

Human Trafficking and Other Labor Risks in the Forestry Sector

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Verité

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1. Introduction

1.1 Objective

This report provides an overview of the risks of human trafficking, including forced labor,¹ in the forestry sector globally. In some cases, the report also discusses other serious labor abuses as indicators of conditions or practices in the working environment that contribute to workers' vulnerability to forced labor.

The objective of this report is to raise awareness of the forms that forced labor may take in the forestry sector, its structural causes, and the combination of factors that may bind workers to their jobs. The intended audience for these findings includes government and industry actors seeking to strengthen their human rights due diligence approaches to manage the risks of forced labor, as well as workers, advocates, civil society, and consumers.

Forestry sector entities operate within an increasingly stringent regulatory environment that demands proactive measures to prevent human trafficking. Federal legislation such as the Trafficking Victims Protection Act, the Tariff Act of 1930, the Trade Facilitation and Trade Enforcement Act of 2015, the Countering America's Adversaries through Sanctions Act, the Uyghur Forced Labor Prevention Act, as well as relevant regulations like the Federal Acquisition Regulation and various state-level requirements, establish clear expectations for businesses to monitor and address trafficking risks within their operations and supply chains.

Forestry sector entities also face compelling business reasons to implement robust due diligence systems. The reputational damage from association with human trafficking operations can result in immediate loss of contracts, particularly with government agencies and major corporations that have adopted zero-tolerance policies. Furthermore, the operational disruptions caused by trafficking-related investigations can significantly impact service delivery and customer relationships, while the financial costs of remediation and legal proceedings can be substantial.

¹ **Note:** The United States recognizes two primary forms of trafficking in persons: forced labor and sex trafficking. For the purposes of this report, several terms are used such as "trafficking in persons," "human trafficking," and "forced labor." In this report, these terms refer to a crime whereby traffickers exploit and profit at the expense of adults or children by compelling them to perform labor.

Guiding frameworks used to benchmark practices and conditions in this sector, include, but are not limited to:

- [ILO Convention 29 – Forced Labour Convention, 1930](#)
- [UN Guiding Principles on Business and Human Rights](#)
- [ILO Code of Practice on Safety and Health in Forestry Work, 2025](#)

1.2 Scope

The forestry sector generally refers to the production and harvesting of forest products, including timber and other wood-based products, as well as primary processing of wood, wood products, and pulp/paper manufacturing, per definitions utilized by the International Labour Organization (ILO).² This report covers the recruitment, contracting, and management of labor involved in forestry operations and related processing. Forced labor is a risk faced by any worker with one or more of the vulnerabilities discussed in this report and is prevalent in the forestry sector around the world, including the United States. Attention is given to research indicating acute vulnerabilities faced by migrant,³ seasonal, and/or subcontracted workers (workers who are supplied by third party providers), who are often exposed to deceptive recruitment, debt bondage, excessive working hours, retention of identity documents, restrictions to their freedom of movement, and unsafe working and living conditions.

1.3 Context and Methodology

1.3.1 Risk Factors, Risk Indicators, and Analytical Framework

As is the case across most industries, certain workers in the forestry sector are more vulnerable to forced labor risks than others. This is based mainly on their ability to decline or leave a job in order to protect their welfare. Verité’s research has found that the greatest risk of forced labor is at the intersection of worker vulnerability and employment practices, including recruitment, that exploit that vulnerability. There are often overlapping characteristics of work and workers at this intersection, such

² [International Labour Organization. 2022. “Forest sector new global estimates.”](#)

³ In this report, the term migrant worker refers to a person who migrates, or has migrated, from one country to another, with a view to being employed by someone other than him/herself, including any person regularly admitted, as a migrant for employment, and/or to seek temporary or permanent residence in another country. This definition is aligned with [ILO Convention C097 – Migration for Employment Convention \(Revised\), 1949](#) and the [U.S. Department of Homeland Security’s Office of Homeland Security Statistics](#).

as those in low-paid, low-skilled, dirty, dangerous, and demeaning (“Three D”) jobs; subcontract workers and workers hired by third-party intermediaries; migrant workers; workers compelled by severe economic drivers; and workers subject to coercion by the state. This report examines both socio-demographic and employment practice-related *risk factors*, which contribute to worker vulnerability, and *risk indicators* or signs, which help identify cases of forced labor. Risk factors and risk indicators have overlapping elements and causes. To help contextualize the many indicators highlighted by the research, Section 3 organizes them into the four most common **risk factors** that underlie them:

- The involvement of labor contractors, recruiters, agents or other middlemen in the labor supply chain
- Migrant workers and immigrants with precarious residency status
- Workers experiencing poverty, marginalization,⁴ and absence of alternative income options
- State-imposed forced labor

Research for this report identified and discusses the following **indicators** of forced labor in the forestry sector:⁵

- Deceptive or fraudulent recruitment (e.g., misrepresentation of wages, working or living conditions, tasks, or job location)
- Debt linked to recruitment practices (e.g., charging recruitment fees or other costs that create a burden of debt)
- Hazardous or degrading working conditions
- Onerous working hours or work schedule

⁴ The [ILO Global Guidelines on the Prevention of Forced Labour Through Lifelong Learning and Skills Development Approaches](#) notes that people most at risk of forced labor are those that are vulnerable and includes marginalization among the common characteristics of vulnerability, along with suffering discrimination on the grounds of age, ethnicity, disability, gender, migration status, race, religion, or sex, etc. leading to social and economic exclusion or marginalization.

