RESPONSIBLE SOURCING TOOL

Base Tool 6:
Supply Chain Mapping and Risk Screening

Protections Against Trafficking in Persons

Supply Chain Mapping and Risk Screening

Supply chain mapping allows a company to trace the chain of custody — and points of accountability — at all levels of production, from extraction or procurement of raw materials to processing, manufacturing, packaging, and distribution to final sale. The supply chain for each product — including miners, growers, processors, manufacturers, suppliers, logistics providers, vendors, agents, and traders — will be unique, so supply chain mapping should be conducted on a product-by-product or service basis.

Identifying first tier or "direct" suppliers is a straightforward process, but it can be more challenging to identify the suppliers' suppliers, and then their suppliers, comprising the second, third, and lower tiers of the supply chain. In the context of manufacturing, energy, and construction supply chains, this means being able to trace products or raw materials back to the quarry where stone was cut, the mine where ore was extracted, as well as to the facilities where components, coatings, fasteners, and packaging were manufactured.

Most sectors are characterized by complex supply chains and there is a large degree of variety and diversity among them. Some supply chains are relatively short and transparent. For example, some building materials, such as lumber, may simply be harvested, milled, and shipped to distributors and retailers. This is more likely to be true for "whole" products (e.g., wooden beams or stone slabs). However, where such raw materials are used simply as ingredients in processed products, more processing steps and supply chain tiers are involved, with each supply chain tier performing another process and adding yet other materials and

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

components. Each additional tier of the supply chain can further obscure a material's origins, leaving little visibility into working conditions along the way. However, once a supply chain has been mapped, companies are able to assess risk at a variety of levels. This tool provides guidance on assessing risk at the level of country of production and type of production and describes how human trafficking risk might manifest in practice at various worksites in supply chains.

NOTE: This sample tool recommends a generic approach to due diligence but is not intended to ensure compliance with specific legal requirements, such as the Federal Acquisition Regulation (FAR): Combating Trafficking in Persons.[i]

GUIDE TO SUPPLY CHAIN MAPPING

Many companies already conduct some form of supply chain or traceability mapping as part of procurement and contracting and to comply with product quality and safety regulations. Visibility is typically limited to direct suppliers; however, rather than sub-tier suppliers where risk is likely to be higher. A company with a full understanding of its supply chain can more accurately target detailed risk assessments and interventions, thereby working to mitigate their risk of the worst labor abuses, including forced labor.

The process of mapping a supply chain beyond direct/first-tier suppliers includes surveying first-tier suppliers to gather information about their suppliers (second-tier suppliers or indirect service providers, such as janitorial staff). Second-tier suppliers can then be queried about their suppliers, and so on, to the bottom of the supply chain. Types of suppliers found in typical supply chains include:

- **Primary producers** mine, extract, grow or harvest raw materials or commodities and include mines, timber harvesters, quarries, oil, and gas production, etc.

[i] For guidance on complying with the Federal Acquisition Regulation (FAR): Combating Trafficking in Persons, please review Tool 12, RST's Sample Compliance Plan Guidance.

- **Processors**, such as lumber mills, oil refineries, and smelters transform commodities into components and production materials for further processing, manufacturing, and construction. Processing may be controlled by the producer of the raw material or commodity.
- **Manufacturers** produce finished products and own the brand name, processes, and product specifications or simply make component parts and assemblies for final assembly by others. In the case of chemicals and wood products, the manufacturer may also be the producer.
- **Traders** facilitate transactions of commodities between buyers and sellers. They may purchase goods from producers or other brokers and sell to processors.
- **Distributors** arrange for transfer of goods, but do not produce goods.
- **Logistics** providers, shippers, or transporters physically move goods from one location to another and may also manage inventory for distributors and manufacturers.

In addition to tracing the flow of materials and services throughout the operation, companies must map their **labor supply chain**; that is, the involvement of third-party labor providers or recruiters. In some cases, suppliers may hire their labor directly, but in many others, third-party labor recruiters have their own complex chain of sub-recruiters as well as origin and destination country agents. Through this mapping process, companies can gain an understanding about the geography and structure of their supply chains, which can be used to inform risk assessment efforts (see Table 1 below).

Information can be gathered from:

- supplier self-assessments/self-reporting;
- supplier interviews;
- supplier site visits and audits (documents, records, observations, and interviews); and
- receipts and purchase orders.

