



# Rubber

## Summary of Key Trafficking in Persons Issues in Rubber Production

- ✓ Structural Supply Chain Features Contributing to Trafficking in Persons Vulnerability
  - Long, Complex, and/or Non-Transparent Supply Chains
- ✓ Undesirable and Hazardous Work
- ✓ Vulnerable Workforce
  - Child Labor
- ✓ Associated Contextual Factors Contributing to TIP Vulnerability
  - Association with Large-scale Land Acquisition
  - Association with Environmental Degradation

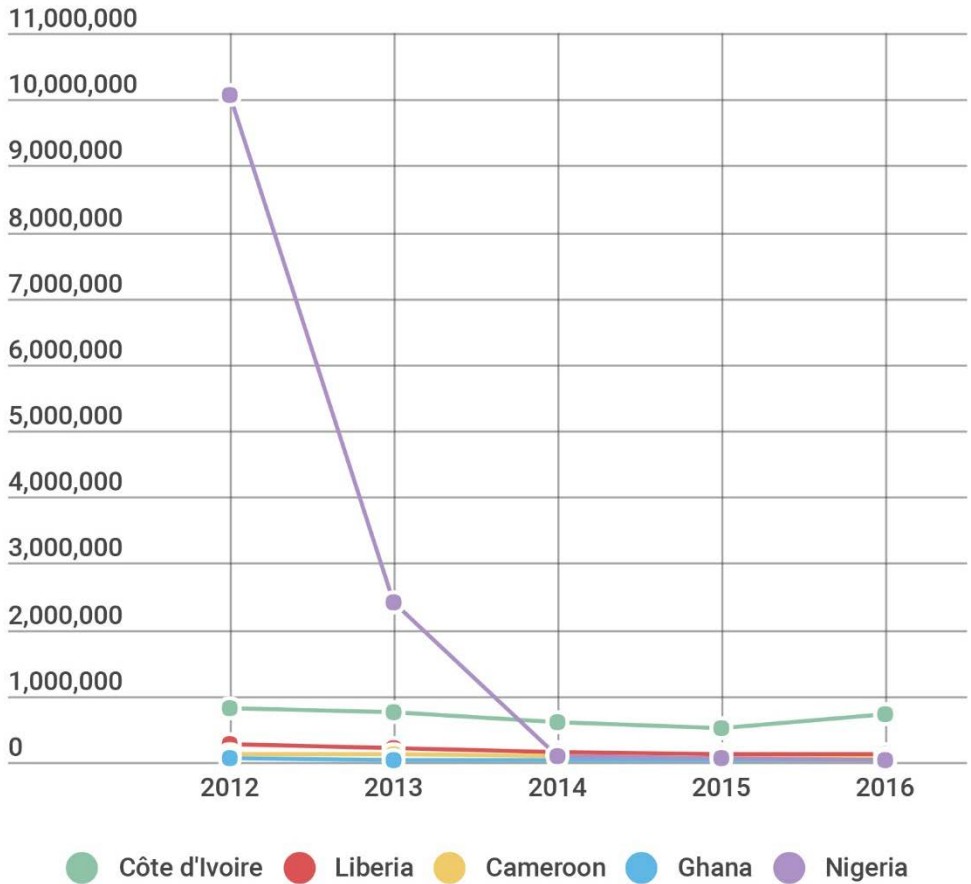
## Overview of Rubber Production in sub-Saharan Africa

### Trade

The top exporters of rubber from sub-Saharan Africa by value in 2016 were Côte d'Ivoire, Liberia, Cameroon, Nigeria and Ghana.<sup>1</sup>



## Top Exporters of Rubber from Sub-Saharan Africa (Value USD/Thousands)



The top importers of rubber from sub-Saharan African countries in 2016 were Malaysia, the United States, Germany, Spain, and Poland.<sup>2</sup>

### Features of Production and Supply Chain

In Africa, rubber is most likely to be grown on small family farms, as opposed to in Asia, where it is more likely to be grown on plantations.