⁵ The ILO Forced Labour Convention, 1930 (No.29), defines forced labor as “all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily.” To support front line actors in the identification of situations of forced labor, ILO Indicators of Forced Labor - 2025 Revised Addition includes 11 of the most common signs observed in forced labor cases. They comprise situations that qualify as the menace of any penalty (also called coercion) and the absence of voluntary consent, or the ability to withdraw that consent, in other words the workers’ freedom to leave the job. (To meet the threshold of forced labor, a situation must have some *combination* of these two types of abuse.) The 11 indicators do not map exactly to the ILO’s earlier, more granular 2024 *Hard to See, Harder to Count: Handbook on Forced Labour Surveys*, which describes 22 circumstances commonly giving rise to involuntary work or qualify as forms of coercion. The list of indicators here are drawn from both these ILO documents as well as Verité’ research for this report.

- Degrading work-related living conditions
- Inability to terminate employment
- Physical violence
- Abuse of isolation
- Restrictions on workers' movement
- Retention of workers' personal documents
- Withholding of wages
- Abuse or manipulation of debt
- Abuse of vulnerability

1.3.2 Sources of Information and Criteria for Inclusion

Sources of information for this report include a broad range of publicly available materials, including civil society publications, journalistic investigations, academic research, and government reporting. These sources were used to identify documented or credible allegations of labor exploitation across forestry sector operations. We note that the absence of documentation (e.g., research or investigative reports) pertaining to certain geographic locations or types of forestry businesses does not signify low or the absence of risk and conversely, more available information on locations does not necessarily mean the risk is higher.

Further, allegations were not required to meet a legal or prosecutorial threshold to be included in the analysis, and not all findings presented here meet the legal definition of human trafficking. Labor exploitation occurs along a continuum, from fair, safe, and legal work, in which employment is freely chosen, to situations characterized by a combination of involuntariness and coercion.⁶

⁶ For operational forced labor indicators of involuntariness and coercion developed by the ILO, please refer to the International Labour Organization's [Hard to See, Harder to Count: Handbook on Forced Labour Surveys](#) (2024). The presence of an indicator alone does not necessarily confirm a legal finding of forced labor but signals elevated risk, especially when multiple indicators are present simultaneously.

2. Overview of the Forestry Sector

2.1 Background

According to recent estimates from the UN Food and Agriculture Organization (FAO) and the ILO, the global forest sector employed at least 42 million people, representing about 1.2 percent of total global employment.⁷ Forestry also remains an important source of livelihoods, income, fuel, shelter, and rural development in many countries, particularly for communities that depend directly on forests and forest products.

While forestry work provides income for many workers and households, the sector is characterized by high levels of informal work, remote worksites, and weak labor oversight.⁸ The sector engages migrant workers, indigenous and local community members,⁹ and seasonal and temporary workers¹⁰ across different country contexts. Forestry work is often strenuous, hazardous, isolated, and low-paid, making it less attractive to workers with other options.¹¹ Cost pressures, volatile markets, illegal logging, and subcontracting to reduce labor costs can all weaken accountability for working conditions.

Forestry production methods and labor structures vary by activity, geography, and level of mechanization. Labor needs differ across tree planting, forest maintenance, logging, transport, and primary processing, and these differences have distinct implications for forced labor risk. More labor-intensive activities, especially those in remote areas or managed through informal contractors, often carry higher risks because conditions are typically harder to monitor and workers are less able to leave,

⁷ Lippe, R.S., Gurbuzer, Y., Carrillo, P., Schweinle, J., Katajam.ki, W., Pekkarinen, A. & Walter, S. "Updated methodology to quantify forest-sector employment: Global and regional estimates." FAO and ILO. 2026.

⁸ Cui, S., Lippe, R. S., & Schweinle, J. (2022). "Informal Employment in the Forest Sector: A Scoping Review." *Forests*, 13(3), 460. International Labour Organization. 2022. "Forest sector new global estimates."

⁹ *Global Perspectives on Indigenous Peoples' Forestry: Linking Communities, Commerce and Conservation. Proceedings of the International Conference, 2002. Forest Trends.*

¹⁰ "Workforce." Forestry Resources Association.

¹¹ Allman, Michal, Zuzana Dudáková, and Martin Jankovský. "Long-term temporal analysis of fatal and severe occupational accidents in Central European forests of the Slovak Republic." *Journal of safety research* 87 (2023): 488-495.

United States Department of Labor. Occupational Health and Safety Administration. "Logging Hazard Recognition."

Wilson, Jason. "The job no one wants: why won't young people work in logging?" *The Guardian*. August 23, 2017.

Ackerknecht, Carlos. "Work in the Forestry Sector: Some Issues for a Changing Workforce." *Unasylva* 61, no. 234/235 (2010): 60–65.

report abuse, or access remedy. Forestry workers often face low wages, limited organization and unionization, and exclusion from effective labor protections in practice. The different types of forestry work, associated labor arrangements, and the connections to forced labor risks are discussed below.

