

[FORCED LABOR COMMODITY ATLAS]

[The link between commodities and some of the worst forms of labor exploitation in the global economy is coming under increasing scrutiny from stakeholders around the world. Several global campaigns seek to raise public awareness about goods produced under forced labor conditions and modern forms of slavery. Our commodity reports contribute to those efforts.]

Bricks

Where are bricks produced with forced labor?



According to the U.S. Department of Labor (2010), bricks are among the manufactured goods most commonly produced with forced or child labor. They are produced with forced labor in China, India, Myanmar (Burma), Nepal, North Korea and Pakistan and child labor in Afghanistan, Argentina, Bangladesh, Brazil, Cambodia, China, Colombia, Ecuador, India, Myanmar, Nepal, North Korea, Pakistan, Peru, and Uganda. There have also been reports of forced labor in Afghanistan contributing to NATO building projects (Kamber 2011).

What does forced labor in bricks look like?

The nature of forced labor in brick production varies widely by region. It has been studied most extensively in India and

Case Study

Forced Labor in Pakistani Brick Production

In contrast to India, debt bondage in the Pakistani brick sector is well-established. Families, including women and children, take advances or loans from subcontractors which they may not be able to repay. If the family transfers kilns, the loan follows them, and “debts are generally not forgiven upon incapacitation or death” meaning that workers may labor under several generations of debt (Pakistan Institute of Labor Education and Research or PILER 2004). As labor laws do not apply to workplaces with fewer than 10 employees, child and exploitative labor is also prevalent (Khan 2009). It is estimated that a half million people work in the kilns (PILER 2004).

How does forced labor in bricks affect me?

Forced labor in bricks is most likely to be in domestic construction.



Pakistan, where forced labor is likely to result from a combination of caste relationships and debt bondage. In India, the extent of forced labor, versus exploitative labor, has been disputed. Guerin (2009) argues that the term debt bondage is not generally applicable as there is a “permanent juggling” between recruiters and employers and workers are able to negotiate the amount of their advance. Jan Breman argues this should be referred to as “neobondage”, a term used to describe forced labor that is temporary in nature. Another study on the sector (Prakash 2009) found that workers’ debt ranged from 1,000 to more than 12,000 rupees, with some 40 percent having debt of 8,000-12,000 rupees and almost 40 percent holding debt of over 12,000 rupees.

Brick Production and Supply Chain

The international supply chain for bricks remains opaque. It is likely that the majority of bricks produced with forced labor are used for domestic production needs.

PILER (2004) research outlines the production process in Pakistan. Brick kilns are operated not by owners but by contractors, who manage labor and output. Mud bricks are formed and sun-dried before being transported to the kiln and baked. Customers may purchase the bricks directly from the kiln site. The original formation of bricks is conducted by a mix of men and women, adults and children, and migrants and locals whereas the subsequent processes are carried out by adult and juvenile males. Kilns can produce 400,000-600,000 bricks per month.

Where can I learn more?

[Read](#) an in-depth report on labor conditions in Pakistani brick production and the domestic supply chain.

[Watch](#) a video on forced labor in Afghanistan

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Cattle

Where are cattle and beef products produced with forced labor?



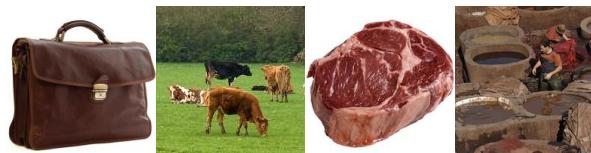
According to the United States Department of Labor (2010) cattle and beef products are among the goods most commonly produced with child or forced labor. Cattle ranching takes place with forced labor in Bolivia, Brazil, and Paraguay and with child labor in Bolivia, Brazil, Chad, Ethiopia, Lesotho, Namibia, Paraguay, Uganda, and Zambia.

What does forced labor in cattle ranching look like?

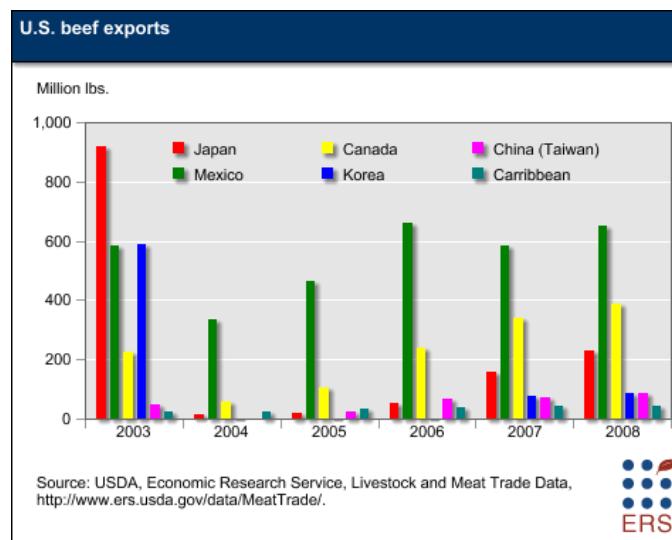
Forced labor in cattle ranching varies from country to country. In Bolivia, the International Labor Organization and the Inter-American Commission on Human Rights have documented the existence of debt peonage on cattle ranches in the Bolivian Chaco (ILO 2005; Garcia 2008). Indigenous Guarani are the

How does forced labor in cattle ranching affect me?

Products from cattle ranching include beef and leather.



Cattle Supply Chain



“The United States, although the largest producer of beef in the

main victims of forced labor in Bolivia, as they work on the plantations or ranches of large landowners, with family labor arrangements often going back generations. Low rates of payment often result in debt bondage or peonage. However, because the beef and agriculture goods produced in this system are destined for the domestic rather than the international market, this matter has received little attention globally.

In Brazil, cattle ranching accounts for over 60 percent of the companies on the “dirty list” of groups using forced labor (Costa 2009). As in other goods produced in Brazil, forced labor results from young men being brought by brokers to rural plantations where they then enter into debt bondage. Cattle ranching may encompass a variety of activities, from clearing land for pasture to monitoring livestock, intersecting with the production of other goods. “Weak land regulation, the appropriation of public land through forged land titles and the permanent deforestation of new areas in the forest are commonplace,” challenging the identification and elimination of forced labor (Costa 2009). Such is the correlation between forced labor and cattle ranching that in 2009 Wal-Mart made a commitment to stop purchasing beef products from farms linked with deforestation or forced labor (Winston 2009).

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world, is a net beef importer. Most beef produced and exported from the United States is grain-finished, high-value cuts. Most beef that the United States imports is lower value, grass-fed beef destined for processing, primarily as ground beef’ (USDA). The only country which is both a major exporter of beef to the U.S. and a user of forced or child labor is Brazil. However, the U.S. is a comparatively minor trade partner for this product, as the most common destinations for Brazilian beef are Saudi Arabia, Russia and Angola (FAO).

Where can I learn more?

[Watch](#) a video from Al Jazeera on the environmental effects of Brazilian cattle ranching.

United States Department of Agriculture. "Cattle: Beef". N.d. <http://www.ers.usda.gov/briefing/cattle/Trade.htm#beeftrade>

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Charcoal

Where is charcoal produced with forced labor?



According to the United States Department of Labor (2010), charcoal is produced with forced labor in Brazil and with child labor in Brazil, Namibia and Uganda.

Charcoal Production and Supply Chain

Typically, eucalyptus or other wood is grown on plantations and the timber is then brought to subcontractors, who burn the wood to make charcoal. Charcoal is in turn used in the production of pig iron. Some of these activities are legal but others may exist illegally, such as harvesting timber from protected areas, which contributes to the deforestation of the Amazon. According to the ILO (2008) "...about 90 per cent of the pig iron produced from this charcoal is exported to the

Case Study

Charcoal and the Automotive Industry

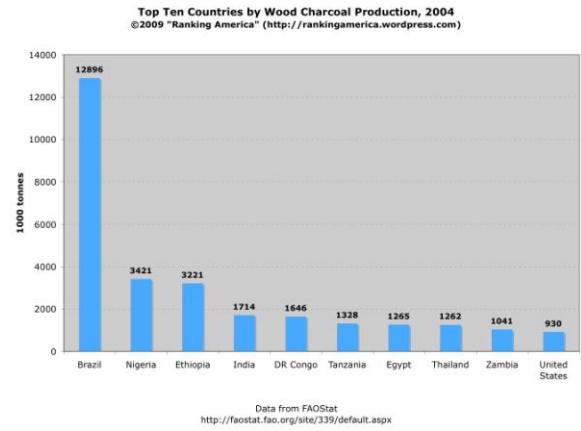
Due to the link between charcoal and pig iron, industry groups have acted against forced labor in charcoal. In Brazil, the Citizen's Charcoal Initiative, or ICC, established a membership process which requires participants to follow a code of conduct, participate in audits, and to refrain from doing business with any company whose membership was revoked (ILO 2008). In the U.S., the auto industry, which is a large buyer of Brazilian pig iron, became involved through the Automotive Industry Action Group (AIAG) by conducting supplier training. Since the issue initially came to global attention, a number of companies have dropped suppliers known to have sourced charcoal made with forced labor. For example, Ford and Kohler stopped purchasing from National Mineral Trading (Smith & Voreacos 2007) and beginning in 2010 Nucor steel company requires its suppliers to join the ICC (Murningham Post 2010).

How does forced labor in charcoal affect me?

Charcoal can either be used domestically as a fuel or as a crucial ingredient in pig iron, itself an ingredient in steel used primarily in auto manufacturing.



United States.” Charcoal used for fuel rarely enters the international supply chain.



What does forced labor in charcoal production look like?