Table 1

Information to Gather from Suppliers in Supply Chain Mapping		
Profile Information		**Sources of potential risk**
	Supplier name	

Minimum recommended profile information	Supplier headquarters address	
	Location of supplier facilities and worksites	Evaluate risks relevant to **country of operation** (see Table 2)
	Type of product or service provided by each facility or worksite	Evaluate forced labor vulnerability tied to **type of production** (see Tables 3)
Additional recommended profile information	Approximate number of workers hired directly	
	Approximate number of workers hired through sub-contractors and recruiters	Use of **third-party labor recruiters or other sub-contractors** increases human trafficking risk overall in any given operation. Work sites with a relatively high proportion of sub-contracted workers to directly hired workers should be prioritized. See Tools 03 and 05 for more information on screening and evaluating labor recruiters.
	Seasonality of production or service delivery	Production or service levels that fluctuate by season may suggest increased risk of **temporary or casual labor** and therefore particular attention should be paid to potential use of labor recruiters and labor contractors (see above).
	Types of jobs at worksite	Prioritize facilities with relatively higher concentrations of **low-skilled, low-paid, hazardous, or otherwise undesirable work**.
	Presence of migrant workers (Y/N)	**Migrant workers** are particularly vulnerable to forced labor in many contexts within supply chains.

	Origin country of migrant workers	Evaluate **risks relative to country of labor supply**. See https://www.responsiblesourcingtool.org/understandrisk for more information.

Once a map of suppliers is assembled, a company can begin to identify geographic regions, products, and particular suppliers most likely to have elevated human trafficking risk in their operations. A solid initial approach to risk screening involves evaluating the risks associated with the economic sector or industry in question, in combination with an appraisal of the risk factors associated with the countries in which the supply chain operates or from which it draws its workforce.

Ideally, a company will assess the risks of a specific supply chain in a specific geographic location. For example, while a country overall may have low rates of migrant workers, migrant workers may be concentrated in certain types of industries (such as agriculture or construction). Examining the supply chain and country in combination also allows for a more thorough review of incidents of exploitation previously documented.

In supply chains characterized by sector, location-based forced labor risk, or both location and sector, companies should exercise heightened due diligence through efforts to enhance visibility into individual supplier practices.

There are a variety of commercial and public resources available to assist with forced labor risk assessment at the level of sector/industry and geographic location — the resources in the Responsible Sourcing Tool provide insight into the factors listed below.

POTENTIAL RISK FACTORS IN SUPPLY CHAINS

Table 2

Country-based Risk Factors

1. **Legal/Policy Risk Factors** (see Tool 4):
   a. What level of legal protection for civil liberties and workers' rights does the law provide?
   b. What ILO Conventions on forced labor or rights of workers and migrants have been ratified?
2. **Political Risk Factors**:

a. Level of political instability or conflict
b. Level of crime and violence
c. Level of state persecution
d. Level of corruption

3. **Socio-economic Risk Factors:**
   a. Presence and concentration of migrant workers
   b. Presence of migrant workers from vulnerable countries
   c. Level of national economic development
   d. Level and extent of poverty
   e. Degree of gender inequality
   f. Degree of landlessness and dispossession

Table 3

Sector-based Risk Factors

1. **Structural Supply Chain Features** that enhance vulnerabilities to forced labor:
   a. Long, complex, and/or non-transparent supply chains
   b. Seasonal surges in labor demand
   c. Short production cycles
   d. Undesirable and hazardous work
2. **Indicators of a Vulnerable Workforce**:
   a. Migrant labor
   b. Casual, temporary labor
   c. Child labor
   d. Gender inequality
   e. Restricted Freedom of Association
   f. Indigenous populations
   g. Hereditary/traditional slavery
   h. Presence of labor intermediaries

The factors listed above are described in greater detail at https://www.responsiblesourcingtool.org/understandrisk

Table 4

Cross-sector Risk Factors

Gender: In countries with high degrees of gender inequality, women typically have fewer rights and legal protections than men and less access to the education necessary to obtain high-skilled jobs. Women in gender-unequal societies are often structurally dependent on men for financial security and access to land. Those who lack access to male protection or wealth (for example, widows, unmarried women, and girls from poor families) and with few resources of their own might be forced into undesirable or hazardous jobs, or mistreatment by unethical employers.