2.1.1 Types of Labor

Workers in the forestry sector include both formal and informal workers with the majority considered informal.¹² Informal forestry work includes both subsistence and informal labor: subsistence work generally involves individuals or households using forest resources to meet household needs, while informal work is done for landowners, contractors, traders, enterprises, or other actors without being incorporated into formal employment structures.¹³ Formal forestry and logging work generally involves documented employment or registered business arrangements in which workers are hired by forestry companies, logging firms, public agencies, plantations, concessions, mills, or licensed contractors.¹⁴

2.1.2 Scale of Production

The global forestry sector operates on a vast scale, supplying timber, pulp, paper, and other forest products through complex international value chains that employ millions of workers worldwide. Large-scale production often relies on extensive networks of contractors, subcontractors, and seasonal labor, which can make it more difficult to monitor and enforce labor standards consistently across operations. As production expands to meet global demand, workers may face heightened risks related to occupational health and safety, long working hours, precarious employment, and inadequate wages, particularly in remote harvesting regions.¹⁵

¹² [Cui, S., Lippe, R. S., & Schweinle, J. \(2022\). Informal Employment in the Forest Sector: A Scoping Review. *Forests*, 13\(3\), 460. International Labour Organization. 2022. Forest sector new global estimates.](#)

¹³ [Lippe, Rattiya Suddeephong, Tatiana Ojeda Luna, Waltteri Katajamäki, and Jörg Schweinle. "Labour informality in forestry: A longitudinal \(2009–2020\) cross-country analysis of determinants in 70 developing countries." *Forest Policy and Economics* 156 \(2023\): 103056.](#)

¹⁴ [Lippe, Rattiya Suddeephong, Tatiana Ojeda Luna, Waltteri Katajamäki, and Jörg Schweinle. "Labour informality in forestry: A longitudinal \(2009–2020\) cross-country analysis of determinants in 70 developing countries." *Forest Policy and Economics* 156 \(2023\): 103056.](#)

¹⁵ [FAO, ILO & Thünen Institute of Forestry \(2026\). *Updated Methodology to Quantify Forest-Sector Employment: Global and Regional Estimates*.](#)

[FAO News \(2026\). *New research provides updated estimates on global forest-sector employment*.](#)

3. Forced Labor and Other Labor Rights Risk Factors Associated with Forestry

Forced labor and vulnerability to forced labor in the forestry industry have been documented in almost every country around the world. The United States Department of State's *2025 Trafficking in Persons Report* noted evidence of forced labor (or risk of forced labor)¹⁶ in the forestry or logging sectors in the following 22 countries: Argentina, Brazil, Burma, Burundi, China, Czech Republic, Democratic People's Republic of Korea (DPRK), Estonia, Fiji, Finland, Guinea, Guyana, Latvia, Moldova, Mongolia, Papua New Guinea, Peru, Russia, Solomon Islands, Taiwan, Vanuatu, and Zimbabwe.

The following sections discuss common factors and employment practices identified across many geographic locations, including the countries listed above, where risks and situations of forced labor in the forestry sector have been identified. These factors and practices are often interrelated and can compound each other.

3.1 Involvement of Labor Contractors, Recruiters, Agents or Other Middlemen in the Labor Supply Chain

In many forestry contexts, particularly informal or small-scale operations, workers are recruited through third parties rather than being hired directly by logging companies or timber buyers. These intermediaries include labor brokers, crew leaders, contractors, traders, transporters, village leaders, or experienced workers who recruit others through personal and community networks. Recruitment is often informal, with limited written documentation or transparency regarding the identity of the ultimate employer, wages, job duties, duration of employment, or work location. In remote areas with few employment opportunities, workers often rely heavily on these intermediaries to provide jobs. Intermediaries are known to misrepresent wages or working conditions, recruit workers into operations that differ from those originally described, charge fees and other expenses that result in debt, or deploy workers to remote logging sites where they have little access to outside support or formal labor protections.¹⁷

[ILO \(2025\). Code of Practice on Safety and Health in Forestry Work.](#)

¹⁶ Risk of, or vulnerability to, forced labor in the forestry sector, as opposed to documented evidence of forced labor, is indicated by the inclusion of "(risk)" following the country in which the risk or vulnerability was reported.

¹⁷ [Verité. Exploring Intersections of Trafficking in Persons Vulnerability and Environmental Degradation in Forestry and Adjacent Sectors - Verité. 2020.](#)

3.1.1 Illustrative Cases

Mozambique

In Tete Province, Mozambique, there was evidence that workers became involved in small-scale illicit logging through connections with logging operators, foreign timber traders, and local elites.¹⁸ Rapid growth in demand for Nkula timber created pressure to expand logging operations and assemble a workforce quickly. Some local elites reportedly pressured community members to participate, while supply-chain actors and operators provided misleading information about the legality of the work, including assurances that harvesting Nkula was lawful and would not expose workers to arrest.¹⁹

In some cases, foreign traders also acted as intermediaries between workers and the timber market, as they purchased logs directly from workers and determined wage payments based on the volume and size of timber delivered. Workers reported that agreed payment terms were not always honored and that traders sometimes withheld wages.²⁰ In some cases the possibility of eventually receiving payment had the effect of keeping workers supplying timber despite being owed earnings, particularly where few alternative income opportunities were available.²¹

Peru

Logging operators and labor intermediaries in the Peruvian Amazon near the borders of Peru, Brazil, and Colombia have used a recruitment system in which workers, including indigenous workers from remote communities, are recruited through advances of money, food, tools, or other goods before they enter logging camps in the Amazonian forest.²² The workers are expected to repay the advances through

¹⁸ [Verité. Exploring Intersections of Trafficking in Persons Vulnerability and Environmental Degradation in Forestry and Adjacent Sectors - Verité. 2020.](#)

¹⁹ [Verité. Exploring Intersections of Trafficking in Persons Vulnerability and Environmental Degradation in Forestry and Adjacent Sectors - Verité. 2020.](#)