In the Carajas region of Brazil, charcoal is produced with debt bondage and child labor. Forced labor in charcoal follows a similar pattern to many agricultural goods in Brazil. Workers are recruited by brokers who bring them to isolated works sites. There they work under abusive conditions for charcoal companies which have subcontracted labor management, thus avoiding direct responsibility for labor conditions. Once at the sites they go unpaid or may not be paid sufficiently to cover the goods they are forced to purchase to survive (U.S. Department of Labor). Charcoal production accounts for some 12 percent of the companies on Brazil’s “dirty list”, a list of companies found to be using forced labor published annually by the government (ILO 2007 in Costa 2009).

In Uganda and Namibia, charcoal is used primarily as a fuel. Children collect wood and participate in burning it to create charcoal.

How can I learn more?

[Visit](#) the website of the NGO Repórter Brasil (Portuguese).
[Read](#) an ILO case study on addressing forced labor in the charcoal sector.

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Coffee

Where is coffee produced with forced labor?



According to the United States Department of Labor (2010) coffee is produced with forced labor in Côte D'Ivoire (CDI) and with child labor in Colombia, CDI, Dominican Republic, Guatemala, Guinea, Honduras, El Salvador, Kenya, Mexico, Nicaragua, Panama, Tanzania, and Uganda. Other reports have found forced labor throughout Latin America, particularly in those countries which the Department of Labor has identified as using child labor.

Coffee Production and Supply

Case Study

Coffee and Fair Trade

Fair Trade coffee has risen in popularity as a means of combating the wide variety of exploitative labor conditions in coffee harvesting. One of the root causes of forced and child labor in coffee is the low prices and lack of price stability for farmers. Farmers who participate in the Fair Trade program receive \$1.69 per pound rather than the average market price of \$1.29. Fair Trade certification also requires adherence to a number of labor standards, including the prohibition of forced and child labor. However, while demand for Fair Trade Coffee is growing rapidly, as of 2006 only 3.3 percent of all coffee sold in the U.S. was Fair Trade (Downie 2007).

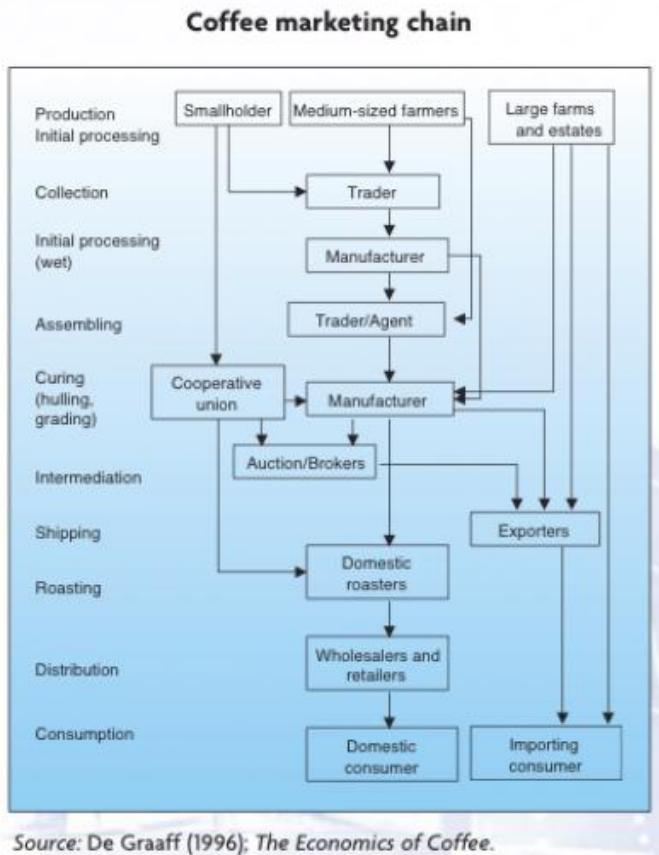
How does forced labor in coffee affect me?

Coffee is one of the most commonly consumed beverages in the world.



What does forced labor in coffee harvesting look like?

Few large-scale studies have been carried out on forced labor in the coffee sector; however, anecdotal reports confirm its



After coffee is harvested, the seeds are dried either by the sun or on more mechanized plantations by machine. Beans are then hulled, sorted and graded for quality before being roasted. Forced labor may occur at all stages but is most likely to occur in harvesting.

According to the United Nations Conference on Trade and Development (2004) coffee is the second most traded

existence. For example, the U.S. Department of State (2010) acknowledged the existence of forced labor on coffee plantations in Guatemala. In CDI, scrutiny of child and forced labor has primarily focused on the cocoa industry and its use of youths from Burkina Faso and Mali, some of whom are trafficked into CDI. Reports cited by the U.S. Department of Labor (e.g. Anti-Slavery International 2004) imply that similar conditions may exist in the Ivorian coffee sector. As few farmers rely solely on cocoa, it is likely that children and adults working on these farms also work in the production of other commodities including coffee.

Where can I learn more?

[Read a summary of the global coffee trade.](#)

commodity world-wide after oil.

The largest coffee producing countries, in descending order, are Brazil, Vietnam, Colombia, Indonesia, Peru, Ethiopia, Mexico, Indonesia, and Guatemala (FAO). The largest importers of coffee are Europe, the U.S. and Japan (UNCTAD 2004). “In the past decade, the proportion of value added to coffee in the industrialized world has increased significantly. The share of producing countries’ earnings in the retail market decreased drastically by the early 2000s, to between 6% and 8% of the value of a coffee packet sold in a supermarket” (UNCTAD 2004).

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Cotton

Where is cotton produced with forced labor?



According to the U.S. Department of Labor (2010), cotton is one of the goods most commonly produced using forced and/or child labor, with the greatest concentration of producer countries occurring in Central Asia. Countries producing cotton with forced labor, represented on the map in red, are: Benin, Burkina Faso, China, Egypt, India (cottonseed), Kazakhstan, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. Forced labor may also be used following cotton harvesting; for example, in the manufacturing of garments, such as in Argentina, China, India, Jordan, Malaysia, and Thailand.

How does cotton produced with forced labor enter products

Case Study

Uzbekistan: Forced Child Labor

Forced child labor is epidemic in Uzbek cotton. For years, the national government of Uzbekistan has required children to leave school and participate in the cotton harvest. Refusal to participate means potential punishment for students and their families, including corporal punishment and withdrawal of crucial services (EJF 2005; ILRF 2008).

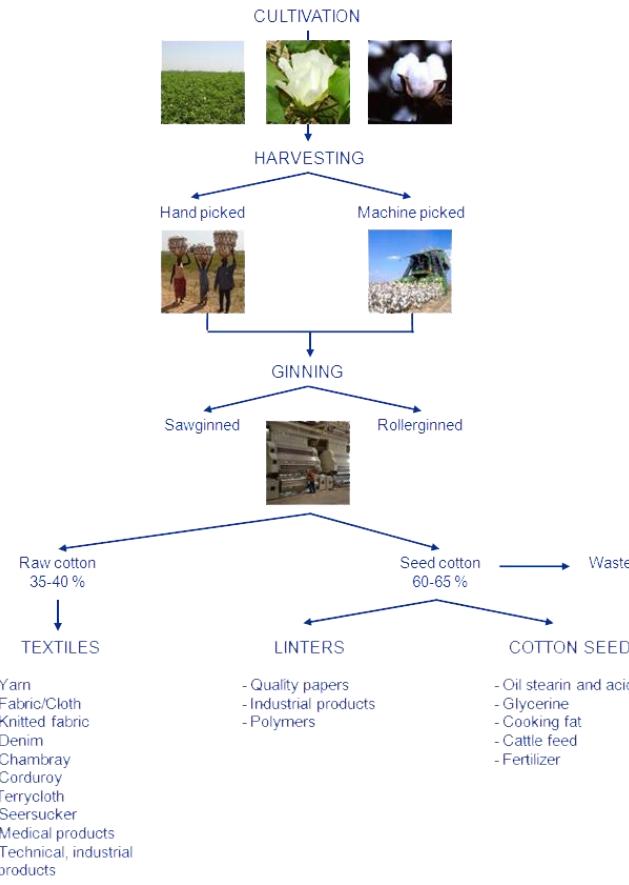
Global attention, including a boycott by major corporations such as Wal-Mart, increased pressure on the government, resulting in a formal prohibition of forced and child labor. However, as of the 2010 harvest, reports indicated that though forced child labor had become more covert, its use continued.

The government is the sole buyer and exporter of cotton (EJF 2005), accounting "for about 10 percent of world trade" (USDA) and 12 percent of all EU imports (UNCTAD 2004). However, tracking goods made with Uzbek cotton is difficult because most cotton is exported to countries such as China and Bangladesh before reaching the U.S.

How does forced labor in cotton affect me?

Cotton produced using forced and/or child labor ends up in the clothes we wear, the textiles in our houses, and, through cottonseed oil, the food we eat.

I buy?



Reinhart, Cotton Chain

After harvesting by machine or hand, raw cotton is transported to gins where it is processed. Cotton yarn is then woven into textiles, which is made into garments and home goods.



What does forced labor in cotton look like?

The nature of forced labor in cotton varies strongly from region to region. For example, in Pakistan, hereditary debt leads to families and communities being bonded to the land they work on. In other countries, such as Uzbekistan and China, forced labor is seasonal due to mandatory labor requirements organized by the national or regional governments. In still other cases, such as Benin, forced labor results from trafficking in persons.

What are governments, corporations, and others doing?

The [Better Cotton Initiative](#), a multi-stakeholder group, aims to improve cotton-growing conditions through cotton certification. Currently, certification covers the harvest to gin stages. Recently, Adidas pledged to transfer to BCI certified 'better cotton' by 2018.

NGO advocates include the [Environmental Justice Foundation](#) and the [International Labor Rights Forum](#).

In 2008 Wal-Mart, Bed Bath and Beyond and others drew attention to the issue through a boycott of Uzbek cotton.

Alternatively, cotton seed is processed, separating the meal and the oil, the former to be used in animal feed and the latter to be used as cooking oil.