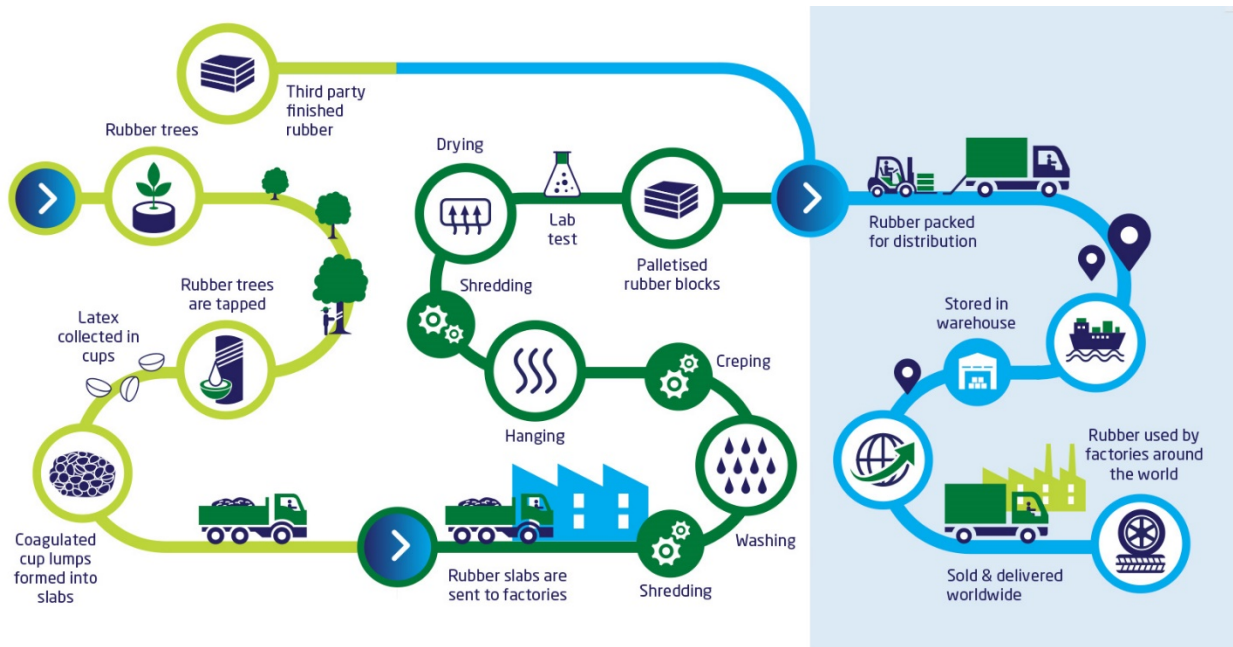


The production of natural rubber revolves around the life cycle of the tree from which the rubber (or latex) originates. This means that the production process for rubber requires three major stages: planting and maintaining the trees, harvesting the rubber from them by tapping, and processing the rubber for trade. As a production process, this is extremely labor intensive. In each stage, several specific tasks are involved, and each relates to the life-cycle of the tree. The rubber tree is fragile, particularly in the period immediately after planting and up to when it reaches maturity at seven or eight years of age. The tree can be tapped carefully from the age of two or three, but its prime years of production, if well-maintained, are from seven to 25 years.<sup>3</sup>

The lifecycle of a rubber field is therefore defined by three distinct phases. First, as seedlings, the trees are in a nursery, while a field is being prepared for them. When the seedlings are ready, these young trees are transplanted to the prepared field. Second, for seven to eight years, apart from periodic gentle tapping, the main activity on the field is pruning and weeding. Third, after this seven to eight-year period, the trees are ready for full production. At this stage, they will be tapped all year round. However, the peak periods of the season last from the heavy rains of May to September and the lighter rains of October to January. Production is considerably lower in the dry period lasting from February to April.<sup>4</sup>

The clearing of land, breeding in the nursery, and the weeding and pruning of fields and young trees are integral elements to the production process. The most labor-intensive stage, however, is the tapping of trees. This involves each tree being “tapped” with a cup that is attached to it just below a cut made in the tree’s bark to collect the latex. In a normal working day, tappers will collect “cup-lumps” from the previous day – that is, the latex that has poured into the cup overnight – then clean the cup and return to collect the new latex later that same day. At the end of the day (or alternately after a whole field has been cleared), the tapper will carry both the fresh latex and cup-lumps to the nearest field station for weighing. At the field station, acid is added to the latex as the first step in producing rubber. At this stage, there are safety concerns for workers involved in the collection and production process, with injuries in the field including eye and skin damage from spilling latex; snakebites; back pain and muscle cramps from carrying heavy loads to the field stations; and exposure to the acid that is added to the latex at the field station.<sup>5</sup>