²⁰ [Verité. Exploring Intersections of Trafficking in Persons Vulnerability and Environmental Degradation in Forestry and Adjacent Sectors - Verité. 2020.](#)

²¹ [Verité. Exploring Intersections of Trafficking in Persons Vulnerability and Environmental Degradation in Forestry and Adjacent Sectors - Verité. 2020.](#)

²² [Campos-Vásquez, J Mujica, Á Peñaloza González, N Zevallos Trigos, and A Flores Macher. "Traceability Problems in the Peruvian Amazon's Timber Supply Chain: Illegal logging, exploitation, and forced labour." *Anti-Trafficking Review*, issue 26, 2026, pp. 32-48.](#)

[International Labour Organization. Forced labour in timber extraction in the Peruvian Amazon. 2005.](#)

timber extraction. Recruiters or employers typically control the valuation of both the goods provided to the workers and the timber produced, allowing them to inflate workers' debts and reduce the value credited for their labor.²³

Workers recruited through this system are known to remain indebted and forced to work for extended periods, unable to leave logging operations until the employer considers their debt repaid.²⁴

Documented abuses include debt bondage, threats, punishment, restrictions on leaving the workplace, and the extension of unpaid or underpaid work to workers' family members.²⁵

Brazil

Poverty, limited employment alternatives, and the urgent need for income can make workers more likely to accept misleading offers and remain in exploitative conditions.²⁶

Workers, generally between the ages of 15 and 40, are recruited in their home states by intermediaries, known as *gatos*, who offer comparatively high wages for work in distant areas. After arriving at rural estates, workers often are charged for transportation, food, housing, and other necessities; wages are less than promised, leaving them with substantially less income than anticipated and unable to pay

²³ [C Campos-Vásquez, J Mujica, Á Peñaloza González, N Zevallos Trigos, and A Flores Macher, 'Traceability Problems in the Peruvian Amazon's Timber Supply Chain: Illegal logging, exploitation, and forced labour', *Anti-Trafficking Review*, issue 26, 2026, pp. 32-48.](#)

[International Labour Organization. Forced labour in timber extraction in the Peruvian Amazon. 2005.](#)

²⁴ [C Campos-Vásquez, J Mujica, Á Peñaloza González, N Zevallos Trigos, and A Flores Macher, 'Traceability Problems in the Peruvian Amazon's Timber Supply Chain: Illegal logging, exploitation, and forced labour', *Anti-Trafficking Review*, issue 26, 2026, pp. 32-48.](#)

[International Labour Organization. Forced labour in timber extraction in the Peruvian Amazon. 2005.](#)

²⁵ [C Campos-Vásquez, J Mujica, Á Peñaloza González, N Zevallos Trigos, and A Flores Macher, 'Traceability Problems in the Peruvian Amazon's Timber Supply Chain: Illegal logging, exploitation, and forced labour', *Anti-Trafficking Review*, issue 26, 2026, pp. 32-48.](#)

[International Labour Organization. Forced labour in timber extraction in the Peruvian Amazon. 2005.](#)

²⁶ [Inter-American Court of Human Rights. *Case of the Hacienda Brasil Verde Workers v. Brazil: Preliminary Objections, Merits, Reparations and Costs*. Judgment of October 20, 2016. Series C, no. 318.](#)

these costs.²⁷ In a number of cases essential goods must be purchased from the employer at inflated prices, resulting in further debts that workers are unable to repay and increasing constraints to leave.²⁸

Isolation further increases workers' dependence on employers, as worksites are often far from towns and accessible only by poorly maintained roads.²⁹ Some workers are reportedly monitored by armed guards and are known to face violence if they attempt to escape. Documented conditions also include dangerous and unsanitary workplaces and physical, sexual, or verbal abuse.³⁰

3.2 Migrant Workers and Immigrants with Precarious Residency Status

Both internal and international migrants make up a significant source of labor for the forestry sector around the world, with many countries addressing labor shortages through the use of migrant workers, refugees, internally displaced workers, and others whose legal, economic, or social status limits their bargaining power.³¹ These workers are often more likely to accept poor conditions because they need immediate income, lack local language facility or social networks, depend on employers or intermediaries for housing and transportation, and fear losing legal status, future work, or the ability to remain in the country.³²

3.2.1 Illustrative Cases

United States

Migrant workers perform much of the labor-intensive work that supports timber production in the United States, including tree planting, thinning, brush clearing, fuels reduction, pest control, herbicide

²⁷ [Inter-American Court of Human Rights. *Case of the Hacienda Brasil Verde Workers v. Brazil: Preliminary Objections, Merits, Reparations and Costs*. Judgment of October 20, 2016. Series C, no. 318.](#)

²⁸ [Inter-American Court of Human Rights. *Case of the Hacienda Brasil Verde Workers v. Brazil: Preliminary Objections, Merits, Reparations and Costs*. Judgment of October 20, 2016. Series C, no. 318.](#)

²⁹ [Freedom Fund. "Ending slave labor in the Amazon: Brazil." 2023.](#)

³⁰ [Inter-American Court of Human Rights. *Case of the Hacienda Brasil Verde Workers v. Brazil: Preliminary Objections, Merits, Reparations and Costs*. Judgment of October 20, 2016. Series C, no. 318.](#)

³¹ [Managing Migrant Labor Human Rights Risks in Food Value Chains. BSR. n.d.](#)