These production stages may occur across multiple countries, particularly for garments and textiles. The exceptions to this rule are India and China, which produce both cotton and cotton products.

China is also a major cotton importer. The map below (UNCTAD 2004) represents global trade flows, with orange bars representing consumption and green bars representing production. The chart does not include finished products such as garments.



UNCTAD, Cotton Trade (2004)

However, as companies typically required their suppliers to ensure that Uzbek cotton was not used, it is not known how significant this was in practice. Other countries producing cotton with forced labor were not included in the boycott.

Where can I learn more?

[Watch](#) a video by the Environmental Justice Foundation.

[Read](#) a case study by the UN Global Compact on forced labor in cotton.

[Join](#) the Better Cotton Initiative (NGOs and corporations).

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Stock Images: <http://commons.wikimedia.org>

Cocoa

Where is cocoa produced with forced labor?



According to the U.S. Department of Labor (2010), cocoa is produced with forced labor in Côte d'Ivoire (CDI) and Nigeria, with child labor in Cameroon, CDI, Ghana, Guinea and Nigeria.

How is cocoa produced?

Case Study

Cocoa and Conflict: The Case of Côte D'Ivoire

In Côte D'Ivoire, cocoa trade helped fund both sides of the civil conflict between 2002 and 2007. As recently as 2010 Human Rights Watch published a report which verified the continued use of cocoa to fund rebel movements. Human Rights Watch found that despite the official cessation of the civil war, cocoa and timber trade in Western CDI is being used to finance the Forces Nouvelles, primarily through transport “fees”.

Additionally, misuse of cocoa trade has also contributed to widespread violence, including sexual violence. The cocoa industry in CDI also has high levels of corruption. In 2008, “the Ivorian Attorney General announced that 23 employees of national cocoa institutions, some of them top officials, were being charged with fraud and embezzlement following an investigation into alleged misappropriations of funds” (Global Witness 2008). These factors challenge meaningful efforts to address forced labor.

How does forced labor in cocoa affect me?

Cocoa is not only the key ingredient of chocolate but also an important element of many cosmetics and soaps, pharmaceutical products, and baked goods which feature cocoa butter.



United Nations Conference on Trade and Development. 2004 Commodity Atlas: Cocoa

Production

Once cocoa pods ripen and are harvested, they are opened and the beans are removed, fermented and dried. They are then sold



What does forced labor in cocoa production look like?

Forced labor in cocoa production is most frequently the result of trafficking in persons. In CDI, victims of trafficking, most commonly boys and young teenagers, come from the neighboring countries of Burkina Faso and Mali intending to migrate to CDI (Tulane 2010). However, they are taken to farms where they are subject to unsafe work, may be abused, and are not paid.

The same conditions are present to a lesser extent in Nigeria. However, as Nigeria is not as large a producer of cocoa as CDI, labor conditions in the commodity have not been studied to the same extent.

The worst forms of child labor occur in cocoa production when children work alongside their relatives on small family farms. According to estimates from the International Labor Organization (2008), 300,000 children work in cocoa production worldwide.

What are governments, corporations, and others doing?

Due to high-profile advocacy from a number of organizations

to middlemen, who transport and sell them to cocoa processors. The processor then roasts and grinds the beans, producing chocolate liquor, a key ingredient in chocolate products (World Cocoa Federation).

Trade

The vast majority of cocoa is grown in the West African countries of Ghana and CDI, which together produce around 70 percent of all cocoa. Other major producers are Indonesia, which produces roughly the same amount of cocoa as Ghana, and Brazil, Ecuador, the Dominican Republic, Papua New Guinea, Malaysia, Colombia and Mexico, which together account for roughly 15% of world output (UNCTAD 2004).

While cocoa grows in only limited areas, most processing of cocoa currently takes place in the United States or Europe, notably Germany, Switzerland, the Netherlands, Belgium and the U.K. The cocoa industry as a whole is very centralized: according to the UNCTAD (2004) “five multinational companies - ADM, Barry-Callebaut, Cargill, Hamester and Blommer - account for half of world cocoa grindings. Similarly, chocolate sales are dominated by a few large companies. Mars and Hershey account for roughly three quarters of sales in the world’s leading consuming country, the United States, while Cadbury, Nestlé and Mars hold a similar share in the United Kingdom.”

Though cocoa processing and trade is centralized, industry groups argue that tracing cocoa usage to the actual farms where

alleging the use of forced child labor in cocoa production, the confectionary industry and the Governments of Ghana, CDI, and the U.S. signed the Harkin-Engle Protocol committing to addressing child and forced labor in Ghana and CDI. After moderate progress, an extension, known as the Joint Action Plan, was launched in 2010. The Action Plan commits a combined US\$17 million over ten years to building capacity in cocoa growing communities and to increasing efforts to end child labor. The action plan has a number of flaws, including the absence of initiatives addressing labor conditions outside of Ghana and CDI and the absence of participation from industry groups outside the confectionary sector. However, it does build on strong multi-stakeholder involvement.

The International Cocoa Initiative, established as part of efforts under the Harkin-Engle Protocol, organizes work on environmental and labor standards in the West African cocoa sector. Other initiatives include a major investment by the Bill and Melinda Gates Foundation (GTZ 2010) in building cocoa productivity and a new development by Helvetica which for the first time will seek to track cocoa beans from the rural farms where they are grown to the warehouses where processors make purchases.

Where can I learn more?

[Watch](#) a short video by the International Labor Organization on child labor in Cameroon.

[Read](#) a manual by the International Labor Organization on best practices for reducing child labor in cocoa farms.

[Visit](#) the website of the international Labor Rights Forum to

cocoa is grown is not currently possible, preventing them from directly monitoring their suppliers.

learn which companies are most active in ending forced and child labor.

[Buy or learn](#) about fair trade cocoa.

Cocoa and Fair Trade

Cocoa is one of the principle products of the Fair Trade movement. A number of cooperatives, for example Kuapa Kokoo of Ghana, the makers of Divine Chocolate, use fair trade cocoa to get a better price for their members, to monitor the conditions under which cocoa is grown, and to improve productivity. Fair Trade cocoa has even begun to be included in confections by major companies, such as the Fair Trade Kit Kat by Nestlé. Despite gains, however, Fair Trade cocoa represents less than one percent of all cocoa sales.

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Diamonds

Where are diamonds produced with forced labor?



According to the U.S. Department of Labor (2010), diamonds are produced with forced labor in Angola and Sierra Leone, with child labor in Angola, Central African Republic, Democratic Republic of Congo, Guinea, Liberia, Sierra Leone and Zimbabwe. While reports in 2008 highlighted forced labor in Zimbabwe, more recent reports have indicated that these occurred only at the point of the initial discovery of diamonds. Investigations are ongoing.

What does forced labor in diamond production look like?

In Angola, forced labor occurs through forced work or, according to anecdotal reports, bonded labor in which “sponsors” pay for a miners’ expenses and are reimbursed through a portion of the diamond findings (Allen 2010). Additionally, the U.S. Department of State (2010) reports that

Case Study

The Kimberly Process: Protection against abuses in diamond production?

The Kimberly Process emerged in response to the increasing use of conflict, or ‘blood’ diamonds to fund violent civil wars in Africa. The resulting Kimberly Process Certification Scheme is intended to guarantee that diamonds are “conflict free”.

However, this process does not cover all human rights abuses but is limited to “rough diamonds used by rebel movements or their allies to finance conflict aimed at undermining legitimate governments.” The NGO Global Witness stated in 2010 that “due to the weaknesses in the Kimberley Process, and the lack of self-regulation by the diamond industry, it is still very difficult for consumers to know if they are buying a ‘clean’ diamond.”

These debates came to a head recently in Zimbabwe, where efforts by the Kimberly Process to address human rights concerns were widely seen as ineffective when the appointed monitor released disputed diamonds for shipment and sale without approval. While human rights advocates have asked that diamonds from Zimbabwe be boycotted (Global Witness 2010), shipments have continued to enter the global market.

How does forced labor in diamonds affect me?

Diamonds are used in jewelry and industrial tools. Industrial uses of diamonds, such as cutting and drilling, account 70% of all diamonds, generally those of lesser quality (World Diamond Council.)

Angola is “a destination for women and girls, mainly from the DRC, who are trafficked into diamond mining camps.” In Sierra Leone, miners, mostly young men, enter into bonded labor whereby they receive tools and housing but no compensation for their work (Boas & Hatloy 2006).

In both Angola and Sierra Leone, as well as countries where forced labor in diamonds is prevalent such as the DRC and Liberia, diamonds have been linked with the funding of violent and protracted civil wars, creating the phrase ‘blood diamonds’.

How are diamonds produced?



Diamond Supply Chain and Production:

Production: Diamonds are most frequently mined through hard-rock, open-pit or alluvial mining, where miners pan for diamonds in water. The latter is most likely to include artisanal and small-scale mining as little specialized equipment is required. This type of diamond production is most likely to feature forced or child labor. The raw diamonds are then sorted, cut, and polished.

Trade: Countries which are most likely to produce diamonds with forced or child labor include some of the largest diamond producers world-wide. According to a diamond industry source, some “US\$13 billion worth of rough diamonds are produced per year, of which approximately US\$8.5 billion are from Africa” (World Diamond Council).



What are governments, corporations, and others doing to address forced labor in diamond production?

In part due to the increasing criticism of the Kimberly Protocol, Martin Rapaport, head of the Rapaport diamond trading company, recently endorsed a more stringent social standard in diamond production. He called for diamonds “that are legal and not directly involved in severe human rights violations ... freely, fairly and legally traded.” The phrase “directly involved in severe human rights violations” is defined as diamonds whose physical production involves murder, rape, physical violence or forced servitude” (Diamond World 2010).