*Natural Rubber Supply Chain, Halcyon Agri 2017. <https://www.halcyonagri.com/what-we-do/>*

Today’s rubber industry is largely dependent on the mixing of batches of rubber. Natural rubber, fillers, and other compounding ingredients are mixed using a two-roll mill or other types of mixers to create “rubber compounds,” which are then sent out for mass consumption. These rubber compounds are processed further through molding machines, vulcanization units, and various curing processes. The process of compounding and curing rubber for consumer use requires a constant supply of natural rubber.<sup>6</sup> However, this process of compounding and altering natural rubber greatly affects its traceability within supply chains.

The Fair Rubber Association reports that the fluctuating and falling prices of natural rubber in the global economy has greatly disadvantaged small or artisanal rubber producers and deemphasized worker rights and safe working conditions.<sup>7</sup> While demand for rubber has slumped in recent years, newer analysis suggests that demand will potentially usurp supply, particularly if the low petroleum prices that have driven use of synthetic rubber rise.<sup>8</sup>

## Key Documented Trafficking in Persons Risk Factors in Rubber Production

According to the U.S. Department of State 2016 *Trafficking in Persons Report*, rubber is produced with forced labor or forced child labor in Côte d’Ivoire and Liberia.<sup>9</sup>

## Undesirable and Hazardous Work

Tasks on rubber plantations include tapping the trees, cutting grass around the trees, spraying pesticides on weeds and fungus, and planting seedlings. Working as a tapper requires hard physical labor and back pain is a common complaint. The rate of accidents is high, as workers have to handle machetes, hot rubber and acid used in the production process. Workers may not be issued or use protective gear.<sup>10</sup> Workers are also exposed to hazards such as snake attacks, pesticides, long hours, and injury from sharp tools, with most work performed in isolated locations.<sup>11</sup>

The labor rights abuses in rubber production that have historically received the most attention are those reported on the Firestone plantations in Liberia. The U.S. Department of State reports that workers from within the country are trafficked on to rubber plantations.<sup>12</sup> Rubber tappers responsible for extracting liquid rubber from trees receive low wages and must meet high quotas, which often requires assistance from family members, including children.<sup>13</sup> Verité conducted research on two large, foreign-owned rubber plantations in Liberia (LAC and Cocopa) in 2010 and found several potential indicators of human trafficking. The majority of workers on the rubber plantations are employed as tappers who manually extract rubber from the trees and transport it to field stations. Tappers are paid by production and have a quota of how many trees they must tap per day. Those who do not reach the quota are subject to financial penalties. Additionally, wages may vary from month to month as paycheck deductions are made for things such as compulsory subsidized bags of rice, school fees, and voluntary savings programs. Researchers found that although the LAC plantation gave out loans to its employees, indebtedness was not a factor in keeping workers on the plantation.<sup>14</sup>