³² [Managing Migrant Labor Human Rights Risks in Food Value Chains. BSR. n.d.](#)

application, and post-logging reforestation.³³ This workforce includes temporary migrant workers employed through the H-2B visa program as well as other migrant workers. A study of 150 predominantly Latin American immigrant forestry workers found that nearly half reported not being paid for all hours worked. Workers traveling between remote worksites often also depend on contractors for transportation and temporary housing, which is documented to be sometimes substandard. Workers report continuing to work past the point of exhaustion under threats of having visas taken away and payment withheld. One worker who filed a complaint against his foreman ultimately withdrew it, due to fear of getting in trouble with the owners of the company employing him.³⁴

Forestry firms working on public lands and large commercial timber tracts commonly organize labor-intensive work through contractors and foreign recruiters. Contractors competing for large-acreage government and industry contracts have relied heavily on these H-2B workers to meet production schedules. Recruitment generally occurs through labor contractors in workers' home countries, with some workers paying as much as USD 5,000 in recruitment, visa, and travel costs.³⁵ Workers often

³³ [Davis, Emily Jane, Carl Wilmsen, Manuel A. Machado, and Gianna M. Alessi. "Multiple Stories, Multiple Marginalities: The Labor-Intensive Forest and Fire Stewardship Workforce in Oregon." *Fire* 6, no. 7 \(2023\): 268.](#)

[Wilmsen, Carl, Diane Bush, and Dinorah Barton-Antonio. "Working in the Shadows: Safety and Health in Forestry Services in Southern Oregon." *Journal of Forestry* 113, no. 3 \(2015\): 315–324.](#)

[McDaniel, Josh, and Vanessa Casanova. "Forest Management and the H2B Guest Worker Program in the Southeastern United States: An Assessment of Contractors and Their Crews." *Journal of Forestry* 103, no. 3 \(2005\): 114–119.](#)

[McDaniel, Josh, and Vanessa Casanova. "Pines in Lines: Tree Planting, H2B Guest Workers, and Rural Poverty in Alabama." *Journal of Rural Social Sciences* 19, no. 1 \(2003\): article 4.](#)

[Southern Poverty Law Center. *Beneath the Pines: Stories of Migrant Tree Planters*. May 3, 2006.](#)

³⁴ [Davis, Emily Jane, Carl Wilmsen, Manuel A. Machado, and Gianna M. Alessi. "Multiple Stories, Multiple Marginalities: The Labor-Intensive Forest and Fire Stewardship Workforce in Oregon." *Fire* 6, no. 7 \(2023\): 268.](#)

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³⁵ [Davis, Emily Jane, Carl Wilmsen, Manuel A. Machado, and Gianna M. Alessi. "Multiple Stories, Multiple Marginalities: The Labor-Intensive Forest and Fire Stewardship Workforce in Oregon." *Fire* 6, no. 7 \(2023\): 268.](#)

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[McDaniel, Josh, and Vanessa Casanova. "Forest Management and the H2B Guest Worker Program in the Southeastern United States: An Assessment of Contractors and Their Crews." *Journal of Forestry* 103, no. 3 \(2005\): 114–119.](#)

borrow this money at high interest rates or secure the debt with home deeds or guarantees from family members. Although workers may be promised the prevailing hourly wage required under the H-2B program, pay at the destination has sometimes been calculated on a piece-rate basis, for example on the number of seedlings planted.

The status of both H-2B and irregular (illegal) migrant workers³⁶, particularly if these workers are in debt for the cost of their recruitment, often have the effect of limiting these workers' ability to challenge poor working conditions. Irregular (illegal) migrant workers typically avoid reporting wage violations, injuries, or unsafe practices because contact with authorities could expose them to immigration enforcement and deportation.³⁷ H-2B workers have legal work authorization, but that authorization is connected to an employer-sponsored job, limiting their ability to leave a contractor, risking loss of employment and deportation. Besides recruitment debt, language barriers, isolation at remote worksites, and dependence on employers for transportation, housing, basic necessities, and future seasonal contracts is known to further discourage complaints. In one study of immigrant forestry workers, 71 percent of workers who did not report an injury attributed that decision to fear of dismissal or other form of retaliation.³⁸

Papua New Guinea

According to the U.S. Department of State's *2025 Trafficking in Persons Report*, logging sites in Papua New Guinea are associated with sex trafficking of women from foreign countries.³⁹ Recruiters working

[Southern Poverty Law Center. *Beneath the Pines: Stories of Migrant Tree Planters*. May 3, 2006.](#)

³⁶ According to the [IOM Migration Glossary](#), irregular migration refers to the movement of persons that takes place outside the laws, regulations, or international agreements governing the entry into the destination or exit from the State of origin, transit or destination. The U.S. government designates such irregular migrants as "illegal migrants."

³⁷ [Davis, Emily Jane, Carl Wilmsen, Manuel A. Machado, and Gianna M. Alessi. "Multiple Stories, Multiple Marginalities: The Labor-Intensive Forest and Fire Stewardship Workforce in Oregon." *Fire* 6, no. 7 \(2023\): 268.](#)

[Wilmsen, Carl, Diane Bush, and Dinorah Barton-Antonio. "Working in the Shadows: Safety and Health in Forestry Services in Southern Oregon." *Journal of Forestry* 113, no. 3 \(2015\): 315–324.](#)

[McDaniel, Josh, and Vanessa Casanova. "Forest Management and the H2B Guest Worker Program in the Southeastern United States: An Assessment of Contractors and Their Crews." *Journal of Forestry* 103, no. 3 \(2005\): 114–119.](#)

[Southern Poverty Law Center. *Beneath the Pines: Stories of Migrant Tree Planters*. May 3, 2006.](#)