In addition to the Kimberly Process, initiatives with a focus on

After mining, raw diamonds are sent to one of a few global diamond sorting and cutting centers. These include Tel Aviv, Israel, Antwerp, Belgium and Surat, India. At these centers diamonds from all sources are mixed, making traceability difficult. New York and London are also major centers of diamond sales. Recently some producers, such as Zimbabwe, have made an effort to develop value-added activities such as cutting and polishing in their countries.

The diamond industry is very centralized, with just a few major corporations like De Beers accounting for the majority of global production and trade.

How can I learn more?

[Watch](#) the National Geographic video “Diamonds of War:

diamonds include the Madison Dialogue and Responsible Jewelry Council, and the Diamond Development Initiative.

Africa's Blood Diamonds”

Listen to the 2010 Diamond Conference “Human Rights and the Diamond Industry- The Way Forward.”

Read a feasibility study on Fair Trade diamonds.

Visit the website of Global Witness, which in 2003 was co-nominated for the Nobel Prize for its work on blood diamonds.

Send an email through Human Rights Watch to encourage action on abuses in Zimbabwean diamond mining.

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Fish

Where is fish caught with forced labor?



According to the United States Department of Labor (2010), tilapia is caught with forced and child labor in Ghana, and dried fish is produced with child labor in Bangladesh. However, forced labor in fishing has been reported globally. Regions of highest vulnerability appear to be South East Asia and West Africa. Gathering region-specific data is difficult because many fishing vessels travel in international waters and have crews from multiple countries.

The Fish Supply Chain

Case Study

Forced labor, fishing and the Philippines

The Philippines is a global hotspot for forced labor and fishing. Verité (2007) found that fishers faced abuses such as being forced to work longer than told, being paid lower wages than promised, and having wages withheld. Additionally, competition for positions is such that workers may have to make bribes to obtain employment. Foreign workers are also at risk on ships from the Philippines. Taiwanese fishing vessels have been observed transferring foreign laborers to houseboats when they dock in a Taiwanese port and later picking up the foreign laborer before heading out to sea again. Almost 30 percent of seamen in the world are Filipino (Martinola 2006 in Verité 2007).

How does forced labor in fishing affect me?

Of all fish caught, 80% is used for food and 20% is made into fishmeal and oil (UNCTAD 2004).



What does forced labor in fishing look like?

In Ghana, fishers or labor brokers approach the parents of



UNCTAD. *Commodity Atlas: Fishery Products*. 2004

The United Nations Conference on Trade and Development (UNCTAD 2004) reports that “for two thirds of the world’s population, including most of the world’s poor, fish provides at least 40% of protein consumption.” The U.S. is both a large exporter and the second largest importer of all seafood in the world. In the chart above, orange bars represent production, green bars represent consumption and arrows represent trade flows.

young children and arrange to take them for training in fishing boats in the Lake Volta region. At the end of the training period, which may last up to five years, they are promised a payment of cash or goods (UNODC 2010). However, abusive work conditions and lack of interim payment may mean that children enter into a situation of forced labor.

The International Transport Workers Union (2006) and the Environmental Justice Foundation (2010) have cataloged numerous instances of international fishing in which brokers arrange for workers to obtain positions on boats which may be at sea for months or years at a time without recourse to payment or the option to return home. In addition to fishers, transport workers may also be subject to forced labor.

Where can I learn more?

[Watch](#) a series of videos by the Environmental Justice Foundation on flags of convenience and pirate fishing.

[Read](#) a report by Verité on trafficking in the Philippines.

[Read](#) a report by the Environmental Justice Foundation about labor abuses in fishing.

[Read](#) a report by the International Transport Workers Federation on labor abuses in fishing and transport.

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Timber

Where is timber produced with forced labor?



According to the U.S. Department of Labor (2010), timber is produced with forced labor in Peru, Brazil and Myanmar (Burma). In Brazil and Peru, valuable hardwoods such as mahogany are most frequently associated with conditions of forced labor, though in Brazil the clearing of land may involve other woods as well. In Myanmar, bamboo and the hardwood teak are produced with forced labor. Child labor is not widely associated with timber.

What does forced labor in timber production look like?

Forced labor in timber is most prevalent in Peru and Brazil. In Peru, forced labor occurs either through debt bondage of Amazonian indigenous communities or through trafficking in persons to remote logging sites. In Brazil, forced labor is

Case Study

Forced Labor in Peruvian Forestry

The International Organization for Migration estimates that there are some 33,000 forced laborers in Peruvian logging. Forced labor results from one of two processes. In the first, middlemen pay a set sum of money to indigenous communities in exchange for mahogany. When the middleman returns, however, he informs the community that the price of mahogany has gone down, leaving them in debt. In other instances, labor brokers bring young men to harvesting areas and then charge them inflated prices for supplies. As the sites are isolated, they are unable to leave (Novak 2009).

“The US imports 32 per cent of its big-leaf mahogany from Peru, 90 per cent of which is illegal” (WWF 2009). Overall, the principle exporters of Peruvian wood were China (over 50%), followed by Mexico, EU countries, the Dominican Republic, Italy, Hong Kong, Canada and Sweden (Mie 2010).

How does forced labor in timber affect me?

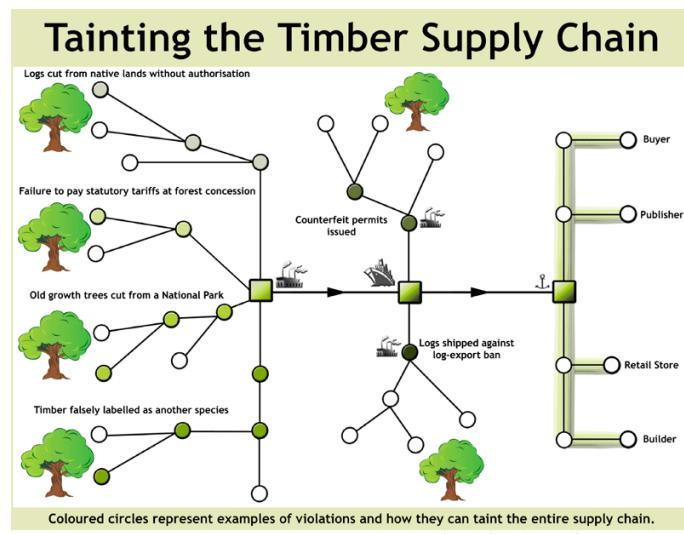
It is hard to overstate how many products use timber, from housing construction materials to furniture to paper and textiles to food thickeners.



associated with trafficking to remote logging sites, often for removal of valuable hardwoods prior to the conversion of land for farming or ranching. In Burma, government agents force timber workers to experience brief periods of unpaid labor.

Anti-Slavery International (2006) reported that logging accounts for 4 percent of all forced labor in Brazil and deforestation accounts for 28 percent. Other figures indicate that forestry accounts for a much smaller percent of forced labor in Brazil but definite figures are difficult because so many other agricultural activities first require that the land be cleared.

Timber Production and Supply Chain:



Timber and Conflict

Timber can be linked with conflict. One report on the issue states “governments are almost always complicit in conflict timber activities” with the conflict taking one of two forms, either providing financial means of sustaining conflict (as in Burma or Liberia) or as a source of conflict when ownership is disputed (as in Vietnam). In addition, “forests, unlike oil or alluvial diamonds, usually generate a range of products and critical services on which people depend immediately and directly for their existence. Therefore, indiscriminate harvesting of such forests (e.g., through clear cuts) is more likely to perpetuate conflict (Jarvie et al. 2003).

The Lacey Act

The U.S. Lacey Act was amended in 2008 with the aim of combating illegal logging and expanding the Act’s anti-trafficking provisions. Under these amendments it is unlawful to import, export, transport, sell, or acquire any plant or plant product taken in violation of any U.S. federal or state law or foreign law. Products, including timber, which violate these provisions are subject to seizure and may result in criminal prosecution. While rights advocates have supported the act, critics have claimed that the definition of due diligence that companies are required to meet is vague and unenforceable.

One of the biggest challenges of the timber supply chain is illegal logging. For Brazil, The International Labor Organization (ILO) confirmed that the areas with a “high incidence of slave labor are the same regions that also have a higher overall incidence of violence as well as a high incidence of deforestation” (ILO in Sakamoto 2009). In the case of Myanmar, despite a U.S. embargo of teak, smuggling across the border into Thailand and China means that wood harvested with forced labor may end up in products exported to America (Winn 2009).

After harvesting, wood is likely to be processed within the producer country. The supply chain following this step becomes increasingly complicated. Some countries have manufacturers which produce furniture or other goods, as is the case Indonesia, Malaysia, Thailand, Brazil and the Philippines (UNCTAD 2004). China is also increasingly exporting finished goods. Japan and the U.S. are the two largest markets for furniture. (UNCTAD 2004).

What are governments, corporations and others doing to address forced labor in timber production?

Most initiatives linked with timber have developed through environmental rather than social perspectives. However, a number of initiatives have aimed to improve labor and environmental standards in timber production. The most prominent of these is the Forest Stewardship Council (FSC) which offers forest management, chain of custody, and controlled wood certifications. The Sustainable Timber Initiative and Rainforest Alliance also have certification systems. The British think-tank Chatham House has gathered information on building social standards in forestry certifications.

In addition to supply chain initiatives, the United Nations Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD) seeks to control illegal logging and other causes linked to deforestation.

Where can I learn more?

[Learn](#) more about international trade in hardwoods.

[Explore](#) the impact of the Lacey Act.

[Read](#) about the link between timber and conflict.

[Read](#) about efforts to build social standards in forestry supply chains.

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Gold

Where is gold produced with forced labor?



