Study assesses risk that fruits, vegetables sold in US are products of forced labor

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A new study calls attention to the need to track forced labor in global food supply chains. Credit: Dave Alexander, Pixabay

A new study in *Nature Food* calls attention to the need for better systems

to track forced labor in food supply chains. The study—a methodological advance—reports on the development of a new scoring system that identifies the risk of forced labor for fruits and vegetables sold in the United States. It finds a high risk of forced labor, but also scattered and incomplete data sources that limit action.

The study, published August 23, 2021, was led by Nicole Tichenor Blackstone in the Agriculture, Food and Environment program at the Friedman School of Nutrition Science & Policy at Tufts, and Jessica Decker Sparks, who leads the Ecosystems and the Environment Program at the University of Nottingham Rights Lab.

"Sustainability research on the food supply typically focuses on promoting human health and protecting the environment," said first and corresponding author Blackstone. "But social sustainability provides a different perspective on our food sources, including issues of labor rights and equity. Globally, agriculture has one of the highest incidences of forced labor."

The study developed a new forced labor risk scoring method that draws upon original data compiled by the authors as well as a range of governmental and non-profit data. The research team then coded each food and country-of-origin combination as either very high risk, high risk, medium risk, or low risk for forced labor having occurred at some point in the growing and harvesting of each item. Previously, there have been short lists of commodities suspected of being produced with forced labor, or case studies of foods produced in one country, such as Mexico.

"What we've done, for the first time, is to look at all of the major fruits and vegetables consumed in the U.S., as well as all of the countries these foods come from, including the U.S., and assess the possibility that somewhere in the production process forced labor could have been involved," said Blackstone.

The scoring method is not meant to be a consumer tool but could help industry and policy makers interested in the development of systems and protocols for the responsible procurement of foods.

The final data set included 93 fruits and vegetables in 307 food-country combinations. The results of the qualitative coding show that most food-country combinations were coded as high risk (85%) for forced labor at some point. Seven percent were coded as very-high risk, 4.5% were coded as medium risk, and 3.5% were coded as low risk.

"This is an extraordinary percentage at high risk, but it reflects that there are very limited or coarse data," said senior author Sparks. "There are major structural issues with how agricultural labor is set up that make workers vulnerable. To us, this reflects systemic issues in food supply chains that have not been addressed. Our findings point to the need for policymakers, farmers, and food companies to engage with farm workers to address the systemic issues."

Some of the variables that factored into the scoring were:

- documented history of forced labor for a given food in a given country;
- a country's record on monitoring forced labor—a good record lowered the score and vice versa; and,
- whether a given food is harvested by hand or by machine.

Agricultural work often takes place in remote and isolated environments with demanding labor requirements. There are typically inadequate legal protections, with piece-rate pay systems tied to productivity, and reliance on migrant labor.

As defined by the International Labor Organization, "forced labor can be understood as work that is performed involuntarily and under the

menace of any penalty. It refers to situations in which persons are coerced to work through the use of violence or intimidation, or by more subtle means such as manipulated debt, retention of identity papers or threats of denunciation to immigration authorities."

"Forced labor in agriculture is a threat to the sustainability of food systems. However, the scarcity of data noted limits holistic analysis and action. Future research should prioritize data and model development to enable analyses of forced labor and other labor-related social risks (e.g., wages, child labor) across the life cycles of a wide range of foods. These efforts can help ensure that the rights and dignity of "the hands that feed us" are centered in the transformation of food systems," concluded the authors in the study.