³⁸ [Wilmsen, Carl, Diane Bush, and Dinorah Barton-Antonio. "Working in the Shadows: Safety and Health in Forestry Services in Southern Oregon." *Journal of Forestry* 113, no. 3 \(2015\): 315–324.](#)

³⁹ [U.S. Department of State. *Trafficking in Persons Report*. Papua New Guinea. 2025.](#)

for or on behalf of Malaysian and Chinese-owned logging companies are reported to recruit women from foreign countries including China, Fiji, Indonesia, Malaysia, the Philippines, and Thailand.⁴⁰ These women are provided with visas and sometimes promised jobs in other sectors, but are transported to logging camps for the purposes of forced sexual exploitation and domestic servitude upon their arrival.⁴¹ Men are also subject to forced labor in logging camps in Papua New Guinea. Male workers—including boys—from countries including Burma, Cambodia, China, Malaysia and Vietnam are promised jobs in the fishing sector by recruiters and unwittingly diverted to logging camps. Upon arrival they are subjected to wage withholding, restricted communication, and threats or actual violence to compel them to work.⁴² Logging companies reportedly bribe law enforcement to facilitate this illegal immigration and to ignore potential trafficking situations, thereby allowing the abuse to occur with impunity. Further, victims are aware that the complicity of law enforcement limits any opportunity to secure protection should they attempt to escape.⁴³

3.3 Precarious Employment and Hazardous and Undesirable Work

3.3.1 Hazardous and Undesirable Work

Forestry, logging, and related work expose workers to a combination of severe and difficult-to-control hazards. Tree felling (the process of cutting down trees) and log handling involve risks from falling trees, broken branches, rolling logs, unstable timber, snapping cables, and use of chainsaws and heavy machinery; with mistakes potentially resulting in fatal or disabling injuries.⁴⁴ Workers may operate on

[International Organization for Migration. Trafficking in persons and people smuggling in Papua New Guinea. 2012.](#)

⁴⁰ [U.S. Department of State. Trafficking in Persons Report. Papua New Guinea. 2025.](#)

[International Organization for Migration. Trafficking in persons and people smuggling in Papua New Guinea. 2012.](#)

⁴¹ [U.S. Department of State. Trafficking in Persons Report. Papua New Guinea. 2025.](#)

[ACF and CELCOR. 2006. "Bulldozing Progress: human rights abuses and corruption in PNG's large-scale logging industry."](#)

⁴² [U.S. Department of State. Trafficking in Persons Report. Papua New Guinea. 2025.](#)

[International Organization for Migration. Trafficking in persons and people smuggling in Papua New Guinea. 2012.](#)

⁴³ [U.S. Department of State. Trafficking in Persons Report. Papua New Guinea. 2025.](#)

[United Nation Office on Drugs and Crime. Rapid Assessment: Criminal justice response to wildlife and forest crime in Papua New Guinea. 2022.](#)

⁴⁴ [UNFAO. "Occupational health and safety in forestry."](#)

[Meira Castro, Ana C., José Mota, and João Santos Baptista. 2026. "Occupational Hazards, Risks and Preventive Measures in Forestry Logging: A Scoping Review of Published Evidence \(2015–2025\)" *Safety* 12, no. 1: 13.](#)

steep, uneven, muddy, or densely vegetated terrain where visibility and movement are restricted. Reforestation, thinning, brush clearing, and fuels-reduction work require prolonged use of sharp tools and powered equipment, often near other workers performing the same tasks.⁴⁵ Additional hazards include vehicle accidents, wildfire and smoke exposure, extreme heat or cold, pesticides and herbicides, excessive noise and vibration, poisonous plants, insects, snakes, and tick-borne disease. Emergency medical care may be delayed when injuries occur in remote forests without reliable roads or communications.⁴⁶

Much of the work is physically demanding, repetitive, and organized around production targets. Piece-rate payment and tightly scheduled contracts can encourage workers to maintain an unsafe pace, work through fatigue or pain, and continue during poor weather or hazardous site conditions.⁴⁷ Logging and forestry crews may work long or irregular hours, including overnight shifts, and extended periods away from home. Employment is frequently seasonal or temporary, while subcontracting and informal employment arrangements can contribute to unpredictable earnings, unpaid waiting or travel time, limited benefits, and uncertainty about the duration of work.⁴⁸

[U.S. Department of Labor, Occupational Health and Safety Administration. "Logging."](#)

⁴⁵ [UNFAO. "Occupational health and safety in forestry."](#)

[Meira Castro, Ana C., José Mota, and João Santos Baptista. 2026. "Occupational Hazards, Risks and Preventive Measures in Forestry Logging: A Scoping Review of Published Evidence \(2015–2025\)" *Safety* 12, no. 1: 13.](#)

[U.S. Department of Labor, Occupational Health and Safety Administration. "Logging."](#)

⁴⁶ [UNFAO. "Occupational health and safety in forestry."](#)

[Meira Castro, Ana C., José Mota, and João Santos Baptista. 2026. "Occupational Hazards, Risks and Preventive Measures in Forestry Logging: A Scoping Review of Published Evidence \(2015–2025\)" *Safety* 12, no. 1: 13.](#)

[U.S. Department of Labor. Occupational Health and Safety Administration. Logging.](#)

⁴⁷ [UNFAO. "Occupational health and safety in forestry."](#)

[Meira Castro, Ana C., José Mota, and João Santos Baptista. 2026. "Occupational Hazards, Risks and Preventive Measures in Forestry Logging: A Scoping Review of Published Evidence \(2015–2025\)" *Safety* 12, no. 1: 13.](#)