Gold, according to the U.S. Department of Labor (2010), is one of the goods most widely produced with forced or child labor. The Department of Labor notes that forced labor in gold production is found in Burkina Faso, North Korea, Nigeria, and Peru and child labor is found in Bolivia, Burkina Faso, Colombia, DRC, Ecuador, Ghana, Guinea, Indonesia, Mali, Mongolia, Nicaragua, Niger, Peru, the Philippines, Senegal, and Tanzania. However, other sources indicate that forced labor in gold is more widespread, notably in Ghana and across Latin America.

Case Study

Gold Production in Burkina Faso

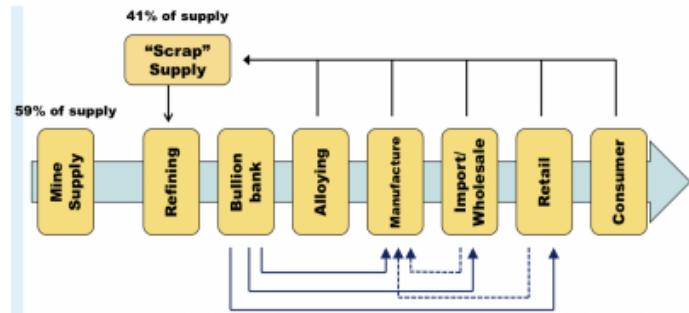
The International Labor Organization (2006) estimates that the Sahel region of Burkina Faso and Niger accounts for a quarter of all child labor in mining. An unknown percentage of these children may willingly migrate to the gold fields but are trafficked by the intermediaries who bring them there or receive no compensation once at the mines. Other children work alongside their families--the ILO indicates that 70 percent of all children working in the area are less than 15 years old.

While Burkina Faso is not among the world's largest producers of gold nor a significant source of U.S. imports, gold is increasing in importance for the national economy, with the opening of four new gold mines and a 239 percent increase in exports between 2007 and 2008. Burkina Faso's major markets are Singapore, Belgium, China, Thailand, Ghana, and Niger (USDOs 2010).

How does forced labor in gold affect me?

Jewelry accounts for the majority of all gold use. Due to its high conductivity, gold is also used in electronics such as cell phones and laptops. Small amounts of gold are also used in dentistry, medicine, and for gold leaf.

How is gold produced?



Responsible Jewelry Council. Gold and the Jewelry Supply

Chain Production: Gold is mined either through hard-rock or alluvial mining. Forced labor is most likely to occur in artisan and small-scale mining, most frequently in informal and/or illegal mining which takes place around major mining sites or sites which are near depletion.

After gold is mined, it needs to be separated from the surrounding ore. In artisan and small-scale mining, this dangerous process takes place in or around miners' homes. In larger mining operations, this process will be carried out mechanically. Gold is then separated from the chemical solution, melted and poured into bars.

According to the “No Dirty Gold” Campaign “half of the world's gold is produced on indigenous peoples' lands.” Additionally, it is estimated that 30 percent of miners are women and children: women in particular are likely to be involved in gold processing, subjecting them to the dangers of mercury exposure, which include birth defects and a range of



What does forced labor in gold production look like?

Forced labor in gold is found either as a result of debt bondage within artisan and small-scale mining (ASM) communities, or, less frequently, as a result of trafficking in persons. In the case of debt bondage, middlemen sell artisan and small-scale miners supplies at inflated prices which miners are unable to pay back. This form of forced labor is most common in Latin America. In the case of trafficking, which occurs in Burkina Faso and Niger, children from local

communities and neighboring countries are trafficked into informal gold mining. Forced labor in North Korea results from forced work by the national government and is used as a punishment (Hawk 2003). Due to the closed nature of North Korean society, the extent of this practice is unknown.

What are governments, corporations and others doing to address forced labor in gold production?

The Organization for Economic Co-operation and Development (OECD) is undertaking a high-level initiative to develop a due diligence policy for coltan, tungsten, tin and gold mining in conflict and high-risk scenarios, particularly the

neurological symptoms.

The Supply Chain: The largest sources of gold to the U.S. are Canada, at 30 percent, Peru, at 29 percent, Mexico, at 16 percent, and Chile, at 9 percent (USGS 2010). Globally, the largest producers are China, Australia, the U.S., South Africa, and Peru (USGS 2010). The price of gold reached an all-time high in 2010, leading to an increase in global production.

After gold is mined and processed, it may be mixed with stronger metals to create an alloy. It is then sold to manufacturers and retailers, which produce jewelry and other goods. Because of the use of scrap gold and the mixing of gold from multiple sources, it is currently very difficult to track the origin of the gold in specific products.

Gold and the Environment

In addition to being linked with forced labor, gold production is highly destructive environmentally. Cyanide or mercury is used to separate gold from the surrounding ore and smelting produces 13 percent of all sulfur dioxide annually (No Dirty Gold). The chemicals used in gold production pollute water and surrounding land and affect human health. For example, in the Amazon, 77 sq. miles of forest has been lost to gold mining, and some 40 tons of mercury has been dumped (Collyns 2010). The United Nations is currently drafting a convention on the use of mercury.

DRC. Forced Labor is one indicator in the "intolerable abuses" of this due diligence guide (OECD 2010).

A number of organizations address social and environmental standards in gold mining. These include the Responsible Jewelry Council (RJC), a membership organization which aims to improve conditions in gold and diamond supply chains. In 2009 the RJC initiated a certification program for all members of the gold and diamond supply chain requiring obligatory third party auditing. No Dirty Gold, a campaign from the NGO Earthworks, seeks to promote environmental and social standards in gold mining. As of March 2011, more than 70 companies had signed on to the No Dirty Gold's "12 Golden Rules" for sourcing, including 8 out of 10 of the top jewelry retailers, with Target the most recent addition. The Madison Dialogue is another industry-focused organization which does not offer a certification program but which seeks to build engagement in the gold and diamond supply chains.

In March 2010 the Fairtrade Labeling Organization and the Alliance for Responsible Mining (ARM) launched a fair trade certification for gold. The certification was piloted in Latin America and will expand to Africa and Asia after 2011. At the moment this represents a fractional scale of the international gold market: FLO indicated that its 15-year plan is to gain 5 percent of the total market share (FLO 2010).

How can I learn more?

[Watch](#) a video by Human Rights Watch on gold mining in New Guinea.

[Listen](#) to a broadcast about the Fairtrade gold launch.
[Read](#) an article by National Geographic on gold around the world.
[Learn](#) more about the environmental effects of gold at “No Dirty Gold”

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Shrimp

Where is shrimp produced with forced labor?



According to the U.S. Department of Labor (2010), forced labor in shrimp farming occurs in Myanmar (Burma) and Thailand and child labor occurs in Bangladesh, Cambodia and Thailand. The existence of forced labor in Bangladesh has been disputed.

What does forced labor in shrimp farming look like?

According to the Solidarity Center (2008), forced labor in shrimp can occur through debt bondage, non-payment of wages, and/or the suspension of freedom of movement as workers are locked in processing plants. Many of the workers in Thai shrimp processing are Burmese and other migrants who are even more likely to be subject to abusive work conditions and forced labor as a result of broker or employer threats to turn them over to the police. The U.S. Department of Labor has

How does forced labor in shrimp affect me?

Most shrimp consumed in America is imported from countries in South East Asia which may use forced or child labor.



Shrimp Production and Supply Chain:

Shrimp production takes place in one of two forms: farming or trawling. In farming, shrimp grow under controlled environments, either in tanks or ponds. In trawling, vessels catch shrimp and fish in the open water by dragging nets behind the boat. Due to trawling's high environmental costs, the Food and Agriculture Organization (2008) compares fish trawling to forest clear-cutting and states that the "discard rates account for over 27 percent of total estimated discards in all the marine fisheries of the world." While both methods are used in South East Asia, the majority of production takes place through farming.

According to the FAO (2008), "world production of shrimp, both captured and farmed, is about 6 million tonnes, of which about 60 percent enters the world market. Shrimp is now the most important internationally traded fishery commodity in

in the past reported that children “work off the parents' debts in the factories, where they reportedly are locked inside and sometimes beaten. These children are thus made officially ‘invisible’ through the subcontracting arrangements between their parents and the employers.” While the Department of Labor (2010) continues to classify shrimp as being produced with forced and child labor, in its most recent report it did acknowledge the “exemplary efforts” made by the Government of Thailand in targeting areas of heightened vulnerability for audits and for carrying out trainings on forced and child labor in association with the Thai Frozen Food Association.

In Myanmar, the Environmental Justice Foundation (2003) has reported incidents in which land has been confiscated for the establishment of shrimp farms and workers have been conscripted to carry out shrimp farm construction and other incidents in which workers were forced to labor on the farms without compensation.

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terms of value.” The largest importers are the United States, Japan and Europe (FAO 2008). The largest sources of imports for the U.S. are Thailand, Ecuador, Indonesia, China, and Vietnam (USDA 2011).

Where can I learn more?

Watch a video or read a report by the Solidarity Center on labor abuses in shrimp and seafood processing in Thailand.

Read a report by the Environmental Justice Foundation on human rights abuses throughout South East Asia.

Read a detailed report on shrimp catching and associated environmental issues by the FAO.

Nuts

Where are nuts produced with forced labor?



According to the United States Department of Labor (2010) Brazil nuts are produced with forced labor in Peru and with forced and child labor in Bolivia. Bolivia also produces peanuts with forced and child labor. Additionally, cashews in Guinea and hazelnuts and peanuts in Turkey are produced with child labor. This outline discusses all nuts unless a certain type of nut is specified.

What does forced labor in Brazil nut gathering look like?

One study found forced labor to be prevalent in Brazil nut harvesting in the Bolivian departments of Beni and Pando, both located in the Amazon Basin (Bedoya & Bedoya 2005). The study recorded that some 31,000 people travel annually to these regions to participate in the harvest. After taking on an average debt of 1,000 bolivianos against their labor, the workers find

Case Study

Child Labor in Turkish Nut Gathering

A study in Turkey estimated that hazelnut harvesting accounted for approximately six percent of child labor and that peanut harvesting accounted for approximately three percent (Gulcubuk et al. 2003). The study found that children were most likely to work alongside their families in nut gathering on a seasonal basis, alternating nut gathering with cotton harvesting and other agricultural activities.