Large-Scale Land Acquisition: Large-scale land acquisition or consolidations, sometimes referred to as land grabs, often leave local populations without livelihood options. The loss of land for subsistence agriculture, cash crops, or other traditional livelihoods can create a local labor force that must either accept work for the company operating on the acquired land or migrate out of the area in search of work to earn money to buy food.

Women and indigenous groups may be at increased risk for displacement as their property rights are often less well-protected or acknowledged under some country legal regimes.

Environmental Degradation: Environmental issues can displace people from their land, disrupt traditional livelihood strategies, cause illness, and generally increase the vulnerability of local populations to forced labor and other forms of exploitation. Deforestation, the collapse of fisheries, recurring drought, or disease of staple crops may also lead to greater risk for forced labor. Such hardships are known to lead to pervasive poverty and insecurity among the populations who depend on the affected resource bases.

Assessing Risks of Individual Suppliers

After a company has developed a working supply chain map (see Appendix 1), they should seek to gain insight into the actual practices of individual suppliers and the labor recruiters those suppliers engage. The following tools provide guidance on conducting these risks assessments:

1. Labor Recruiter Screening Tool (Tool 7)
2. Sample Supplier Self-Assessment Questionnaire (Tool 8)
3. Labor Recruiter Monitoring Tool (Tool 9)
4. Migrant Worker Interview Tool (Tool 10)

POTENTIAL HUMAN TRAFFICKING RISK BY SECTOR

To understand human trafficking and other labor risks at the level of production or service delivery, it is important to understand the wide variety of industry sectors and worksites along the supply chain, each of which, in turn, can engage many different types of workers of workers. As a result, each type of worksite has a different risk profile for workers.

The following sections present the risk considerations for two industry sectors: agriculture and electronics*. For risk information on two other sectors, see the Potential Forced Labor Risk sections in Tool 6 of the Construction and Facilities Services sector-specific tool sets at ResponsibleSourcingTool.org.*

1. Agriculture

Overview

Agricultural producers can range widely in terms of scale and modernization from small family farms — typically producing largely for subsistence needs — to large-scale commercial plantations. In addition, there are a variety of farm management models. The two primary types are contract and independent farm management. On contract farms, a larger company provides inputs to individual farmers, dictating terms such as quality and contracts to purchase a set amount. In a centralized model with vertical integration, the company relies on a centralized processor or packer.

This model is typically used for tree crops, dairy, poultry, and other hand-harvested crops that require some level of initial processing. In the nucleus or estate model, in addition to a centralized processing or packing plant, the larger company also maintains a plantation to supplement harvest from contracted smaller producers. Smaller producers may also make more informal, temporary contracts with purchasing companies or sell directly to unaffiliated intermediaries. This range of management models has implications for supply chain transparency as well as the ability to cascade social expectations — including protections against trafficking in persons — to the lowest tiers of the supply chain.

Forced Labor Risks in Agriculture

Risk indicators include:

- Hazardous/undesirable work;
- Vulnerable, easily replaced and/or low-skilled workforce;

- Migrant workforce;
- Presence of labor contractors and recruiters;
- Seasonal nature of work

The labor on farms, regardless of farm management type, can include different categories of workers, who may have varying levels of vulnerability to forced labor. Approximately 40 percent of workers in agriculture supply chains globally are hired workers – both permanent and seasonal. Permanent workers are engaged directly by growers. On farms producing goods in a seasonal cycle, there is relatively little need for permanently engaged staff, so numbers of permanent workers tend to be lower across the sector. Seasonal/temporary workers in agriculture are often engaged via a third-party labor recruiter. Seasonal and/or temporary work is tied to high rates of turnover among workers in the agricultural sector, which can create challenges for workers in terms of advocating for their rights or expressing grievances. Large farms and plantations with considerable staffing needs are also more likely to rely on third-party labor recruiters, which can increase vulnerability to human trafficking.

The mechanisms of labor recruiter-induced human trafficking vary depending on countries and contexts; however, there is often deception about the nature of the work and various fees that are deducted from the workers' wages. Some recruiters work for large formal operations and have their own subcontractors, while others are individuals operating independently.

