



# Addressing Forced Labor in the Xinjiang Uyghur Autonomous Region

## *Toward a Shared Agenda*

By Amy Lehr

JULY 2020

### THE ISSUE

*The forced labor of ethnic and religious minorities in the Xinjiang Uyghur Autonomous Region (XUAR), as part of a broader pattern of severe human rights abuses, is a significant and growing concern that demands the attention of governments and private-sector actors across the world. Products entering the United States, Europe, and other democracies are at risk of being affected by these forced labor practices, which often occur several steps away from global brands in supply chains. Companies cannot currently easily ensure that their products are not affected by XUAR-linked forced labor because brands often cannot trace their products to origin, and the XUAR's important role in a number of sectors may require significant changes in sourcing practices. Moreover, global brands seeking to exert leverage on their Chinese suppliers with regard to XUAR sourcing are reportedly seen to intervene with internal political affairs. This brief explores what the XUAR produces, the sectors that are implicated, the resulting sourcing challenges, and the opportunities for collective action to be explored in further research.*

### INTRODUCTION

This brief is the first in a series that CSIS's Human Rights Initiative (HRI) will produce to identify how businesses, governments, multilateral organizations, NGOs, and other actors can work together to address XUAR-linked forced labor. This brief enhances understanding of relevant supply chains and includes a deeper dive into forced labor risk in cotton production and supply chains in the XUAR. HRI's work has focused less on labor transfers from the XUAR into the rest of China to avoid replicating the ongoing work of others. The brief does not provide recommendations but rather a starting point for a common understanding of relevant supply chains and labor risks, helping to ground further research and policy solutions.

The brief starts with an overview of the current policy environment in China and the XUAR as it pertains to forced labor practices and the products that the XUAR is producing and exporting. Some of the statistics used are drawn from

Chinese government sources, which are not necessarily reliable but are often the only available data. The brief then looks more deeply at how the XUAR's forced labor practices are linked to the textile, apparel, and footwear industries. The third and last section discusses areas that merit more exploration because of their ability, in combination, to provide a path forward to address XUAR-linked forced labor.

### OVERVIEW OF THE POLICY ENVIRONMENT IN CHINA AND THE XUAR

The Chinese government has detained and “reeducated” more than 1 million Uyghurs and other Muslim ethnic and religious minorities in Xinjiang in an effort to fully secure and control—or stabilize—the population there.<sup>1</sup> Some claim these policies rise to the level of crimes against humanity.<sup>2</sup> The government seeks stability through a variety of measures, including incarceration, widescale detention without trial, and political indoctrination. Factory work, which the government believes causes ethnic minorities to assimilate

by acquiring the mindset and attributes of mainstream Han Chinese culture, is an integral component of these stabilization efforts. Research indicates that ethnic minorities may be forced to take part in these work programs.

In the poverty alleviation program, local officials are under pressure to deliver certain quotas of people out of poverty, which can be accomplished on paper by transferring them from their traditional work to other jobs. Research suggests that some of those transferred to work are not willing and are severely underpaid, raising concerns about forced labor, potentially at a significant scale.<sup>3</sup> This concern is heightened by the highly coercive and surveilled atmosphere in the XUAR.<sup>4</sup>

In addition to concerns about poverty alleviation, it is well documented that detainees from detention facilities were forced to work while detained or upon their release. Finally, the number of ethnic minorities in prisons in the XUAR due to risks of extremism (often meaning ties to their culture or religion) increased five-fold from 2016 to 2017—constituting 21 percent of all arrests in China—even though the XUAR is sparsely inhabited. This introduces a significant risk that historic patterns of forced labor in XUAR prisons will affect these new prisoners.<sup>5</sup>

Efforts to put ethnic minorities to work through programs such as poverty alleviation combine in a concerning way with “pairing” programs. In pairing programs, mainland Chinese provinces are partnered with specific regions of the XUAR. For instance, the XUAR’s Aksu region is paired with the mainland’s Zhejiang province, with much of Aksu Industrial Park funded by Zhejiang and populated with Zhejiang companies such as Huafu Fashion Co. Ltd.<sup>6</sup> Each pairing program has a sectoral focus based on the needs of paired mainland firms in certain industries, such as textile and agriculture sector needs in Zhejiang, Guangdong provinces, and others.<sup>7</sup> In other words, pairing priorities in particular regions of the XUAR are related to the industrial needs of their paired province. Companies involved in pairing are expected to open factories in the XUAR and may be asked to receive government transfers of XUAR workers within the region itself and in their factories in mainland China.<sup>8</sup> Some of those transferred workers may be part of poverty alleviation efforts. Within the XUAR, detained workers have been transferred to work in factories in the pairing programs.<sup>9</sup>

Poverty alleviation and pairing programs both rely on labor transfers, in which the XUAR Department of Human Resources and Social Sciences plays a key role. According to researcher Adrian Zenz, poverty alleviation through job training and employment can be divided into six categories:

- Movement of laborers to other parts of the XUAR;
- Movement of laborers to other parts of China;
- Movement of laborers to Xinjiang Production and Construction Corps (XPCC) locations for work;
- Movement of laborers into urban industrial parks;
- Movement of laborers into satellite factories (small factories at the village level); and
- Support for small-scale self-employment.<sup>10</sup>

The diagram below shows the destination of approximately 62,000 people transferred to work as part of poverty alleviation.<sup>11</sup>



Source: “Xinjiang helped 62,000 poor laborers in southern Xinjiang find employment,” Xinhua News Agency, July 20, 2018.

Due to these intertwined priority programs, combined with the degree of coercion in the XUAR, there is an increasing risk that products made in China that rely at least in part on low-skilled, labor intensive manufacturing could be affected by XUAR-linked forced labor.<sup>12</sup> Because the XUAR is closed to the outside world, it is difficult to fully understand, much less respond, to these risks.

## FOCUS AREAS FOR SECTORAL GROWTH IN THE XUAR

The XUAR’s pairing programs focus on electronics manufacturing, textile and apparel manufacturing, rare earth mining, agricultural production, and plastics production, although provinces may select other priorities as well.<sup>13</sup> The HRI has identified a number of the sectoral priorities for 19 pairing programs, as well as the names of

some of the involved companies. Agricultural products are the most dominant priority, although textiles, electronics, mining, chemicals, and medical equipment also appear repeatedly.<sup>14</sup> The Chinese government plans on doubling manufacturing capacity in the XUAR by 2025, with apparel and textiles forming a key element of that plan.<sup>15</sup>

The following products represent the XUAR's top exported goods in 2019.<sup>16</sup>

PRODUCT	EXPORT VALUE	% OF TOTAL EXPORTS
<b>APPAREL</b>	\$4.49B	25.4%
<b>FOOTWEAR</b>	\$1.81B	10.2%
<b>ELECTRICAL MACHINERY AND EQUIPMENT</b>	\$1.6B	9.1%
<b>OTHER MACHINES</b> (I.E., MECHANICAL APPLIANCES)	\$1.15B	6.6%
<b>TOYS AND SPORTS EQUIPMENT</b>	\$971M	5.5%
<b>PLASTICS</b>	\$747M	4.2%
<b>VEHICLES</b> (EXCLUDING RAILWAY)	\$712M	4.0%

Source: "Xinjiang Uygur Autonomous Region," Observatory of Economic Complexity, 2019.