## Vulnerable Workforce

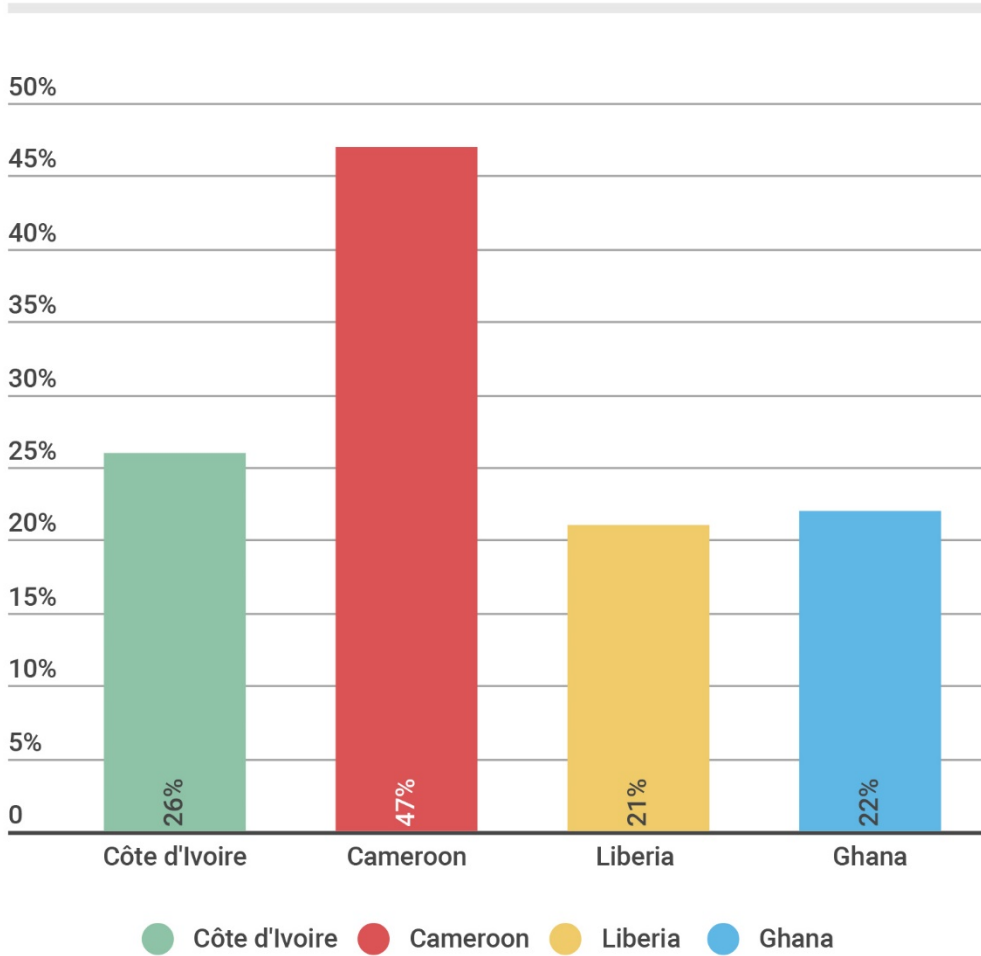
### Child Labor

Child labor has been noted in Liberian rubber production. Because of the quota system, many families employ their children in order to reach the daily quota. Additionally, because of the poor quality of education and high school fees, many parents prefer to have their children working on the plantation over attending school. Researchers found that plantation workers, including children, face significant health risks. In 2011, a collective bargaining agreement provided for lower quotas and higher wages,<sup>15</sup> although a report from Fair Rubber Association found poor health and safety standards and a lack of monitoring.<sup>16</sup>

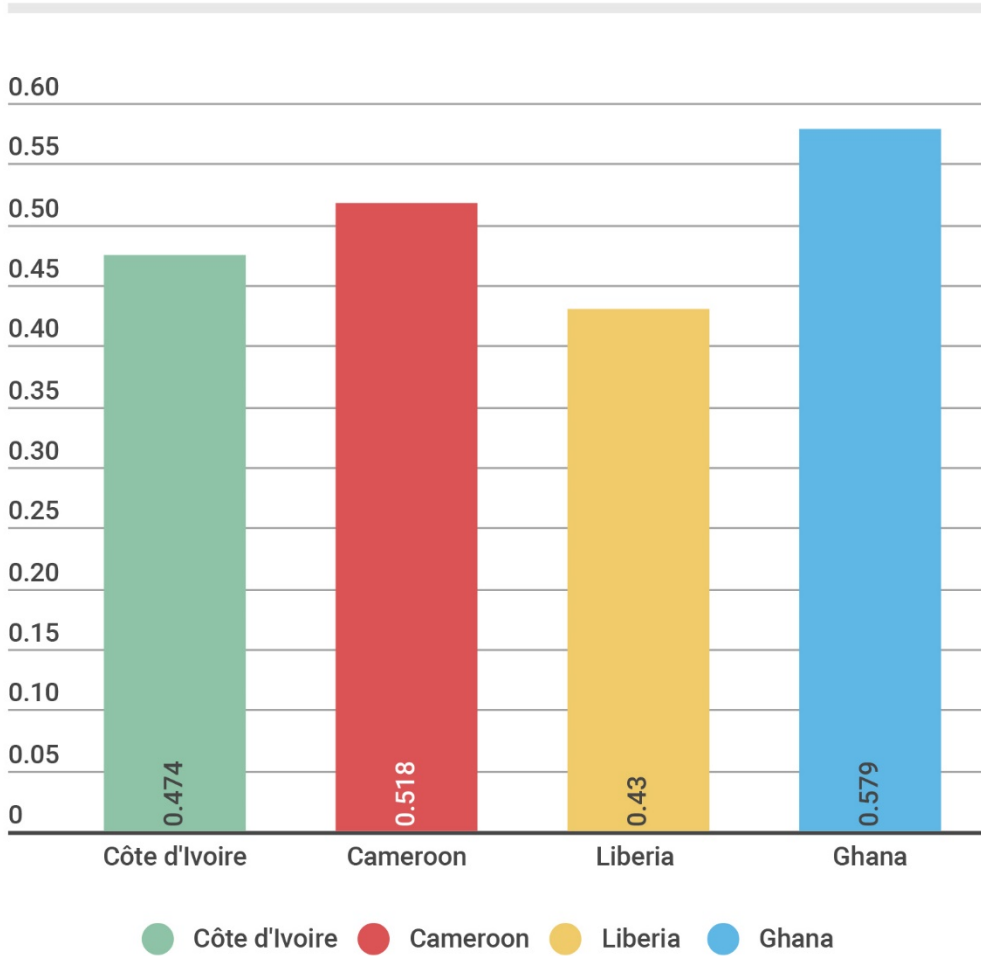
Child labor has also been noted anecdotally in rubber production in Ghana, although that is more likely to occur in the context of smallholder farms.<sup>17</sup>