How does forced labor in nuts affect me?

Nuts are consumed alone, in nut mixes, or in chocolate or confectionary products. Nuts may also be used in cosmetics.



Brazil Nuts Production and Origin

“Brazil nuts only grow in a specific area of the Amazon rainforest encompassed by Bolivia, Brazil and Peru. The trees grow up to 50 meters in height and live for up to 1,000 years. Each tree produces up to 1,300 grapefruit-size pods containing

that their wages are not sufficient to pay back the debt and that they are forced to purchase goods at exorbitant cost.

Nut workers are generally not permitted to leave the remote harvest sites. At the end of the harvest they remain in debt and are obligated to return the next year or to remain indefinitely. An estimated 5,000-6,000 of the 31,000 men, women and children are subject to forced labor. There have also been instances reported in which local indigenous peoples have been kidnapped and subjected to forced work in Brazil nut harvesting for brief periods. In Peru, forced labor is most likely to be a result of debt bondage.

20-40 individual brazil nuts. The pods drop to the forest floor during the rainy season from January to March" (Fairtrade Foundation).

According to the FAO, Bolivia is by far the largest source of shelled Brazil nuts to the U.S., followed by Brazil and Peru. Only Brazil accounts for a significant source of unshelled nuts. In addition to the U.S., the largest importers of Brazilian Brazil nuts are the United Kingdom, Germany and the Netherlands.

Where can I learn more?

[Read](#) about the Brazil nut harvest.

[Read](#) about forced labor in Bolivia (Spanish).

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Palm Oil

Where is palm oil produced with forced labor?



According to the U.S. Department of Labor (2010), palm oil is produced with forced labor in Malaysia and with child labor in Indonesia.

What does forced labor in palm oil production look like?

Forced labor in palm oil is generally a result of international trafficking in persons. Malaysia is a regional destination for international migrants and often labor brokers or employers are implicated in trafficking through such means as confiscation of passports or high brokerage fees. This is true across all sectors. Palm oil has particularly high potential for abuse due to the isolation of palm plantations.

The exact prevalence of forced labor in palm oil is unknown.

Case Study

Trafficking in Persons in Malaysia

Malaysia is a regional destination for trafficking in persons for many sectors, ranging from IT manufacturing to palm plantations. Verité and groups such as Amnesty International (2010) have reported abuses by labor brokers, who charged high rates for visas, up to \$1,000 in some cases, and confiscate passports. Workers then become subject to abusive work situations from which they cannot escape.

The U.S. Department of State reports that Malaysia hosts approximately 2 million documented migrants and an additional 1.9 million undocumented migrants. Both groups are vulnerable to trafficking. The most frequent countries of origin are “Indonesia, Nepal, India, Thailand, China, the Philippines, Burma, Cambodia, Bangladesh, Pakistan, and Vietnam” (USDOS 2010). Malaysia is on the Department of State’s Tier 2 Watch List.

How does forced labor in palm oil affect me?

A ubiquitous product, palm oil can be found in goods from food to cosmetics such as soap. Palm oil may be listed as “vegetable oil” on ingredient lists.



This is due in part to the fact that while trafficking to Malaysia is known to be common, figures are not segregated by commodity. Additionally, the island of Borneo, a major production site for palm oil, is divided between three countries, including Malaysia and Indonesia, and irregular migration contributes to trafficking. Finally, palm oil production is increasing in Africa and Latin America, and forced labor has not been studied in this context. Other abuses, such as the confiscation of land, have been noted in Colombia.

Palm Oil Production and Supply Chain

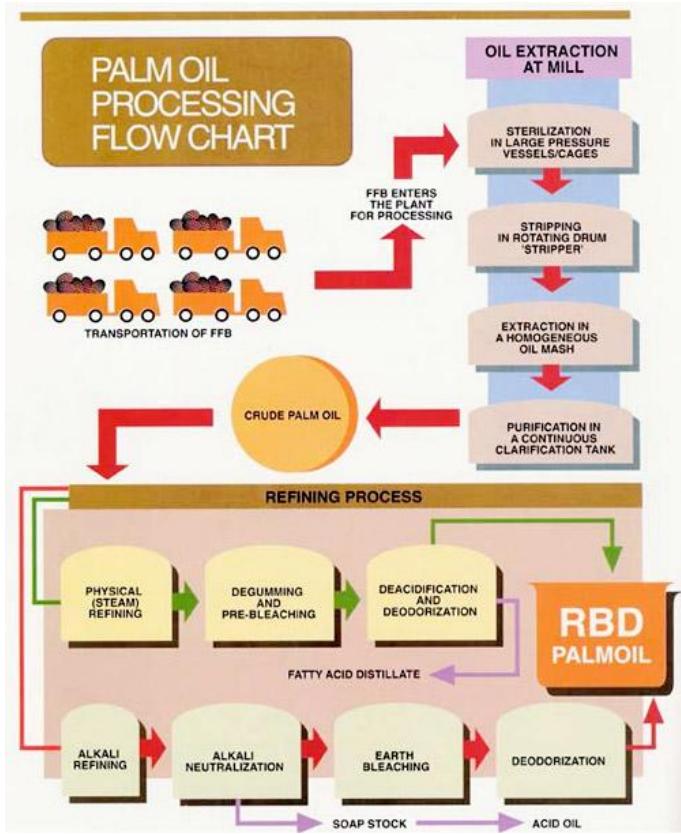
Environmental Consequences of Palm Oil Production

Palm oil production has heavy environmental consequences, notably through widespread deforestation, which leads to the destruction of habitats for endangered species such as orangutans (Greenpeace 2008) and contributes to climate change. “The creation of oil plantations in Malaysia is regarded as the main cause of the air pollution that has been affecting many neighboring countries in Southeast Asia” (WWF in O’Sullivan 2009).

Nor does palm oil have environmental benefits when used as a biofuel- Oxfam (2010) has stated that the deforestation resulting from the conversion of forest to farmland in Indonesia would require “420 years of biofuel production to pay back the carbon debt.”

What are governments, corporations, and others doing?

Due to increased campaigning highlighting the environmental impacts of palm oil, the last few years have seen increased engagement by corporations and governments. As a result of pressure from Greenpeace, in 2008, Unilever, made a commitment to complete sustainable sourcing by 2015 (Greenpeace 2008). Unilever has since been followed by Wal-Mart and General Mills in 2010. Social issues such as forced labor have not been at the foreground of these campaigns, though in one notable case The Body Shop dropped their major supplier of palm oil, Dabaan Organics, over allegations of



Oil palm fruit is harvested on remote tropical plantations. After harvesting, the fruit is transported to processing plants, where palm oil is produced from the flesh and palm kernel oil is produced from the kernel of the fruit. "For every 10 tonnes of palm oil, about 1 tonne of palm kernel oil is also obtained" (Malaysian Palm Oil Export Board).

Oil may be further processed to produce derivatives of varying densities. The derivatives may also be blended with other vegetable oils (Greenpalm). Palm oil or its derivatives is present

illegal land confiscations in Colombia. Companies and other stakeholders have banded together to create the Roundtable on Sustainable Palm Oil, which has a certification system for sustainable palm oil.

Government actors have also become concerned about palm oil production. The World Bank is developing a palm oil strategy which "will outline a set of principles to guide the World Bank Group's future engagement in the palm oil sector" (IFC). The Netherlands has pledged to move to sustainable palm oil sourcing from 2015 and the United Kingdom has announced a research initiative on palm oil with UK companies.

Where can I learn more?

[Watch](#) "The Price of Palm Oil" by Al Jazeera.

[Learn](#) about Verité's efforts to end abuses by labor brokers.

[Read](#) a report by Amnesty International about trafficking in Malaysia.

[Read](#) a report by GreenPeace on the environmental effects of palm oil.

in up to 50% of all products in grocery stores (WWF in Economist 2010).

Malaysia and Indonesia are the world's largest producers of palm oil, together accounting for 85 percent of all production (Greenpalm). Currently, the US is the 6th largest importer of palm oil, following China, India, Europe, Pakistan and Malaysia (USDA). Growth in India and China contributes to increasing demand for oil- demand which the World Wildlife Fund reports may double by 2020.

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Coltan, Tungsten & Tin

Where are coltan, tungsten and tin produced with forced labor?



According to the U.S. Department of State, coltan, tungsten and tin, three widely-used minerals, are produced with child labor and not forced labor in the Democratic Republic of the Congo (DRC). However, other reports have included reports of forced labor. The DRC is the only country in which these minerals have been linked to forced labor. As the labor conditions for each are similar, this guide will address the three minerals jointly.

What does forced labor in mineral production look like?

Local organizations and international organizations working in the DRC have reported incidences of forced labor in mining. One report (Pöyhönen et al. 2010) which surveyed local advocates included forced labor, along with sexual violence

Case Study

Conflict Minerals in the DRC

Conflict between government military groups, local militias, and armed groups based in neighboring Uganda and Rwanda has been ongoing in the DRC for more than 15 years, resulting in more than 5 million deaths. Sales of coltan, tungsten and tin have allowed each of these groups to continue funding the conflict. Global Witness (2009) has recorded prevalent corruption in the mineral sector which directly benefits the military.

The United Nations Security Council has issued a number of resolutions regarding the DRC with specific reference to conflict minerals. Additionally, the Office of the High Commissioner for Human Rights released a report which outlines human rights abuses from 1993-2003 and which “sets out measures to hold perpetrators of the most serious crimes to account. Recommendations include setting up a special court or chamber in an existing Congolese court” (Global Witness 2010).

What are coltan, tungsten and tin and how are they used?