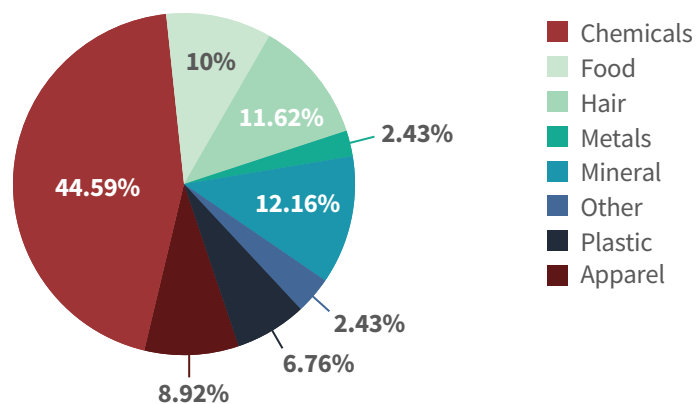
The XUAR's true role in supply chains is much more prominent than the above export data reveals because the XUAR produces a number of commodities and products that are then incorporated into finished products within China. The links of the textile, apparel, and footwear ("textile and apparel") industry to XUAR are best understood. The XUAR produces more than 20 percent of the world's cotton. It is also the third-largest producer of cashmere in China, and China is the world's largest cashmere producer.<sup>17</sup> The links of the textile and apparel sector to the XUAR are further explored below, although other sectors may also be reliant on components or raw materials from the region.

For example, electronics and machinery, plastics, and agricultural products are likely to also be growth exports for the XUAR. The data above indicates that machinery and electronics are already important exports, although the countries to which they are primarily destined are not known. The pairing programs have an emphasis on electronics, plastics, and agriculture that make them potential areas for growing production that may connect to global supply chains, with a risk of forced labor. The XUAR is also an important source of rare earth metals used in consumer electronics and aviation.<sup>18</sup> As production increases, these goods may also be incorporated into other products within China and enter global supply chains indirectly. Both an understanding of whether and to what

extent these sectors are affected by forced labor, as well as the extent to which those products are embedded in global supply chains, deserve more exploration.

Although both Congress and the Trump administration have highlighted concerns over the past year about forced labor in the XUAR, exports to the United States have grown dramatically.<sup>19</sup> From April 2019 to April 2020, the XUAR's two fastest-growing export markets were the United States, rising by more than 250 percent (\$26.6 million), and Italy, rising by over 200 percent (\$7.88 million).<sup>20</sup> This trend suggests a degree of success in the Chinese government's efforts to make the XUAR a global manufacturing hub. The goods being shipped to the United States directly from the XUAR can be seen in the following chart.<sup>21</sup>

Product Type by Number of Orders



Source: Based on data from July 3, 2019 to July 3, 2020, obtained from ImportGenius and analyzed by the HRI.

The Trade Facilitation and Trade Enforcement Act of 2015 enables the seizure of goods produced in whole or in part with forced labor.<sup>22</sup> In 2020, U.S. Customs and Border Protection issued withhold release orders for two hair product producers and one apparel factory in the XUAR, enabling the seizure of their products when they enter the United States due to allegations of forced labor.<sup>23</sup> There have also been allegations of forced labor in electronics and agricultural production.<sup>24</sup> Generally, forced labor is more likely to occur in low-skilled jobs. Involvement in the pairing program is believed to make it more likely that companies will be asked to absorb workers from detention facilities or poverty alleviation programs.<sup>25</sup> However, the extent to which these sectors are affected by XUAR forced labor is unknown and will be difficult to assess given the impossibility of conducting credible social and labor audits in the XUAR at the moment. The data above should be understood in context; it represents what is shipped directly to the United

States and does not help elucidate products from the XUAR that are shipped within China or to third countries for further transformation before coming to the United States.

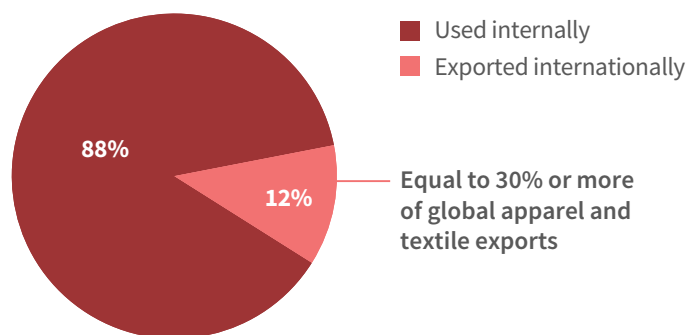
## CASE STUDY: CHINA AND THE TEXTILE, APPAREL, AND FOOTWEAR SUPPLY CHAIN

China generally seeks to move away from low-paying industries and into more advanced sectors such as higher-skilled manufacturing, as noted in its Made in China 2025 policy. This entails a shift from apparel manufacturing into sectors such as aerospace, information and communications technology (ICT), advanced rail transit equipment, and agricultural equipment. Despite this ambition, production of cotton, textiles, and apparel still plays a significant role in China's economy. In 2019, there were around 3.1 million employees in China's textile industry.<sup>26</sup> In 2018, China's GDP was \$13.6 trillion, with exports accounting for almost 20 percent.<sup>27</sup> China's total raw cotton, yarn, textile, and apparel exports in 2018 constituted almost 10 percent of the total value of Chinese exports.<sup>28</sup> These exports—not including significant internal consumption—are 1.9 percent of China's total GDP.

Including non-cotton products and raw materials, China's textiles, apparel, yarn, and raw materials exports in 2018 constituted 31.6 percent of the global export market for these goods. More specifically, China's share of global exports includes 30.5 percent of apparel, 41.9 percent of textiles and rags, 46.7 percent of cotton fabrics, and 10.9 percent of cotton yarn.<sup>29</sup> China is the world's largest producer of yarn, textiles, and apparel, and one of the world's two largest cotton producers.