[U.S. Department of Labor. Occupational Health and Safety Administration. Logging.](#)

⁴⁸ [UNFAO. "Occupational health and safety in forestry."](#)

[Meira Castro, Ana C., José Mota, and João Santos Baptista. 2026. "Occupational Hazards, Risks and Preventive Measures in Forestry Logging: A Scoping Review of Published Evidence \(2015–2025\)." *Safety* 12, no. 1: 13.](#)

[U.S. Department of Labor, Occupational Health and Safety Administration. "Logging."](#)

Forestry and logging work often take place in isolated areas with limited access to drinking water, sanitation facilities, shelter, transportation, and medical services. Workers may travel considerable distances between temporary worksites or live in employer-arranged camps, hotels, or other short-term accommodations.⁴⁹

3.3.2 Illustrative Cases

Vietnam

There is evidence that children participate in the timber sector in Vietnam in significant numbers. These children are exposed to significant occupational hazards at logging sites, particularly carrying and loading heavy timber as well as long hours, with the vast majority reportedly working over 40 hours a week.⁵⁰

Solomon Islands

According to the *U.S. Department of State's 2025 TIP Report*, logging camps in the Solomon Islands are associated with numerous forms of forced labor, particularly among young vulnerable children.⁵¹ Workers or managers at the camps reportedly compel boys and young adults to cook, clean, and perform other domestic work in employee accommodations.⁵² Boys are sometimes also required to act as intermediaries who recruit girls for domestic service or commercial sexual exploitation. Some children and young women initially recruited for household work have subsequently been subjected to sexual exploitation within logging settlements.⁵³ In some cases, parents or community leaders reportedly arrange the placement or marriage of girls and young women with foreign logging workers in return for money or goods. These arrangements have been known to lead to domestic servitude or sex trafficking,

⁴⁹ [UNFAO. "Occupational health and safety in forestry."](#)

[Meira Castro, Ana C., José Mota, and João Santos Baptista. 2026. "Occupational Hazards, Risks and Preventive Measures in Forestry Logging: A Scoping Review of Published Evidence \(2015–2025\)." *Safety* 12, no. 1: 13.](#)

[U.S. Department of Labor, Occupational Health and Safety Administration. "Logging."](#)

⁵⁰ [U.S. Department of Labor, Bureau of International Labor Affairs, 2025. "Vietnam: Timber," *List of Goods Produced by Child Labor or Forced Labor*.](#)

⁵¹ [U.S. Department of State. Trafficking in Persons Report. Solomon Islands. 2025.](#)

⁵² [U.S. Department of State. Trafficking in Persons Report. Solomon Islands. 2025.](#)

⁵³ [U.S. Department of State. Trafficking in Persons Report. Solomon Islands. 2025.](#)

while payments to families or local leaders can create a financial incentive for the exploitation to continue.⁵⁴

3.5 State-Imposed Forced Labor

Forced labor can be imposed by the government of a country or by private actors. State-imposed forced labor in forestry occurs when governments use law, policy, administrative authority, or coercive institutions to compel individuals or groups to perform forestry work under threat of penalty. This has taken the form of public labor mobilization schemes, penal labor systems, military or civic service requirements, poverty alleviation programs, compulsory production quotas, or policies targeting specific marginalized populations. In forestry contexts, these systems can involve mandatory planting, harvesting, land preparation, irrigation work, or production for state-directed supply chains, often with limited ability for workers to refuse, leave, negotiate wages, or advocate for improved conditions. Participation is sometimes framed as civic duty, rehabilitation, training, or development rather than employment.

3.5.1. Illustrative Cases

Russia and DPRK

The U.S. Department of Labor has noted forced labor among North Korean workers in the forest and logging sector of Russia. DPRK authorities have reportedly participated in worker selection and assignment, while state-affiliated companies and officials have supervised workers abroad, held their passports, restricted their movement and communications, and collected a large portion of their earnings.⁵⁵ While some workers may have some level of willingness in accepting these jobs, the stringent surveillance, restriction of movement, and other forms of coercion prevent them from leaving once they are in Russia.⁵⁶

⁵⁴ [U.S. Department of State. *Trafficking in Persons Report. Solomon Islands. 2025.*](#)

⁵⁵ [U.S. Department of Labor, Bureau of International Labor Affairs, 2025. "Russia: Timber," *List of Goods Produced by Child Labor or Forced Labor.*](#)

[Office of the United Nations High Commissioner for Human Rights, *Forced Labour by the Democratic People's Republic of Korea* \(Geneva: United Nations, 2024\), 37–39.](#)

⁵⁶ [National Public Radio. *In Russia's Far East, North Koreans Labor Silently.* NPR, April 13, 2008.](#)

The U.S. Department of Labor reports that approximately 2,000 North Koreans were employed in Russian timber production under this system.⁵⁷ Workers reportedly lived in remote logging camps, worked 12 to 18 hours per day, and paid deductions for food and accommodation. Approximately 80 percent of their wages was remitted to the DPRK government, leaving some workers with \$30 to \$50 per month.⁵⁸ Workers generally could not change employers or leave their assigned employment without authorization and could face repatriation or other penalties for doing so. Oversight by DPRK security personnel and the possibility of repercussions for family members in DPRK further limited workers' ability to refuse work or report conditions.⁵⁹

4. Recommendations: Due Diligence Steps to Address Risks

4.1 Conclusions

This report examined forced labor risks in the operations and supply chains of companies across the forestry sector, focusing specifically on the supply of labor.