Coltan: The source of the minerals niobium and tantalum. In the context of the DRC, coltan generally refers to tantalum, which is used widely in the capacitors of common electronics like cell phones and laptops.

Tungsten: Derived from wolframite, tungsten is used in electronics due to its high conductivity. It is also used as an alloy to strengthen steel.

and land disputes, as issues urgently needing attention. Forced labor may take a number of forms. In some cases, the forces that control mining sites, which could be representatives of the armed forces or rebel groups, may require that local miners work without pay at their mining site for short periods -- a process known as "solango" (Pöyhönen et al. 2010). Free the Slaves has identified a number of other manifestations of forced labor such as debt bondage resulting from overpriced supplies, forced labor in local militias and forced marriages (Fitzpatrick 2010).

Mineral Production and Supply Chain:

The supply chain in six steps

1 The mines

A gold rush with guns

2 Trading houses

looking the other way

3 Exporters

Minerals enter international markets

4 Transit countries

Origins obscured

5 Refiners

Minerals to metals

6 Electronics companies

Conflict minerals in your phone

According to the Electronics Industry Transparency Initiative, “10 million people (16%) of the Congolese population are directly or indirectly dependent on small scale mining.” Currently, mining associated with forced labor and other human rights abuses is largely limited to the eastern provinces of North and South Kivu. Following mining, ore is sold to trading houses and then exporters, who sell it to refiners. It is then made into electronics components (Prendergast and Leshnev 2009).

As Global Witness (2009) notes, “When it comes to tracing supply chains back to their sources, refiners are the critical link. After the mineral

Tin: Often found alongside coltan, tin from cassiterite has a wide variety of uses from the production of tin cans to tin solder in electronics.

Together, these minerals are sometimes referred to as the “3 T’s”, an abbreviation of tantalum, tungsten and tin.

How does forced labor in coltan, tungsten and tin affect me?

Coltan, tungsten and tin are commonly used in electronics such as cell phones and computers.



What are governments, corporations and others doing to address forced labor in coltan, tungsten and tin?

The United Nations has a significant presence in the DRC through its Stabilization Mission in the DRC (MONUSCO). As Enough! (2010) points out: “At \$1 billion a year, the U.N. peacekeeping mission is by far the biggest investment the international community—and the United States, which pays nearly 30 percent of the tab—is making in support of peace in the Congo.”

ore is refined into metal, it becomes impossible to distinguish tin or tantalum that originated in Congo from other sources, and supplies from all over the globe are mixed together at this step in the chain. This is why it is essential that these companies take pains to document where they are sourcing from and make their records subject to independent audits.” Challenges in the supply chain include the dispersed and informal nature of mining, illegal transfer of minerals from the DRC to Uganda, Rwanda and other neighboring countries, and the informal nature of mining and the international supply chain.

According to the U.S. Geographical Survey (2010), the DRC was the world’s fifth largest producer of coltan (tantalum) and tin (cassiterite), but was not among the top global producers of tungsten. Global Witness (2009) reports that the largest purchasing countries of coltan are Belgium, China, Thailand and South Africa. The largest purchasing countries for tin are Belgium, Thailand, the UK, Malaysia and Rwanda, and the largest purchasing countries of tungsten are Belgium, the UK, the Netherlands, China, and Austria. For electronics purchased in the US, minerals are usually shipped and processed in Asia before being sold as finished products.

A number of due diligence systems have emerged for mineral sourcing in the DRC. The OECD is developing a voluntary due diligence policy for coltan, tungsten, tin and gold mining in conflict and high-risk scenarios. In October 2010 this system was endorsed by 11 African countries, in addition to the existing endorsements. Forced Labor is one indicator in the “intolerable abuses” of this due diligence guide (OECD 2010). The organization Global Witness (2010) has also proposed due diligence guidelines for companies sourcing from the DRC. In the United States, the Frank-Dodd Act requires companies to ensure that minerals do not contribute to conflict. The tin industry, represented by the International Tin Research Industry (ITRI), has piloted a certification system for tin from the DRC. The Electronics Industry Code of Conduct has introduced the [Conflict Free Smelter Program](#), which will require third-party auditing, to help bring companies into compliance with the law. Participants as of April 2011 included Apple and Intel (Schwartz 2011).

A number of international organizations focus on labor abuses in the mineral sector of the DRC. In addition to Global Witness, these include Enough! and its RESOLVE campaign and MakeITFair.

Where can I learn more?

[Watch](#) the “Story of Electronics” from MakeITFair.
[Read](#) an article from Free the Slaves about the different types of forced labor in mining in the DRC or [go in-depth](#) with a report by Global Witness.
[Read](#) about the need for a certification system in the DRC

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Sugar

Where is sugar produced with forced labor?



According to the U.S. Department of Labor (2010), sugar is produced with forced labor in Bolivia, Brazil, the Dominican Republic, Myanmar (Burma) and Pakistan and with child labor in Belize, Bolivia, Brazil, the Dominican Republic, El Salvador, Kenya, Mexico, Myanmar, Pakistan, Panama, the Philippines and Uganda. Some researchers also argue that forced labor is present in Indian sugar production.

What does forced labor in sugar production look like?

The nature of forced labor in sugar varies widely. In Brazil, forced labor is often a result of domestic trafficking through

Case Study

Sugar Production in India: Forced Labor?

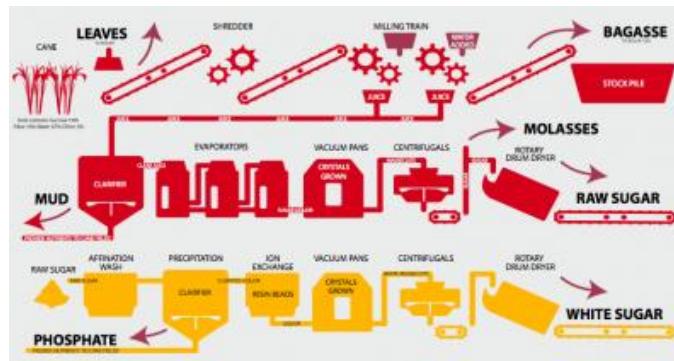
While the U.S. Department of Labor does not list Indian sugarcane as being produced with forced labor, other researchers have argued that it should be included. According to Guerin et al. (2009) migrant workers in the State of Tamil Nadu are recruited by labor brokers who provide advances for transportation and living expenses, to be repaid at the end of the harvest season. However, due to high quotas set as well as the disparity in power and information between brokers and workers, workers often end the season in debt. According to this research, "...most of the workers come back not only with empty hands, but indebted for the next season. In 2004, 62 percent were in this situation, against 23 per cent with nil balance and the others (15 percent) managing to come back with a little savings." Yet 95 percent say that they have changed brokers at least once meaning that the state of bondage is not permanent.

How does forced labor in sugar affect me?

While most American products use sugar beet rather than sugarcane, globally sugarcane is used in a wide variety of confectionery products as well as in soft drinks and alcoholic beverages. Sugar may also be used in ethanol or as an ingredient in industrial products such as cement or glue.

local labor brokers. In Bolivia and Pakistan, families reside on large plantations with a history of debt bondage and slavery. In India, communities of migrant workers participate in the harvest of sugar in sugar-producing regions annually, sometimes remaining in debt to labor brokers. Children as well as adults working in sugarcane production are exposed to high levels of pesticides and potential injuries from machetes, which are used to cut the cane.

Sugar Production and Supply Chain:



Sugarcane is most frequently harvested by hand using machetes rather than by machine in order to avoid damaging the crop. After harvest, it must be processed quickly. At sugar mills, processing creates raw sugar, which is generally refined into white sugar. Molasses and bagasses, or sugarcane fiber, are produced as by-products of this process (UNCTAD 2004).

“Approximately 79% of total production is made from sugar cane grown primarily in the tropical and sub-tropical zones of



Sugarcane and Ethanol

While the U.S. uses ethanol produced from corn, sugarcane ethanol is a major world energy source. Brazil is the world's largest producer of sugar-based ethanol, which it uses domestically and also exports, with most exports going to Europe.

Despite its benefits when compared with oil, Sugarcane ethanol production is not without environmental impacts; most notably, it is among the most water-heavy crops. According to the World Wildlife Fund, it takes “one million litres of water to produce 12.5 tonnes of commercial cane.” The United Nations Environmental Program (2010) has warned that demand for water due to ethanol use could compromise its value.

What are governments, corporations and others doing to address forced labor in sugar production?

Formerly known as the Better Sugarcane Initiative (BSI), Bonsucro is a multi-stakeholder group which seeks to improve social and environmental standards in sugar production. The required standards for membership include prohibition of forced and child labor. Bonsucro will start offering

the southern hemisphere, and the balance from sugar beet which is grown mainly in the temperate zones of the northern hemisphere. Generally, the costs of producing sugar from sugar cane are lower than those in respect of processing sugar beets" (ILoveSugar).

According to the Food and Agricultural Organization, the largest producers of sugarcane as of 2008 were Brazil, India, Thailand, China and Pakistan. Of these countries, three produce sugar with forced labor. However, the majority of sugar used in the United States is not produced from sugarcane but rather from sugar beets and is produced domestically.

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certifications in 2011.

Where can I learn more?

[Watch](#) a video about forced labor in the Dominican Republic.

[Learn](#) about Bonsucro and sustainable sugar.

[Read](#) about the global sugar trade.

Granite and Other Stone

Where is stone produced with forced labor?



According to the United States Department of Labor (2010) granite is produced with forced labor in Nigeria and with child labor in Benin, Nigeria, and Sierra Leone. Additionally gravel (crushed stone) is produced with forced labor in Nigeria and with child labor in Guatemala, Nicaragua, and Nigeria. Child labor is used in limestone in Egypt and Paraguay and pumice production in Nicaragua. Various stones are produced with forced and child labor in India and Nepal and with child labor in Zambia.

What does forced labor in stone production look like?