Although China is the world's largest exporter of textiles and apparel, the U.S. Department of Agriculture estimated that the domestic Chinese market in 2018 accounted for 88 percent of textile and apparel sales, with 12 percent for export.<sup>30</sup>

### China's 2018 Textile and Apparel Production



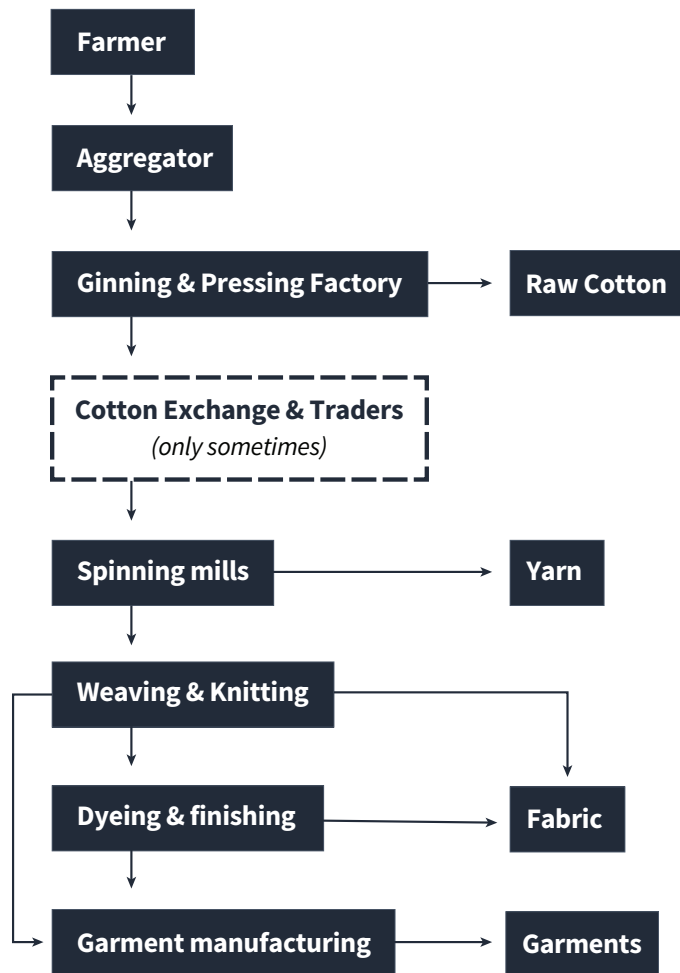
Source: Abigail Nguema, *China-People's Republic of: Cotton and Products Annual Sustained Demand Fuels Steady Import Growth* (Washington, DC: USDA, April 2019).

The XUAR is one of the world's largest cotton producers, and China's critical role in apparel production is also well known. HRI's research revealed several other important factors that should be considered when seeking to understand the sector and identify how to eradicate XUAR-linked forced labor.

The first set of findings relates to supply chain structure and dominance. First, China's textile industry combines vertical integration—cotton, yarn, textile, and apparel production all within one country—with significant scale, a combination that other countries do not currently match. Second, China is the world's largest global yarn production and its largest exporter. Much of that yarn likely includes XUAR cotton, along with cotton that China imports. Finally, China is an important player in the global textile industry, both in terms of volume produced and exported and the diversity and technical capacity of its producers. Those yarn and textile exports mean that textile and apparel products from other countries, particularly in Southeast Asia, are likely to also be affected by XUAR-linked forced labor. Ensuring that supply chains are not affected by XUAR-linked abuses requires understanding each step of the supply chain and making sure that alternative sources of those inputs are available and used.

Textile, apparel, and footwear supply chains are complex and difficult to trace because of the potential roles of middlemen and commodities traders and the practice of blending cotton and yarn at certain stages. Brand sourcing decisions can also make supply chains more or less complex, depending on whether brands buy or select their own textiles or leave those decisions to their tier-one apparel suppliers. Cotton travels from a farm to a nearby gin, as it is too heavy before ginning to travel any significant distance. In some cases, cotton may be sold to middlemen who then sell to the gin. The gin then sells cotton to yarn producers, again with the potential involvement of middlemen or cotton exchanges. Yarn producers then sell to textile producers, and several different companies may be involved in various stages of textile production, such as making fabric, dyeing, and subjecting it to other chemical processes. The textiles then move to factories that produce apparel and footwear, also called "cut-and-sew" factories.

In addition to this complex sourcing model, some large Chinese companies have established vertically integrated supply chains where they buy their cotton from farmers and produce their own yarn, textiles, and apparel.



Source: WWF-India and YES BANK, *Cotton Market and Sustainability in India* (WWF-India, 2012), and HRI analysis.

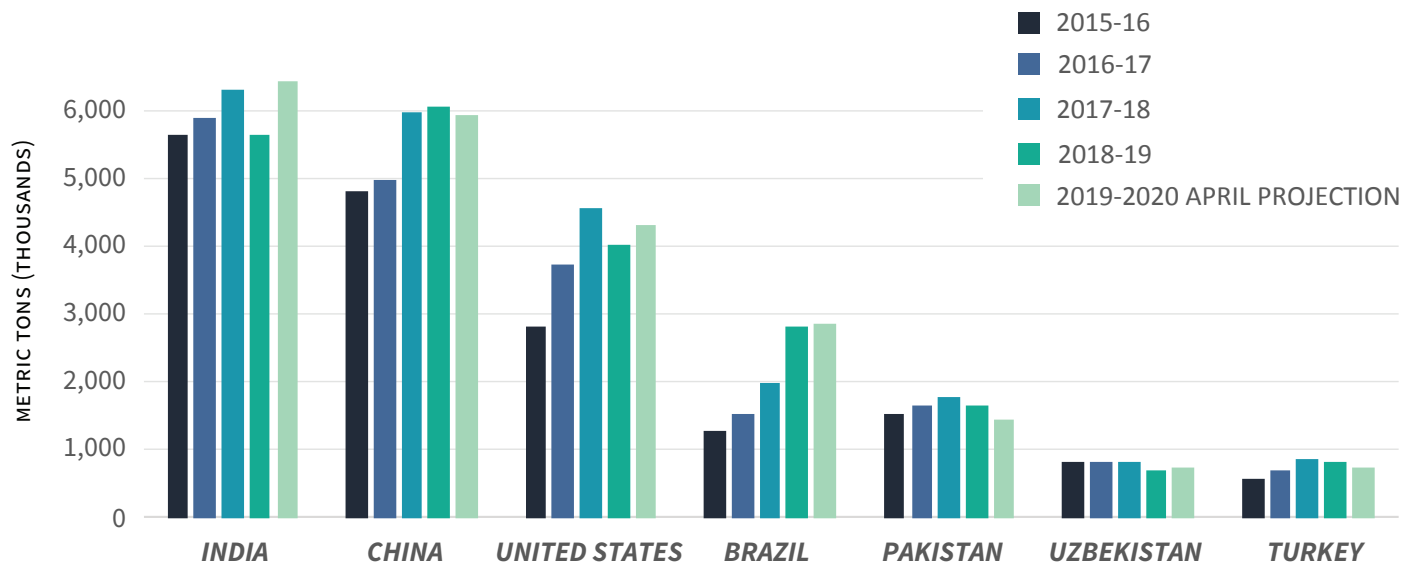
### COTTON PRODUCTION AND GINNING IN THE XUAR

China is one of the world’s largest cotton producers, along with India, the United States, Pakistan, Brazil, Uzbekistan, and Turkey. The XUAR alone accounts for over 20 percent of the world’s production and is known for its consistent quality, making it a desirable source of cotton.

The main aim of poverty alleviation programming is to place ethnic minorities into factory work, not agricultural production. As outlined below, there is nevertheless a risk of forced labor in the XUAR’s cotton production and ginning, which is impossible to fully assess today due to a lack of free access to the region. The highly seasonal nature of cotton harvesting and ginning requires a sudden, concentrated burst of work that has sometimes been filled by forced labor in various regions, including in the XUAR. Experts believe this is a risk in farms and gins run by the Xinjiang Production and Construction Corps (XPCC) (discussed below) but may also affect other XUAR cotton producers.