## Percentage of Children Engaged in Child Labor in Rubber Exporting Countries



## United Nations Human Development Index Score in Rubber Exporting Countries



## Presence of Labor Intermediaries

### Association with Large-Scale Land Acquisition/Displacement

As demand for natural rubber is expected to increase, foreign investors are again investing in rubber production in Africa, leading to associated land grabs to develop monoculture plantations.<sup>18</sup> In fact, it is estimated that up to 8.5 million hectares will need to be converted to rubber plantations by 2024 to meet demand.<sup>19</sup> In 2011, 40 people were arrested in Sierra Leone protesting the sale of 6,500 hectares of farmland to a company for rubber and palm oil development.<sup>20</sup> Indigenous people in Cameroon have reportedly been displaced for development of rubber plantations.<sup>21</sup>

### Association with Environmental Degradation

Deforestation is associated with rubber plantation conversion.<sup>22</sup>



Gift of the United States Government

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## Endnotes

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<sup>1</sup> International Trade Centre. Trade Map. [www.trademap.org](http://www.trademap.org).

<sup>2</sup> International Trade Centre. Trade Map. [www.trademap.org](http://www.trademap.org).

<sup>3</sup> Verité. *Rubber Production in Liberia: An Explanatory Assessment of Living and Working Conditions, with Special Attention to Forced Labor*.





[http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector\\_\\_9.16.pdf](http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector__9.16.pdf).

<sup>4</sup> Verité. *Rubber Production in Liberia: An Explanatory Assessment of Living and Working Conditions, with Special Attention to Forced Labor*.

[http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector\\_\\_9.16.pdf](http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector__9.16.pdf).

<sup>5</sup> Verité. *Rubber Production in Liberia: An Explanatory Assessment of Living and Working Conditions, with Special Attention to Forced Labor*.

[http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector\\_\\_9.16.pdf](http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector__9.16.pdf)

<sup>6</sup> Dick, John S. and P. Rader. "Raw Materials Supply Chain for Rubber Products Overview of the Global Use of Raw Materials, Polymers, Compounding Ingredients, and Chemical Intermediates." Hanser Publications. 2013.

[http://www.hanserpublications.com/SampleChapters/9781569905371\\_9781569905371%20Raw%20Materials%20Supply%20Chain%20by%20Dick%20and%20Rader%20SAMPLE%20PAGES.pdf](http://www.hanserpublications.com/SampleChapters/9781569905371_9781569905371%20Raw%20Materials%20Supply%20Chain%20by%20Dick%20and%20Rader%20SAMPLE%20PAGES.pdf).

<sup>7</sup> Fair Rubber Association. "Low Prices Drive Natural Rubber Producers into Poverty: An overview of sustainability issues and solutions in the rubber sector." Aidenvironment. October 20, 2016. <http://www.aidenvironment.org/news/low-prices-drive-natural-rubber-producers-into-poverty/>.