In Nigeria, forced labor is most likely to result from trafficking in persons either of Nigerians or migrants from the neighboring countries of West Africa. Often, the workers are young boys or teenagers who may migrate willingly to Nigeria and may

How does forced labor in stone affect me?

Stone is used in a variety of home goods such as tile and counters as well as construction goods such as gravel and flagging.



Stone Production and Supply Chain

Imports are divided into dimension stones, which have been shaped, and crushed stone, which have not. The most commonly sold forms of dimension stone in the U.S. are limestone, granite, and sandstone. Rough stone is used in construction and "dressed" or finished stone in products such as tile, blackboards, and flagging (USGS Survey 2008).

With the exception of India, the principal sources of stone imports for the U.S. are not those countries which produce stone with forced or child labor. As one source notes, only five percent of all sandstone produced in India is exported (Griffiths 2010).

In 2008, the most significant import sources by value for all dimension stones included Brazil, Italy, China, and Turkey. For

receive advances from labor brokers but who end up in situations of trafficking. While there is no confirmed total estimate of forced labor in Nigerian granite, one estimate states that “at least 6,000 children from Benin alone are forced to work in the country’s granite pits in the southwest” (Stoneworld 2003).

In India, quarrying is strongly linked with forced and child labor for multiple types of stone. Estimations put some 200,000 children working in sandstone in India and as many as 90 percent of all quarry workers may be victims of debt bondage (Mine Labour Protection Campaign in Griffins 2010). In these circumstances, workers take on debt which, when unpaid, may be passed down through generations. According to a study by the Indian Committee for the Netherlands (2006) families often take on debt during the rainy season in which quarrying is halted and they have no alternative income source. Debts may accumulate due to high interest rates, cost of supplies and tools, and contractor fees.

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granite specifically, the most significant sources were Brazil, China, Italy and India. Additionally, the U.S. is an exporter of dimension stone, particularly granite (USGS 2008). The United States Geographical Survey (2008) states, “although unreported, a significant amount of granite was probably exported back to the U.S. market.” Due to the high cost of transport, imported crushed stone accounted for only one percent of domestic use (USGS 2008).

Where can I learn more?

[Watch](#) a video by Free the Slaves on stone quarries in India.

[Read](#) a report about corporate social responsibility and quarrying.

[Read](#) an article about quarrying in India.

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Rubber

Where is rubber produced with forced labor?



According to the United States Department of Labor (2010) natural rubber is produced with forced labor in Myanmar (Burma) and with child labor in Cambodia, Indonesia, Liberia, Myanmar, and the Philippines. Previously, forced labor has been identified in Liberia and anecdotal reports have reported forced labor in Malaysia (Kinetz et al 2008).

What does forced labor in rubber production look like?

How does forced labor in rubber affect me?

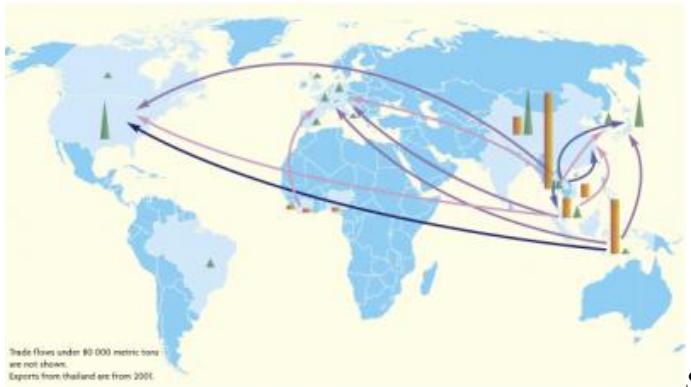
Rubber is used primarily in tire production but also for a wide variety of industrial uses.



Rubber Production and Supply Chain

In Asia, with the exception of Indonesia and Malaysia, rubber is likely to be grown on large plantations whereas in Africa it is most likely to be grown on small family farms. Forced labor takes place at the harvesting stage. While production processes differ, a common process is vulcanization, which adds sulfur to natural rubber in order to solidify it. After vulcanization, rubber is heated and pored into molds.

Approximately 90 percent of rubber production takes place in Asia, with Thailand, Indonesia, Malaysia, India, China and Vietnam accounting for 88 percent of global production (UNCTAD 2004). However, Liberia accounts for approximately 64 percent of quantity and 72 percent of value of American rubber imports with Vietnam and Thailand also providing significant sources (FAO).



Source:

UNCTAD 2004. Yellow bars signify production and green cones signify consumption. Arrows signify trade flows. Source: UNCTAD 2004.

The most well-known instances of forced labor in rubber production are those on the Firestones plantations of Liberia. Rubber tappers responsible for extracting liquid rubber from trees received low wages and must meet high quotas which require assistance from family members, including children (International Labor Rights Forum). According to anecdotal reports, conditions have bettered somewhat in recent years, in part due to the public campaigns highlighting Firestone and in part due to the end of Liberia's civil war. There have been few studies on conditions outside of Firestone properties.

In Myanmar, the Karen Human Rights Group (2006) has reported forced labor in rubber similar to forms practiced in other agricultural commodities in which officials, mainly government representatives, claim a certain proportion of the week's labor for working on plantations.

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Natural Versus Synthetic Rubber:

Demand for synthetic rubber increased drastically during World War II. Today the majority of all rubber used is produced synthetically and not known to involve the use of forced or child labor in its production. While goods may use either natural or synthetic rubber, approximately 60 percent of all natural rubber use is in tires and other automobile parts (UNCTAD 2004).

Where can I learn more?

[Watch](#) a video about Firestone in Liberia.
[Read](#) about the international rubber trade.
[Read](#) about Firestone in Liberia.

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Rice

Where is rice produced with forced labor?



According to the United States Department of Labor (2010) rice is harvested with forced labor in India, Mali and Myanmar (Burma) and with child labor in Brazil, the Dominican Republic, India, Kenya, Mali, Myanmar, the Philippines and Uganda.

What does forced labor in rice production look like?

While most forced and child labor in rice takes place at the harvesting stage, in India forced labor has been identified at the milling stage of production. In early 2010 an Indian rice mill owner was convicted for holding multiple families inside the mill, initially binding them with debt through advances and also locking the facilities and denying workers permission to leave (International Justice Mission). As recently as October

How does forced labor in rice affect me?

According to the United States Department of Agriculture (USDA), rice is the “primary staple for more than half the world's population.”



Rice Production and Supply Chain

The world's largest exporters of rice, in descending order, are Thailand, Vietnam, Pakistan and India (USDA 2010). These countries are also major rice consumers. The largest producers of rice in terms of volume are China, India, Indonesia, Bangladesh and Vietnam (FAO). The U.S. is also a net rice exporter; however, demand for aromatic rice varieties has increased imports from South Asia (USDA).

Where can I learn more?

[Read](#) a case study from the International Justice Mission.

[Watch](#) a video on recent changes in the international rice trade.

2010 additional workers were rescued from the other mills
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Tobacco

Where is tobacco produced with forced labor?



According to the United States Department of Labor (2010) tobacco is among the agricultural goods most commonly produced with child or forced labor. The U.S. Department of Labor lists tobacco as being produced with forced labor in Malawi and Kazakhstan and with child labor in Argentina, Brazil, Indonesia, Kazakhstan, Kenya, Kyrgyz Republic, Lebanon, Malawi, Mexico, Mozambique, Nicaragua, the Philippines, Tanzania, Uganda and Zambia.

Tobacco Production and Supply Chain

After harvesting, tobacco is cured by air, fire or sun. At factories, leaves are cleaned, de-stemmed and aged, after which flavor may be added. Tobacco is then rolled into cigarettes, which may have filters added.

How does forced labor in tobacco affect me?

The most common uses of tobacco are for cigarettes, cigars, pipe tobacco, chewing tobacco, and snuff.



What does forced labor in tobacco harvesting look like?

The nature of forced labor in tobacco growing varies from region to region. For example, in Kazakhstan Human Rights Watch (HRW 2010) has identified instances of forced labor “in which employers confiscated migrant workers’ passports and in some cases required them to perform other work without pay or compensation in addition to tobacco farming.” Workers are paid at the end of the harvest season, meaning that workers must tolerate working conditions employers provide or forfeit their compensation. While the study by HRW was not a sector-wide survey and the full scope of forced labor remains unclear, it does indicate wide-spread abuses among tobacco farmers. Human Rights Watch also pointed out that Phillip Morris, the maker of Marlboro, is the principle buyer of tobacco in Kazakhstan.

In Malawi, forced labor occurs in the context of tenant farming

Forced labor is most likely to take place at the harvest stage. In addition to forced labor in tobacco harvesting, forced and child labor may occur in the cigarette production process in India. The World Health Organization (2001) reported some 325,000 children working in rolling tobacco, and estimated that 50 percent are bonded laborers.

Tobacco is produced and consumed world-wide. “The major producers are China, India, Brazil, the U.S., Turkey, Zimbabwe and Malawi, which together produce over 80 percent of the world's tobacco. China alone accounts for over 35 percent of world production” (Food and Agriculture Organization 2010). The largest importers are Russia and the U.S., with the U.S. importing approximately the same amount of tobacco that it exports (World Trade Organization).

in which families make agreements with landowners whereby they receive a portion of the profit from the tobacco harvest in exchange for labor in growing and harvesting the crop (Eldring et al. 200). Tenants are generally expected to pay for seeds and other expenses. Because this system rarely results in profit for the tenants, they remain in a situation of debt bondage (International Trade Union Confederation 2010). Additionally, families are expected to have their children participate in the harvest from a young age, exposing them to dangerous levels of nicotine.

Where can I learn more?

[Watch](#) a video by Plan International on child labor in Malawi.
[Watch](#) a video by Human Rights Watch on tobacco growing in Kazakhstan.
[Read](#) about tobacco growing and trade.

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