The state plays an important role in cotton production in the XUAR. For example, the XPCC—a unique quasi-governmental paramilitary organization—is the single-largest producer of cotton in the XUAR. In 2017, the XPCC was responsible for approximately 37 percent of the XUAR’s total production.<sup>31</sup> The XPCC created the XUAR’s cotton industry using forced labor to construct irrigation and water management systems for cotton fields and to harvest cotton.<sup>32</sup> The XPCC maintains jurisdiction over swathes of the XUAR and has its own administrative regions containing farms, schools, and hospitals, as well as prisons and labor camps.<sup>33</sup>

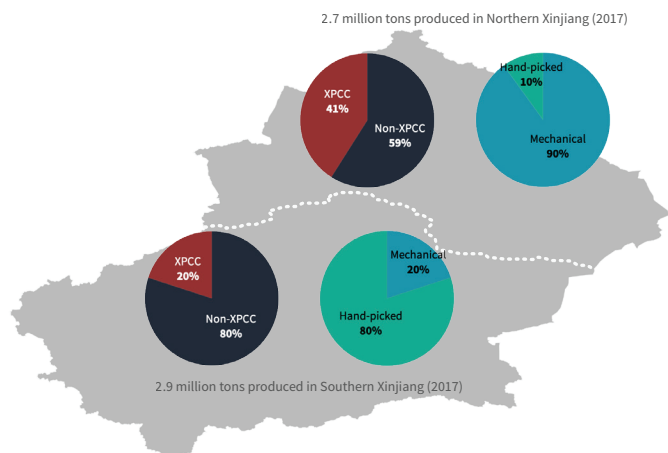
### World Cotton Statistics



Source: Leslie A. Meyer, *Cotton and Wool Outlook* (Washington, DC: USDA, April 2020).

XPCC farms are primarily in northern XUAR, where the XPCC is more dominant and over 90 percent of cotton harvesting is mechanized.<sup>34</sup> Southern XUAR is poorer and still dominated by smaller farms. Larger farms are more likely to have automated harvesting, but smaller farms reportedly sometimes hire a harvesting machine. Several other regions of China also produce cotton on much smaller farms.<sup>35</sup> The risk of forced labor is believed to be far lower in these regions, although the quality of the cotton is poorer.<sup>36</sup>

## North-South Divide in Cotton Production



Source: based on data from XUAR Agricultural and Animal Husbandry Ministry and Xinjiang Statistical Yearbook (2019).

Automated harvesting is often seen to reduce the risk of forced labor, especially during harvesting, but other labor-intensive tasks must be conducted by hand, such as seeding, weeding, thinning, and irrigation ditch digging. Indeed, although much of the XPCC's harvesting is automated, records indicate they required 140,000 pickers in 2016, meaning they presumably required workers for weeding and other activities as well.<sup>37</sup> As a result, automation does not eliminate the risk of forced labor.

The potential forced labor role of XPCC prisoners, including the growing number of ethnic minorities incarcerated for their beliefs, is a particular concern. The XPCC has long used prison labor at a large scale, with mostly Han Chinese inmates sent from other parts of China. The XPCC reportedly maintains 36 prison farms.<sup>38</sup> For example, the 8th Division of the XPCC, the largest producer of XPCC cotton, is believed to run 22 prison labor squadrons that work in agriculture and manufacturing.<sup>39</sup> At least two known XPCC ginning factories list their addresses at or very near known XPCC prisons.<sup>40</sup>

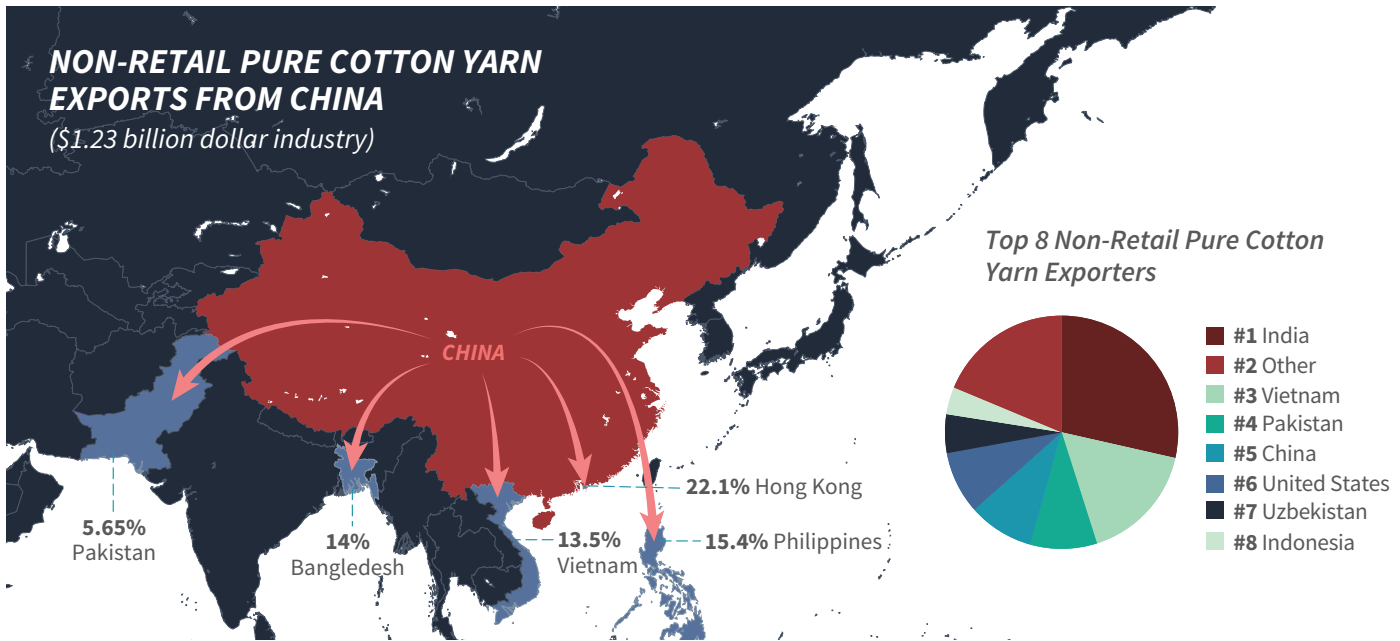
## THE XPCC: BEYOND FORCED LABOR

Business engagement with the XPCC is concerning beyond the dimension of forced labor. The XPCC helped build and run detention facilities in its administrative areas that have been involved in the repression of Uyghurs. The XPCC is also bolstering surveillance and security measures in southern XUAR, including procuring equipment to create records from trace DNA left behind on surfaces.<sup>41</sup> These activities mean that it is a key actor in what the U.S. Holocaust Museum has labeled crimes against humanity.<sup>42</sup> Identifying XPCC-linked businesses, however, can be challenging due to obfuscated ownership structures.