<sup>8</sup> Economic Times. "Natural Rubber supply will be short of demand from 2020, says ANRPC secretary general." October 17, 2016. <http://economictimes.indiatimes.com/news/economy/agriculture/natural-rubber-supply-will-be-short-of-demand-from-2020-says-anrpc-secretary-general/articleshow/54899753.cms>.

<sup>9</sup> U.S. Department of State. Office to Monitor and Combat Trafficking in Persons. *Trafficking in Persons Report*. 2016. <https://www.state.gov/documents/organization/258876.pdf>.

<sup>10</sup> Verité. *Rubber Production in Liberia: An Explanatory Assessment of Living and Working Conditions, with Special Attention to Forced Labor*.

[http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector\\_\\_9.16.pdf](http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector__9.16.pdf).

<sup>11</sup> International Labor Organization (ILO) Indonesia. *Child Labour in Plantations*. April 22, 2010.

[http://www.ilo.org/jakarta/areasofwork/WCMS\\_126206/lang--en/index.htm](http://www.ilo.org/jakarta/areasofwork/WCMS_126206/lang--en/index.htm).

<sup>12</sup> U.S. Department of State. Office to Monitor and Combat Trafficking in Persons. *Trafficking in Persons Report*. 2016. <https://www.state.gov/documents/organization/258876.pdf>.

<sup>13</sup> International Labor Rights Forum (ILRF). *Labor Rights Abuses Continue on Firestone Liberia Rubber Plantation*. July 28, 2009. <http://www.laborrights.org/stop-child-labor/stop-firestone/news/12065>.

<sup>14</sup> Verité. *Rubber Production in Liberia: An Explanatory Assessment of Living and Working Conditions, with Special Attention to Forced Labor*.

[http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector\\_\\_9.16.pdf](http://www.verite.org/sites/default/files/images/Research%20on%20Working%20Conditions%20in%20the%20Liberia%20Rubber%20Sector__9.16.pdf).

<sup>15</sup> International Labor Rights Forum (ILRF). *Labor Rights Advocates Congratulate Bridgestone/Firestone Workers in Liberia on Award from U.S. Dept. of Labor*. February 16, 2011. <http://old.laborrights.org/stop-child-forced-labor/stop-firestone/news/12461>.

<sup>16</sup> Fair Rubber Association. "Low Prices Drive Natural Rubber Producers into Poverty: An overview of sustainability issues and solutions in the rubber sector." Aidenvironment. October 20, 2016. <http://www.aidenvironment.org/news/low-prices-drive-natural-rubber-producers-into-poverty/>.

<sup>17</sup> International Labor Organization (ILO). *Ghana Employers' Association: Rapid Assessment Survey on Child Labour in Five Commercial Oil Palm and Rubber Plantations in Ghana*. March 2005.

[http://www.ilo.org/public/english/dialogue/actemp/downloads/projects/ghana\\_rapidass\\_study\\_oil\\_en.pdf](http://www.ilo.org/public/english/dialogue/actemp/downloads/projects/ghana_rapidass_study_oil_en.pdf).

<sup>18</sup> World Rainforest Movement (WRM). *Oil palm and rubber plantations in Western and Central Africa: An Overview*. December 2008. [http://wrm.org.uy/oldsite/publications/briefings/Western\\_Central\\_Africa.pdf](http://wrm.org.uy/oldsite/publications/briefings/Western_Central_Africa.pdf)

<sup>19</sup> Greenpeace. Africa's forests under threat: Socfin's plantations in Cameroon and Liberia. May 2016.

<http://www.greenpeace.org/africa/Global/africa/Forests/Spliff/Brief%20Liberia-Cameroun%20version%20finale.pdf>



<sup>20</sup> [https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/OI\\_brief\\_socfin\\_agricultural\\_company.pdf](https://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/OI_brief_socfin_agricultural_company.pdf).

<sup>21</sup> Ethical Consumer. October 22, 2015. "New palm oil plantation destroys local livelihoods"

<http://www.ethicalconsumer.org/latestnews/entryid/1884/new-palm-oil-plantation-destroys-local-livelihoods.aspx>.

<sup>22</sup> Greenpeace. Africa's forests under threat: Socfin's plantations in Cameroon and Liberia. May 2016.

<http://www.greenpeace.org/africa/Global/africa/Forests/Spliff/Brief%20Liberia-Cameroun%20version%20finale.pdf>.

