Russian invasion of Ukraine could have lasting impacts on global economy, environment: Study

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As the Russian invasion of Ukraine stretches into its third year, international trade has felt the effects as sanctions on Russian exports
have expanded. Now researchers have found that the invasion may not only have significant short-term impacts on the global timber markets but may leave lasting effects on the global economy and the environment.

These findings are detailed in a new study which projects the impact of sanctions on Russia and military disruption in Ukraine on the global wood product markets. Researchers compared two projected scenario outcomes based on the Global Forest Products Market model, one simulating a scenario with no invasion and another projecting the effects of current sanctions on wood products and trade disruption in Ukraine out to 2025. This allowed them to form their own model which predicts changes to the global wood product markets in both the near future and the long term.

Rajan Parajuli, associate professor of forest economics and policy at North Carolina State University and corresponding author of a paper on the study, said that the immediate impacts of the invasion could be severe.

"In the short term, which we define as within ten years of the end of the invasion, our model predicts an increase in price up to three percent for things like industrial roundwood and finished wood products," he said. "Russia is a top producer of forest products, and they supply all over the world, so sanctions on them are very impactful. You must also factor in the disruptions in Ukraine, where the military operations will make things like timber harvesting very difficult."

Despite this, Russia may regain a good deal of its overall timber market share in the long term. Looking as far forward as 2050, the model predicts a lower overall level of disruption as Russian markets for industrial timber recover. Researchers set a baseline assumption that the invasion will end in 2025, and the model predicts that global markets
will begin returning to pre-invasion levels within 10 to 30 years after that.

Despite the lower overall level of disruption predicted in the long term, researchers do not expect some product markets to ever return to their exact pre-invasion states. Parajuli said that some effects may last beyond the end of the conflict.

"We found that products like wood-based panels, paper and paper board will not recover in Russia or Ukraine. These are not large markets, and our model predicts that if these countries cannot produce those products for a few years, other countries will move into that space," he said. "The sanctions will cause higher prices, which we predict would lead resource-rich countries like the United States and Canada, China and some other Asian countries to ramp up production. They will want to sell while the price is high."

This shift in production and trade could have serious implications worldwide, both economically and environmentally. While increased production in other countries could be a significant economic driver, researchers also warn that it could lead to loosening environmental regulations and increased deforestation caused by an upswing in timber logging. Specifically, developing countries which already suffer from high levels of illegal logging may bear the brunt of increased deforestation and environmental harm.

The paper, "Projected Effects of the Russian Invasion of Ukraine on Global Forest Products Markets," is available in the journal Forest Policy and Economics. Co-authors include Prakash Nepal and Austin Lamica.