It is possible that former detainees or the rural poor are also being sent to work in cotton agriculture. The XUAR historically had a system through which young people were sent to work in the fields without pay (*hashar*), with reports that this practice continued, at least in some pockets, as recently as three years ago.<sup>43</sup> Some believe the practice has mostly ended, but it points to a history of collective forced seasonal labor in the XUAR. Today, third-party recruiters reportedly help bring in seasonal work for the cotton farms. More information is needed to understand who the recruiters are and whether those seasonal workers are being coerced.

There are also scattered allegations of practices of indentured servitude—or possibly forced labor—affecting the predominantly Uyghur farmers in the south. In southern XUAR, farmers often migrate to XPCC cotton farms for seasonal employment in cotton harvesting.<sup>44</sup> Because rural residents in southern XUAR often do not have enough income, they depend on loans from local authorities. When the farmers return, they reportedly use their income from cotton harvesting to pay off the loan but then must apply for a new loan to make ends meet. Due to these practices, some rural Uyghurs may be trapped in a form of indentured servitude. Whether forms of indentured servitude to the state or other lenders are common in the south is not clear, and obtaining further information is not possible due to lack of access to the region.

The risk of forced labor in ginning in the XUAR is not well understood. As noted above, raw cotton is very heavy due to seeds and other debris and must be transported to a nearby gin for processing. If cotton comes from a particular gin, it will also come from that immediate area, and



Source: "Which countries export Non-Retail Pure Cotton Yarn? (2018)," Observatory of Economic Complexity, 2018.

traceability at this stage is relatively feasible. Ginning itself requires significant machinery but also moderately skilled human labor. It is highly seasonal work, which makes it somewhat more likely to rely on migrant or prison labor. The XPCC operates over 170 known ginning factories, which are controlled by enterprises that have ordinary sounding names.<sup>45</sup>

#### YARN PRODUCTION IN CHINA AND THE XUAR

Modern, large-scale yarn production requires relatively sophisticated equipment, which makes it more expensive to set up than an apparel factory. Depending on the level of modernization and technology, cotton spinning can be more automated and less labor-intensive; developed countries use less labor-intensive technologies for spinning to stay globally competitive, while developing countries have historically stayed competitive with lower labor costs but less advanced spinning operations.<sup>46</sup> Yarn producers combine different types of cotton and materials in complex ways to produce different types of yarns. Traceability typically becomes extremely challenging at this stage of the supply chain because physical segregation is expensive and could limit the types of thread being produced.

China is the world's largest yarn (thread) producer, producing more from 2015 to 2017 than the rest of the world combined.<sup>47</sup> The cotton yarn produced in China likely predominantly uses cotton from the XUAR but may also contain imported yarn to achieve the desired quality.

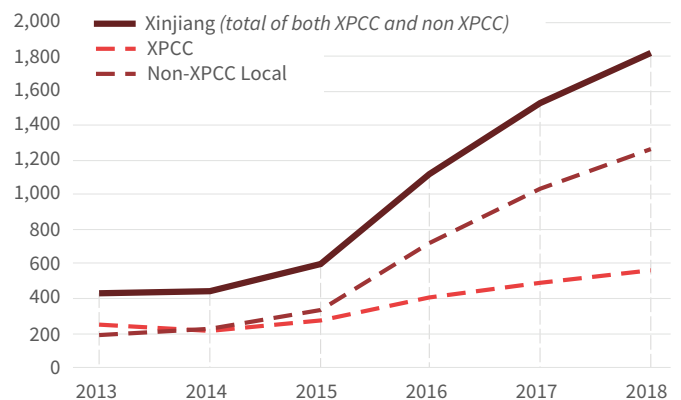
China is also the world's largest exporter of yarn, primarily exporting to a number of important textile producers in the

region. China is by far the world's largest importer of non-retail pure cotton yarn, importing almost five times as much as it exports.<sup>48</sup>

The XUAR's yarn production is small but growing rapidly. In 2018, the XUAR produced 5.9 percent of China's total production, up from 3.8 percent in 2017.<sup>49</sup> The XPCC produced 30 percent of the XUAR's yarn, most of which is believed to be cotton yarn.<sup>50</sup> Recent industry trends, however, indicate new interest and investment in producing polyester thread.<sup>51</sup>

The extent of forced labor in yarn production in the XUAR is unknown. Some yarn manufacturing facilities are highly automated, purportedly reducing forced labor risks, but less advanced facilities require more manual labor.

#### Xinjiang Yarn Production from 2013–2018



Source: based on data provided confidentially and HRI analysis.

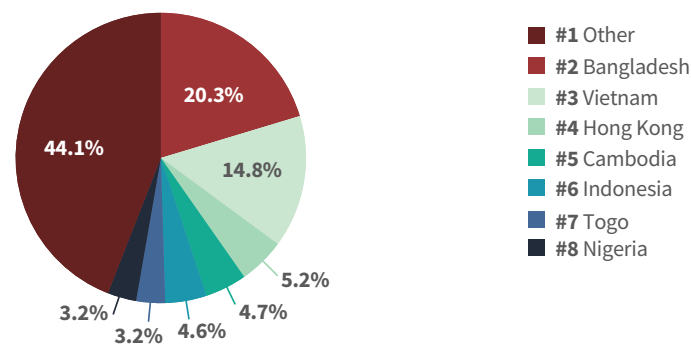
## TEXTILES

China is the world's largest producer and exporter of textiles. Textile exports from China reached 37.6 percent of the world's total in 2018, a 3.5 percent increase from the previous year.<sup>52</sup> That the European Union—the second-largest exporter of textiles—is still able to compete indicates that textile production, like yarn, is a relatively technical and capital-intensive industry, often requiring more sophisticated machinery.

Traceability at the textile layer of the supply chain is often weak. Textile factories may source many types of yarn to make their varied products. Textile companies are often two layers away from brands in the supply chain and may sell to many different buyers. Sometimes branded companies do not know the sources of their textiles, although leading brands now can often trace back at least to tier two (textiles). Brands also may struggle to exert direct leverage on textile producers when they do not have a direct relationship.

China's 2018 cotton textile exports constituted 4.61 percent of the total value of China's exports of cotton, yarn, textiles, and apparel.<sup>53</sup> The top recipients of these products are nearby countries that are important players in apparel production, depicted below.<sup>54</sup> Their products made with Chinese cotton-containing textiles present a risk of XUAR-linked forced labor.

### Top 7 Countries Importing Chinese Cotton Fabric



Source: HRI analysis aggregated from OEC data.

## APPAREL

As noted above, China is the world's largest apparel producer. Most of these textiles and apparel are exported to the United States, Japan, Vietnam, Hong Kong, Germany, South Korea, and the United Kingdom. However, apparel production has been shifting from China to lower cost countries such as Cambodia, Vietnam, and Myanmar for a number of years. Apparel production (or "cut-and-sew") is a low-skill industry that is relatively easy to establish and tends to migrate to countries with cheap and efficient labor.

