual utilization of their wood.

Brazil is planning rapid expansion of her forest

industries including expanding pulp production from one million tons in 1972 to six million tons in 1985. Brazil is expected to use most of the increase in production so the amount available for export to the deficit countries will be of marginal importance. Lack of a developed economy, lack of technical know how and other problems will continue to impede development and use of Brazilian forest for years to come.

The same problems exist in tropical Africa to an even greater degree and Asian wood is likely to be utilized primarily in that region.

Although the Soviet Union has surplus growth, most of the wood for its expansion will have to come from Siberia - an area lacking infrastructure located a tremendous distance from the final market. It is expected that Soviet domestic consumption of wood products will keep pace with the rate of production. For example, their consumption of paper per capita is only 1/10 that of the United States.

Canada has vast unutilized forest reserves and the potential for nearly doubling its allowable cut but much of its forests are economically inaccessible. Increasing distances from woods to mill as nearby forests are cut, the problem of getting sufficient labor to the woods and rapidly increasing costs will probably prevent large expansion of the Canadian industry.

It is hard to imagine the U.S. as a "deficit" area. Our supply of wood has always been more than adequate and we have had a surplus of growth over drain for many years. The rise in exports since 1950 has just about offset the increase in imports and there hasn't been much change in net trade. Net imports in 1973 were 1.6 billion cubic feet, some 12 percent of total U.S. consumption.

The prognosis reached by Jaakko Poyry is of most interest:

The final conclusion is that, in spite of vast unutilized forest resources in differ-

ent parts of the world, it will be difficult to supply the deficit areas of the world with wood from surplus areas. the deficit regions must contribute much more than is usually assumed. Those regions generally have a well-developed infrastructure and an established industry close to the market. Therefore, the forest industry within these regions should be capable to pay a quite high wood price before it is more economical to invest in countries with less developed economy. Higher wood price means that more money can be invested in silviculture and other measures to increase forest production. The most interesting region in this regard is, without doubt, the USA, which has a potential for an increased harvest both for softwood and hard-The potential is big enough not only to supply the expected deficit but also to turn the US to a net exporter of forest based products.

So the real question is how to get from here to there. How can the U.S., in a few decades progress from deficit status to surplus? You will get the answers over the next several days and then be ready to go out and put them into practice in the field.

In simplified fashion the answers given to the question, at least in my mind, fall into two categories:

- Increase productivity on all classes of forest lands
- 2. Improve utilization of the timber we harvest

The list of tools in our forestry toolkits aimed at increasing productivity is long and will be explored in depth during your symposium. Whether they will be used to the extent necessary to make wood a strategic material depends on policy decisions and resultant capital availability. Policy decisions with respect to public and private forests may in the future provide the motivation for allocation of capital for

forest productivity, or may move even more to withdrawals from the forest land base for other uses and non-economic restrictions on forest productivity to achieve social or environmental goals. The forestry profession has a part to play in the decision making process but in the final analysis I am not optimistic about the current chances for using economics or world trade opportunities as "hot buttons" for our legislators. We have a lot of work to do.

We have shown our ingenuity in increasing utilization of mill and forest residues and we can and will do more. Seminars and symposiums on the subject abound and there's no need for me to try to go into detail. Those of us with industry are proud to point out that with only 13% of the forest land we supply one third of the harvest. But we have not been able to develop or implement ways to similarly increase output from public and nonindustrial private ownerships.

This symposium does show that we're aware of our potential and want to get on with the job ahead. Wood can be a strategic material and forestry technique can increase productivity and improve utilization. Can we influence policy decisions so that capital will be allocated to do the job?

In closing I'd like to talk about the current situation in Sweden as an example of how a deficit situation can occur and the steps that country has taken to try to bring supply back into balance.

In 1974 Sweden was still a net exporter of unprocessed wood. Norway received 600,000 cords of roundwood and 160,000 cord equivalents of chips. The net export to Finland was 50,000 cords of roundwood. Small quantities were imported from Germany, Poland, the Soviet Union and the United Kingdom.

In 1975 the picture in Sweden changed and Sweden's forest products industry faced a shortage. Harvest was estimated to be 12% higher than growth. The report of the Swedish State Commission on National Forest Resources indicated that if the gross cut were maintained

until 1980, at a level corresponding to the industry's 1973 consumption, the harvest from Sweden's forests would thereafter have to be reduced by 20% to achieve a sustained long-term yield.

Swedish forests are among the most intensively managed in the world. Why did Sweden get into this situation? There are some reasons:

- 1. Up until 1973 wood prices had remained about the same for 15 years while costs had increased. As a result, the economics of Swedish forestry suffered a consistent downward trend. Inadequate reforestation resulted and timberstand improvement activities were curtailed due both to lack of funding and environmental restrictions on chemical spraying.
- 2. Another critical concern for Swedish forestry is an unfavorable distribution of forests by age class. Sweden has a relative shortage of forests aged 20-40 years as the result of extensive thinning operations which did not create enough young forests and slow start-up of new stands due to insect damage and over-crowding.
- 3. Statistical surveys on the condition of Swedish forests were overly-optimistic. The "margin of error" is unclear.

The Swedish government took action. Restrictions were made on industry expansion unless it was based on imported raw material. Investments in intensive management of state-owned lands were escalated and a new more detailed forest survey was begun.

Swedish companies began to look for a new source of wood. After looking at all possibilities throughout the world they determined that the United States would be the best source of supply from both an economic and political standpoint.

Since then, Wood Fiber Market Corporation has been formed in the United States by sawmill owners to sell chips to Sweden. Louisiana Pacific Corporation is

constructing chip export facilities at Lake Charles, LA, Weyerhaeuser has exported eight shiploads from Morehead City, NC and Georgia-Pacific is planning a deep water export facility at the Port of Savannah, GA.

There are some lessons for us in the Swedish experience. We must not wait until the limits of our forest resource are hard upon us. We must provide reasoned and effective opposition to those who would further restrict forest productivity. This nation has the potential for world leadership in forestry. We have the means and must find the ways to stimulate action.