In the agricultural context, recruiters — often referred to as farm labor contractors — often manage workers on site and provide housing and transportation. The presence of these labor contractors creates a barrier between farmers and the workers on their farms, leaving workers vulnerable to sub-minimum wages, high deductions, and unsafe housing and transportation. Even when employers pay labor recruiters the minimum wage per each worker employed, these payments are often not passed on to workers by the labor recruiters, who take excessive deductions for transportation, housing, food, and other services. There have also been cases in which labor recruiters have threatened and beaten workers who have tried to leave their employer.

Additionally, labor "cooperatives" may sometimes act as employment agencies. These are not cooperatives in the traditional sense, in which small and medium enterprises jointly maximize their marketing potential; rather, these worker cooperatives recruit workers into a larger labor pool and contract this labor out to plantations or other employers. In such cases, the cooperative functions similarly to an employment agency or labor recruiter. The worker's employment relationship is with the cooperative, not the plantation.

Farm owners may engage tenant or sharecroppers to work on their land under a profit-sharing agreement that can vary depending on context. It is important to note that these tenant farmers or sharecroppers may also engage the work of their families or hired workers. Tenants or sharecroppers in rural areas are typically landless themselves and lack access to credit or capital. They may be expected to pay for inputs, creating cycles of debt with the landowner and further incentivizing use of inexpensive vulnerable labor.

Regardless of type of engagement, there is a high degree of migrant labor in agriculture production, particularly in relatively economically prosperous countries; the migrant worker population tends to be composed of transnational migrants from poorer countries. In developing economy countries with higher rates of subsistence agriculture, there are lower rates of transnational migrants, but there are large numbers of internal migrants in the agricultural sector. Migrants may settle near a particular farm, "shuttle" between their home and worksite, or follow crop-harvesting cycles from farm to farm. In some cases, migrant workers may work in subsistence agriculture on their own land during part of the year and migrate to larger farms or plantations during labor-intensive harvesting seasons.

Women produce half of the world's food and up to approximately 90 percent of staple crops, primarily as smallholder or subsistence farmers. However, most women lack access to credit, inputs, markets, training, and tools — and much of women's labor in agriculture is unpaid.

In the case of family labor, even when a woman is responsible for the majority of the planning and labor, she may be required to cede control of the profits to her husband. As hired wage labor on larger farms, women may work towards their husbands' quotas or piece-rates, never receiving their own pay. There is strong evidence that female farm workers face high rates of sexual abuse and harassment, often at the hands of farm labor contractors, who oversee workers' hours, wages, and living arrangements. Fear of retaliation or deportation strongly discourages women from reporting this abuse.

2. Electronics and Electrical Products Manufacturing

Overview

The manufacture of electronics and electrical products consist of two subsectors: 1) Computer and Electronic Product Manufacturing, and 2) Electrical Equipment, Appliance, and Component Manufacturing. Products manufactured under the Computer and Electronic Product classification include computer and peripheral equipment;

communications equipment; audio and video equipment; semiconductor and other electronic components. Products manufactured under the Electrical Equipment, Appliance, and Component classification include electrical lighting equipment such as lamp bulbs and lighting fixtures; household appliances; electrical equipment such as electric motors, generators, transformers, and switchgear apparatuses; and other electrical equipment and components such as batteries and insulated wire.

Electronic and electrical products are manufactured using a wide array of metals and minerals, including copper, aluminum, tungsten, tantalum, titanium, and gold. Plastics made from petroleum products and other chemicals are also extensively used.

Although many major brands continue to originate in the United States, Japan, and other developed countries, the actual production of most electronic and electrical products has increasingly shifted to developing and middle-income countries, largely in Asia and Southeast Asia, as a result of a trend toward offshoring to lower labor costs and to gain other efficiencies. Since 2004, China has been the largest producer and largest exporter of electronic goods.

Forced Labor Risks

Risk indicators in the sector include:

- Vulnerable, easily replaced and/or low-skilled workforce;
- Presence of labor recruiters;
- Migrant workforce; and
- Hazardous/undesirable work.

High value-adding labor in this sector is concentrated in advanced economies, however, with brands in the United States, Japan, and Europe accounting for the majority of global value added. Lower value adding, labor-intensive aspects of production in this sector increasingly take place in less advanced economies with significant low-skilled workforces and lower labor costs, and it is in these contexts that the sector experiences heightened risk of forced labor.