The Chinese government's focus on growing the textile industry in the XUAR includes a significant emphasis on apparel production. Indeed, given that the workforce being moved into jobs through poverty alleviation efforts is likely to be relatively unskilled, apparel production is a natural destination. Firsthand accounts of forced labor in the XUAR have often involved apparel production. Given that apparel is the XUAR's top export, this particular tier in the supply chain creates forced labor risk for global supply chains. Brands should be able to identify and address this risk more easily by not sourcing apparel and other finished products directly from the XUAR. HRI's analysis of U.S. imports shows that little apparel still comes to the United States directly from the XUAR and that other sectors are also responsible for the increase in imports to the United States over the past year. The extent to which XUAR apparel is still shipping directly to the European Union is not known because of weak EU import data.

## POTENTIAL PATHS FORWARD: LEVERAGE, TRACEABILITY, AND DIVERSIFICATION

The above findings have clarified the structural challenges to addressing XUAR-linked forced labor in global supply chains. At the same time, there is a constellation of opportunities that, if thoughtfully deployed, could both help eliminate XUAR-linked forced labor from Western supply chains and place pressure on the overall system of XUAR-linked forced labor and related abuses. HRI's future research will explore these areas in more depth.

### LEVERAGE

HRI plans to further explore sources of leverage and what can be quickly deployed to have an impact on the plight of ethnic minorities in the XUAR. Companies, industry associations, governments, and multilateral institutions all have potential roles to play.

Companies are most likely to be able to exert leverage via their business relationships and sourcing choices. Indeed, large brands have been reaching out to their suppliers in China to seek assurances that their products do not originate in the XUAR and that XUAR workers are not being placed by the government in supplier factories in other parts of China. Brands report increasing challenges in engaging their Chinese suppliers, which tend to be supportive of the Chinese government's policies and may have CCP members among their leadership. Nevertheless, these conversations and relationships are one source of leverage that could conceivably have some impact on XUAR policies if combined with other substantial efforts. Expanding the constellation of sectors engaging on XUAR-linked forced labor could also help increase impact.



Governments and business actors may seek to influence supplier behavior and that of the Chinese government through economic policy. Brands can communicate their intention to end business relationships if suppliers cannot credibly demonstrate that they do not source products from the XUAR that could be affected by forced labor. Although doing so is politically challenging in China, if many brands adopt and communicate this intention, it could inform the Chinese government's perspective. Similarly, governments could announce their intentions to place new requirements on their companies to avoid XUAR-linked forced labor. The importance of China in many tiers of global supply chains will make avoiding XUAR-linked forced labor challenging, meaning that the work must start immediately so that brands can act on their commitments to eradicate forced labor in their supply chains. Such plans could be unwound if conditions on the ground change. However, at least a partial exit may be appropriate as a means to diversify and strengthen global supply chains even if—contrary to current trends and expectations—conditions in the XUAR do improve meaningfully.

Other actors have important roles to play in exerting leverage on the Chinese government but have for the most part been silent. Chief among these are governments, which have a range of policy tools available. These include diplomacy and ongoing dialogue; leverage related to the Olympic Games taking place in Beijing in 2022; and punitive tools such as bans on imports of goods produced with forced labor and government procurement policies that ensure governments themselves are not purchasing goods made with XUAR-linked forced labor. Trade policy can serve as a carrot or stick to influence China's actions and also help encourage new sourcing hubs.

Multilateral institutions also have a role to play, although increasing Chinese influence in these fora will require careful consideration of each entity to identify realistic opportunities for multilateral action. For example, multilateral institutions could push for more meaningful access to the region, which in turn could lead to greater understanding of the situation or undertake credible international investigations of the facts on the ground.

Because of China's global importance, the extent to which such actors will meet their human rights and moral obligations is unclear, but opportunities exist that demand more exploration and coordination.

### **TRACEABLE SUPPLY CHAINS**

Traditional approaches to product traceability are slow to implement, cumbersome, and often highly imperfect.

Traceability is nevertheless likely to be a growing consumer demand. It also would greatly enhance any efforts to keep XUAR-linked goods out of supply chains and help ensure that such commitments are not paper tigers.

Brands in many sectors currently struggle to know whether their products contain XUAR components because they cannot determine the chain of custody of their products from source to final product. Were apparel companies, for example, to formally agree or be forced by law to stop sourcing certain XUAR products, stronger traceability systems would be vital to make this commitment effective. This would be true in any context and is even more important in China, where questions about XUAR sourcing are becoming increasingly politically sensitive and less likely to elicit honest responses from suppliers. New technologies hold promise to support a more rapid scale-up of traceability, with greater reliability. In particular, isotope and microbe tracing may enable identification of product origin to help confirm sourcing information provided by suppliers, but their efficacy demands more examination. Distributed ledger systems or other shared databases may also assist in the scale-up of traceability. Traceability requirements for certain minerals originating in conflict zones ("conflict minerals") could serve as a potential model and offer lessons learned to assist with streamlining and efficiency. Both consumers and regulators increasingly demand traceability, so the systems developed to respond to XUAR-linked forced labor would have much broader applications and could provide an ongoing advantage for brands adopting them.

### **DIVERSIFIED SUPPLY CHAINS**

If companies could trace their products back to origin and sought to eliminate components affected by XUAR-linked forced labor, an outstanding question is whether they would have enough inputs due to China's outsized role in supply chains. The XUAR's key role in cotton, textile, and apparel supply chains is best understood, although further research may reveal it plays an important upstream role in other sectors. China more broadly plays a unique role in global apparel and textile supply chains due to its combination of scale, diversity, technical capacity, and vertical integration. Although apparel production itself is moving into neighboring countries, these operate around China as a hub and key source of inputs. Similar vertical capacity in a single country or region at such a scale does not currently exist.

This is a significant hurdle, but one that must be addressed, both to avoid XUAR-linked forced labor and to support healthy, diversified supply chains. Establishing alternative

textile hubs with vertical integration is likely to prove challenging. Nevertheless, there are examples, and supporting new hubs may serve to support targets in the UN Sustainable Development Goals. Because of the challenges that will likely arise and the need for coordinated action between companies, investors, and governments, such efforts must start now. ■

***Amy K. Lehr** is the director of the Human Rights Initiative at the Center for Strategic and International Studies in Washington, D.C.*

*The Human Rights Initiative would like to thank Margaret Siu, Henry Wu, and Mariefaye Bechrakis for their contribution.*

*This project was made possible by the support of multiple donors interested in commerce in Asia. CSIS alone is responsible for the analysis presented in the report.*

---

**CSIS BRIEFS** are produced by the Center for Strategic and International Studies (CSIS), a private, tax-exempt institution focusing on international public policy issues. Its research is nonpartisan and nonproprietary. CSIS does not take specific policy positions. Accordingly, all views, positions, and conclusions expressed in this publication should be understood to be solely those of the author(s). © 2020 by the Center for Strategic and International Studies. All rights reserved.