The risks of exploitation of workers trace, in most cases, back to the inadequate due diligence processes of third-party services providers, labor agencies, and suppliers; deceptive and exploitive recruitment processes that result in worker debt and compound other risk factors for migrant workers; the use of workers in state-imposed forced labor, and the unique hazards of forestry work.

⁵⁷ [U.S. Department of Labor, Bureau of International Labor Affairs, 2025. "Russia: Timber," *List of Goods Produced by Child Labor or Forced Labor*.](#)

[Office of the United Nations High Commissioner for Human Rights, *Forced Labour by the Democratic People's Republic of Korea* \(Geneva: United Nations, 2024\), 37–39.](#)

⁵⁸ [U.S. Department of Labor, Bureau of International Labor Affairs, "Russia: Timber," *List of Goods Produced by Child Labor or Forced Labor*.](#)

[Office of the United Nations High Commissioner for Human Rights, *Forced Labour by the Democratic People's Republic of Korea* \(Geneva: United Nations, 2024\), 37–39.](#)

⁵⁹ [U.S. Department of Labor, Bureau of International Labor Affairs, "Russia: Timber," *List of Goods Produced by Child Labor or Forced Labor*.](#)

[Office of the United Nations High Commissioner for Human Rights, *Forced Labour by the Democratic People's Republic of Korea* \(Geneva: United Nations, 2024\), 37–39.](#)

Companies should view the contents of this report as a starting point and seek to further develop their understanding of the specific weaknesses and risks in their supply chains at all tiers, in order to implement dynamic and ongoing risk assessments and mitigation strategies.

The findings of this report largely point to potential gaps in companies' due diligence systems or approaches to managing risk. The following recommendations for addressing these potential process gaps offer forestry entities practical guidance for implementing comprehensive measures to control forced labor risks and protect their operations and individuals who may be vulnerable to exploitation within their supply chains. Effective due diligence requires a systematic approach that integrates risk assessment, prevention and mitigation, capacity building, and monitoring. This involves developing comprehensive frameworks that can identify and address potential forced labor indicators across diverse operational contexts. The goal is not merely to achieve compliance, but to create sustainable systems that protect vulnerable populations and prevent forced labor, while maintaining operational efficiency and competitive advantage.

The ResponsibleSourcingTool.org site overall and the [Base Due Diligence Toolset](#) specifically provide technical tools to support the implementation of the following recommendations. The toolset and the recommendations that follow are aligned with the [UN Guiding Principles on Business and Human Rights](#) and the [OECD Due Diligence Guidance for Responsible Business Conduct](#). [Tool 1](#) of the Toolset provides a model due diligence program for identifying potential risks of human trafficking within a supply chain, evaluating and prioritizing identified risks, implementing solutions, and monitoring and improving supplier performance over time.

4.2 Recommendations

4.2.1 Policy and Embedding Forced Labor Prevention Standards and Practices in Business Functions

- 4.2.1.1 Companies should include a clear prohibition against forced labor in their Codes of Conduct and supplier performance standards. (See Tool 2.) This should include the “employer pays” principle, which requires that all fees and expenses relating to the recruitment and placement of a worker are paid to by the employer.

- 4.2.1.2 The policy should be clearly communicated to all business entities, including third-party service providers and labor agents, and included in business contracts. (See [Base Tool 5](#).) The contracts should also require that the policy be cascaded to the suppliers' suppliers.
- 4.2.1.3 Procurement staff should be formally assigned, trained, and supported to screen prospective suppliers, including third-party service providers and labor agents, for their commitment and capacity to meet the policy standards on avoiding forced labor. (See [Tools 3, 7 and 8](#).) There should be clear consequences established for supplier performance on achieving the standards.
- 4.2.1.4 Review of a supplier's management of forced labor risks should be incorporated in regular supplier engagements, such as quarterly business reviews, quality audits, and other existing supplier management processes.

4.2.2 Risk Assessment and Prioritization

- 4.2.2.1 Conduct a combined supply chain mapping and forced labor risk assessment as a key first step in creating a targeted strategy for segmenting and prioritizing risks to address. ([See Tool 6](#).) High level risk factors to consider include characteristics of country of operation, product or production processes involved, and workforce demographics (e.g., prevalence of migrant workers). Other factors to consider include a company's ability to influence suppliers based on volume/spend and the degree of harm to people that practices may cause.

4.2.3 Needs Assessment and Capacity Building

- 4.2.3.1 Based on the results of a risk assessment, companies should conduct deep dives (e.g., targeted research, risk assessments, rapid appraisals, supplier assessments) to develop and implement action plans to address the underlying causes of identified risk or issues. The activities, which should be informed by clear objectives and measurable success indicators, may range widely from supplier training to engagement in multistakeholder initiatives where companies individually lack the leverage to drive positive changes in an operating environment (e.g., where economic or political factors are immovable in the immediate term). (See [Tools 8, 10, and 11](#).)

4.2.4 Monitoring

- 4.2.4.1 Companies need to routinely evaluate whether they are implementing their due diligence processes as planned (e.g., new suppliers screened for forced labor risks, review of corrective action plans during regular supplier business reviews). (See [Tool 9](#) and [the Supply Chain Due Diligence Process](#).)
- 4.2.4.2 The effectiveness of due diligence activities should be tracked to ensure the desired impacts are on target and sustainable (e.g., worker-paid recruitment fees are avoided, foreign migrant workers are in full control of their identification documents, workers have access to remedy).