The low-skilled electronics and electrical goods workforce is dominated by women and migrants, both internal and international. The percentage of the electronics manufacturing workforce made up by women in the emerging economies in Asia is generally over 50 percent. In China, much electronics and electrical manufacturing is done by young women who migrate to urban areas temporarily to earn money before marriage. In regional

manufacturing hubs like Malaysia, many electronics workers are migrants from other poorer Southeast Asian countries like Nepal, Burma, Vietnam, and Indonesia. Workers also flow in substantial numbers from China, South Asia, Southeast Asia, and sometimes Eastern Europe into manufacturing hubs like Singapore, Taiwan, and Japan.

The rapid development of new products and the short product life cycles of many popular goods in this sector mean that dramatic surges in demand are frequent occurrences. To meet urgent production deadlines, suppliers and factory managers often impose long hours on workers, sometimes in excess of legal overtime limits. There have been many accounts of managers forcing electronics workers to work overtime even when they do not wish to, and overtime hours are not always compensated at appropriately increased wage rates, a form of wage theft.

The unpleasant and dangerous nature of low-skilled manufacturing labor in this sector is correlated with risk for forced labor due to the fact that many workers often take on such jobs only because they lack other options or are forced to do so. Verité research has found that workers often pursue work in this sector because they have no viable alternatives for employment.

Migrants, both internal and international, make up a significant proportion of the electronics and electrical goods manufacturing workforce in many countries. Migrants in this sector are at increased risk for trafficking for many reasons. Among the most prominent are the burden of debt that many migrants incur in the course of their recruitment and job placement, their vulnerability to being deceived about their job conditions or wages by unethical recruiters or employers, and the structural vulnerabilities they endure as a result of residency and immigration policies that restrict their freedom of movement and legal ability to change jobs. In some countries, foreign migrants may also have their passports and other identity documents taken from them by their brokers or employers, further restricting their freedom of movement.

Foreign electronics manufacturing workers may also be exploited or even trafficked as a result of legal frameworks within a destination country that inadequately protects their basic rights as workers. In Japan, for example, a longstanding program to treat low-skilled foreign workers in electronics and other manufacturing sectors as trainees rather than as temporary migrants has prevented many foreign manufacturing workers from receiving the full basket of workplace protections and workers' rights that Japanese workers enjoy.

Because of the dynamic nature of the electronics and electrical manufacturing sector and the frequent fluctuations in labor demand, particularly in the electronics sub-sector,

recruitment agents and labor contractors are heavily involved in the supply of labor to this sector.

In major manufacturing hubs for electronics overseas, it is also common for firms to rely on short-term contracts and temporary agencies for labor sourcing. In many cases, workers in this sector work in a factory, but are employed not by the factory but rather by an outsourcing agent.

Migrant workers in electronics factories may be employed directly by third-party employment agents. These labor intermediaries manage the full employment life cycle of migrants, from recruitment, hiring, and deployment, to management, compensation, and eventual repatriation of workers.

Debt bondage is also frequently correlated with recruitment in this sector, a consequence of workers borrowing to pay fees to recruiters to place them in their jobs, often incurring debts they have difficulty paying off, given the low wages that are typically paid to low-skilled laborers in electronics and electrical products manufacturing facilities.

The electronics manufacturing sector is a globalized industry made up of a vast network of companies and suppliers. The number of inputs in the supply chain of any given electronics product is enormous, with major component parts each possessing their own supply chains. Primary inputs come from raw materials supply chains for metals, plastics, and chemical compounds around the world. These inputs make their way to manufacturing facilities for electronics and electrical components, which are often produced in industry manufacturing hubs in Asia and Southeast Asia. Components are then assembled – often in different facilities or even countries – into finished products, which are finally distributed to wholesalers and retailers around the world. The supply chain in the sector is therefore not strictly hierarchical, but in many cases more accurately described as reciprocal, with some companies acting as both customers to some suppliers – buying parts and components that they assemble into an end product – and as suppliers to other companies, depending on where in the supply chain the product they produce is located. Because production in the sector is so globalized, it relies heavily on inputs from the transportation and logistics sectors and other supporting service sector industries.

The complexity of supply chains in this sector makes scrutiny of the labor practices throughout the totality of a product's production cycle quite difficult. Even when a particular facility within the chain implements safeguards against trafficking or other labor abuses in its own management practices, forced labor may occur in the course of sourcing labor for the facility, or in the labor practices involved in production of the inputs on which it relies, or in the supply chain into which its own products feed.