Cover Photo: Dale de la Rey/AFP/Getty Images

## ENDNOTES

1. Amy K. Lehr and Mariefaye Bechrakis, *Connecting the Dots in Xinjiang: Forced Labor, Forced Assimilation, and Western Supply Chains* (Washington, DC: CSIS, October 2019), <https://www.csis.org/analysis/connecting-dots-xinjiang-forced-labor-forced-assimilation-and-western-supply-chains>.
2. “USCIRF Commends U.S. Holocaust Museum Spotlight on China,” U.S. Commission on International Religious Freedom, April 2020, <https://www.uscifr.gov/news-room/press-releases-statements/uscifr-commends-us-holocaust-museum-spotlight-china>.
3. Lehr and Bechrakis, *Connecting the Dots in Xinjiang*.
4. “How Mass Surveillance Works in Xinjiang, China,” Human Rights Watch, May 2019, <https://www.hrw.org/video-photos/interactive/2019/05/02/china-how-mass-surveillance-works-xinjiang>.
5. Lehr and Bechrakis, *Connecting the Dots in Xinjiang*.
6. Yuhui Li, *China’s Assistance Program in Xinjiang: A Sociological Analysis* (Lanham, MD: Rowan & Littlefield, August 15, 2018).
7. Tao Song, Weidong Liu, Zhigao Liu, and Yeerken Wuzhat, “Policy Mobilities and the China Model: Pairing Aid Policy in Xinjiang,” *Sustainability* 11 (2019), doi:10.3390/su11133496.
8. Ibid.
9. Adrian Zenz, “Beyond the Camps: Beijing’s Grand Scheme of Forced Labor, Poverty Alleviation and Social Control in Xinjiang,” *Journal of Political Risk* 7, no. 12 (December 2019), <https://www.jpplrisk.com/beyond-the-camps-beijings-long-term-scheme-of-coercive-labor-poverty-alleviation-and-social-control-in-xinjiang/>.
10. Ibid.
11. “Xinjiang helped 62,000 poor laborers in southern Xinjiang find employment,” Xinhua News Agency, July 20, 2018, <https://archive.vn/mOzAT>.
12. Zenz, “Beyond the Camps.”
13. Song et al., “Policy Mobilities and the China Model”; and Vicky Xiuzhong Xu et al., *Uyghurs for sale, ‘Re-education,’ forced labour and surveillance beyond Xinjiang* (Canberra: Australian Strategic Policy Institute, 2020), [https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2020-03/Uyghurs%20for%20sale\\_Final.pdf](https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2020-03/Uyghurs%20for%20sale_Final.pdf).
14. Research on file with the HRI.
15. The plan aims at developing 10 strategic priorities, such as new energy, new materials, special equipment, electronic information, textiles and clothing, light industrial food, and biopharmaceuticals. See: <http://www.scio.gov.cn/xwfbh/xwfbfh/wqfbh/33978/34593/xgzc34599/Document/1479103/1479103.htm>.
16. “Xinjiang Uyghur Autonomous Region,” Observatory of Economic Complexity, [https://oec.world/en/profile/subnational\\_chn/65](https://oec.world/en/profile/subnational_chn/65).
17. Wu Xiaoyan, “China’s cashmere production accounts for more than 80% of the world’s total. Inner Mongolia is my country’s largest cashmere production area,” *Forward - The Economist*, Prospective Industry Research Institute, April 22, 2019, <https://www.qianzhan.com/analyst/detail/220/190419-05529ab3.html> or <https://archive.vn/NmYQG>.
18. “Super-large rare metal deposit discovered in Xinjiang,” Xinhua News Agency, August 31, 2009, [http://www.china.org.cn/business/2009-08/31/content\\_18436628.htm](http://www.china.org.cn/business/2009-08/31/content_18436628.htm).
19. S. 3744 – Uyghur Human Rights Policy Act of 2020 and H.R. 6210–Uyghur Forced Labor Prevention Act 2019–2020; and U.S. Department of State, *2019 Trafficking in Persons Report: China* (Washington, DC: 2019), <https://www.state.gov/reports/2019-trafficking-in-persons-report-2/china/>.
20. “Xinjiang Uyghur Autonomous Region,” Observatory of Economic Complexity, [https://oec.world/en/profile/subnational\\_chn/65](https://oec.world/en/profile/subnational_chn/65).
21. Based on data from July 3, 2019 to July 3, 2020, obtained from ImportGenius and analyzed by the HRI. The import of chemicals into the United States from the XUAR has received little attention, and we are not currently able to evaluate the risk of forced labor. U.S. recipients include chemical labs/production facilities, nutritional companies, and plastics manufacturing entities. Key chemical products imported into the United States include Dodecanedioic acid (used in antiseptics, top-grade coatings, painting materials, corrosion inhibitors, surfactants, engineering plastics, and chemical fibers/textiles, including nylon), Amino acids (used primarily for animal feed but also for clinic nutrition and supplements), and PBT resin (a basic thermoplastic with various uses, including in plastic electronic parts, plastic electrical parts, and plastic auto parts).
22. The Trade Facilitation and Trade Enforcement Act forbids the entry of goods produced in whole or in part with forced labor into the United States.
23. “Withhold Release Orders and Findings,” Customs and Border Protection, n.d., <https://www.cbp.gov/trade/programs-administration/forced-labor/withhold-release-orders-and-findings>.
24. Song et al., “Policy Mobilities and the China Model”; Xu et al., *Uyghurs for sale*; and “Forced Labor Risk in Xinjiang, China,” Fair Labor Association, January 2020, [https://www.fairlabor.org/sites/default/files/documents/reports/fla-brief-xinjiang\\_forced\\_labor\\_risk\\_final.pdf](https://www.fairlabor.org/sites/default/files/documents/reports/fla-brief-xinjiang_forced_labor_risk_final.pdf).
25. Almost all chemical shipments were from companies located in two industrial parks: the Gan Quan Pu Economic & Technology Development Zone, Urumqi, Xinjiang and Magic Zone, Chemical Industry Park, Wusu, Tacheng Area, Xinjiang. Data from July 3, 2019 to July 3, 2020, obtained from ImportGenius and analyzed by the HRI.
26. Data for the XUAR is significantly outdated. As of 2013, there were 200,000 recorded employees in Xinjiang’s textile industry, with the goal of 1 million by 2023. “China counts on textile industry jobs to defuse Xinjiang unrest,” Reuters, June 25, 2015, <https://www.reuters.com/article/us-china-xinjiang-textiles/china-counts-on-textile-industry-jobs-to-defuse-xinjiang-unrest-idUSKBN0P50G020150625>.
27. “China,” World Bank, n.d., <https://data.worldbank.org/country/china>. Product exports accounted for \$2.59 trillion of China’s GDP in 2018. “China,” Observatory of Economic Complexity, 2018, <https://oec.world/en/profile/country/chn>.
28. “China,” Observatory of Economic Complexity.
29. Analysis conducted by HRI based on OEC data.
30. Abigail Nguema, *China-People’s Republic of: Cotton and Products Annual Sustained Demand Fuels Steady Import Growth* (Washington, DC: USDA, April 2019), [https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Cotton%20and%20Products%20Annual\\_Beijing\\_China%20-%20Peoples%20Republic%20of\\_4-11-2019.pdf](https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Cotton%20and%20Products%20Annual_Beijing_China%20-%20Peoples%20Republic%20of_4-11-2019.pdf).
31. “9-9 Sown Areas and Output of Farm Crops (2017),” 2018 Xinjiang Production and Construction Corps Statistical Yearbook, 2018, <http://tjj.xjbt.gov.cn/2018nj/mainindex.htm>; “12-17 Output of Major Agricultural Products by Prefecture, State, City and County (City),” 2019 Xinjiang Statistical Yearbook, 2019, <http://tjj.xinjiang.gov.cn/tjj/nyyp/202006/eafed783ed504eab8dc6abd93b62a815.shtml>.
32. Lianchao Han et al., *Cotton: The Fabric Full of Lies: A report on forced labor and prison labor in Xinjiang, China, and the nexus to global supply chains* (Washington, DC: Citizen Press, August 2019), 12-14; and interviews with experts on labor rights in China.
33. Yajun Bao, *The Xinjiang Production and Construction Corps, An Insider’s Perspective* (Oxford, England: University of Oxford, 2018), <https://www.bsg.ox.ac.uk/research/publications/xinjiang-production-and-construction-corps>.

34. “Cotton machine picking rate increases, ‘cotton picking labor force army’ decreases,” Ministry of Agriculture and Rural Affairs of the People’s Republic of China, Tianshan, October 16, 2019, [http://www.moa.gov.cn/xw/qg/201910/t20191016\\_6330088.htm](http://www.moa.gov.cn/xw/qg/201910/t20191016_6330088.htm).
35. “China: 2017/18 Cotton Production Outlook,” USDA, August 11, 2017, <https://ipad.fas.usda.gov/highlights/2017/08/china/index.htm>.
36. CSIS interviews with industry experts.
37. See: <http://www.xjbt.gov.cn/c/2019-11-11/7300214.shtml>.
38. Greg Fay, *The Bingtuan: China’s Paramilitary Colonizing Force in East Turkestan* (Washington, DC: Uyghur Human Rights Project, April 2018), <https://docs.uhrp.org/pdf/bingtuan.pdf> (citing Seymour and Anderson 1999).
39. Ibid.
40. Conclusion drawn from CSIS’s internal research and analysis.
41. Jilil Kashgari, “Xinjiang Police Search Uyghur Homes For ‘Illegal Items,’” Radio Free Asia, April 4, 2017, <https://www.rfa.org/english/news/uyghur/searches-04042017172301.html>. See also, Jessica Batke and Mareike Ohlberg, “China’s Biosecurity State in Xinjiang Is Powered by Western Tech,” *Foreign Policy*, February 19, 2020, <https://foreignpolicy.com/2020/02/19/china-xinjiang-surveillance-biosecurity-state-dna-western-tech/>.
42. “China,” U.S. Holocaust Memorial Museum, n.d., <https://www.ushmm.org/genocide-prevention/countries/china>.
43. Nury Turkel, “Hearing: Forced Labor, Mass Internment, and Social Control in Xinjiang,” Congressional-Executive Commission on China, October 17, 2019, [https://www.cecc.gov/sites/chinacommission.house.gov/files/documents/Turkel%20CECC%20Oct%2017%20Testimony\\_%2010152019%20version.pdf](https://www.cecc.gov/sites/chinacommission.house.gov/files/documents/Turkel%20CECC%20Oct%2017%20Testimony_%2010152019%20version.pdf).
44. “In Pishan County, the Mokuyla township loses about half its 21,000 population to XPCC cotton fields.” See: “In China’s Xinjiang, some Uyghurs are forced into a sharecropper’s life,” Radio Free Asia, November 22, 2016, <https://www.refworld.org/docid/58481226a.html>.
45. “XPCC Cotton Processing Entities,” Xinjiang Cottech, <https://xinjiang.cottech.com/btam/enterprise>.
46. Suvalee Tangboonritruthai, Nancy L. Cassil, and William Oxenham, “Global Dynamics Impacting Yarn Production and Consumption,” *Journal of Textile and Apparel, Technology and Management* 5, no. 4 (2007): 1-26, [https://textiles.ncsu.edu/tatm/wp-content/uploads/sites/4/2017/11/TANGBOONRITRUTHAI\\_Full\\_185-06.pdf](https://textiles.ncsu.edu/tatm/wp-content/uploads/sites/4/2017/11/TANGBOONRITRUTHAI_Full_185-06.pdf).
47. Interview #21, June 15, 2020; and International Textile Manufacturers Federation, *State of Trade Report* (Zurich: 2017), <https://www.itmf.org/images/dl/member-area/publications/STR-2017-Q1.pdf>.
48. “Non-Retail Pure Cotton Yarn,” Observatory of Economic Complexity, 2018, <https://oec.world/en/profile/hs92/115205/>.
49. China Statistics Press, *2018 China Statistical Yearbook* (Beijing: 2018), <http://www.stats.gov.cn/tjsj/ndsj/2018/indexeh.htm>; China YearBooks, *2018 Xinjiang Statistical Yearbook* (Beijing: 2018), <https://www.chinayearbooks.com/tags/xinjiang-statistical-yearbook>; and China Statistics Press, *2017 China Statistical Yearbook* (Beijing: 2017), <http://www.stats.gov.cn/tjsj/ndsj/2017/indexeh.htm>.
50. 0.56 MMT was produced by the XPCC and 1.26 MMT by non-XPCC spinners. 2018 Xinjiang Production and Construction Corps Statistical Yearbook. Prior to 2015, over 90 percent of the XUAR’s yarn production capacity was dedicated to cotton yarn. “Yarn capacity and product structure in Xinjiang,” CCFGroup, March 22, 2016, [https://www.ccfgroup.com/newscenter/newsview.php?Class\\_ID=D00000&Info\\_ID=20160322057](https://www.ccfgroup.com/newscenter/newsview.php?Class_ID=D00000&Info_ID=20160322057).
51. “Guiding Opinions of the General Office of the State Council on Supporting the Development of Xinjiang Textile and Garment Industry and Promoting Employment,” Central People’s Government of the People’s Republic of China, 2015, [http://www.gov.cn/gongbao/content/2015/content\\_2893138.htm](http://www.gov.cn/gongbao/content/2015/content_2893138.htm).
52. Latest Figures From China’s Textile Industry Reported At Intertextile Apparel Round Table,” December 2, 2019, <https://www.textileworld.com/textile-world/2019/12/latest-figures-from-chinas-textile-industry-reported-at-intertextile-apparel-round-table/#:~:text=In%202018%2C%20China’s%20chemical%20fiber,31.3%25%20of%20the%20world’s%20total.>
53. Analysis conducted by HRI based on OEC data.
54. “Where does China export Cotton to?,” Observatory of Economic Complexity, 2018, [https://oec.world/en/visualize/tree\\_map/hs92/export/chn/all/1152/2018/](https://oec.world/en/visualize/tree_map/hs92/export/chn/all/1152/2018/), with additional calculations performed using OEC data.