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Sourcing Cotton
Basic Information for Adjusting Sourcing Strategies

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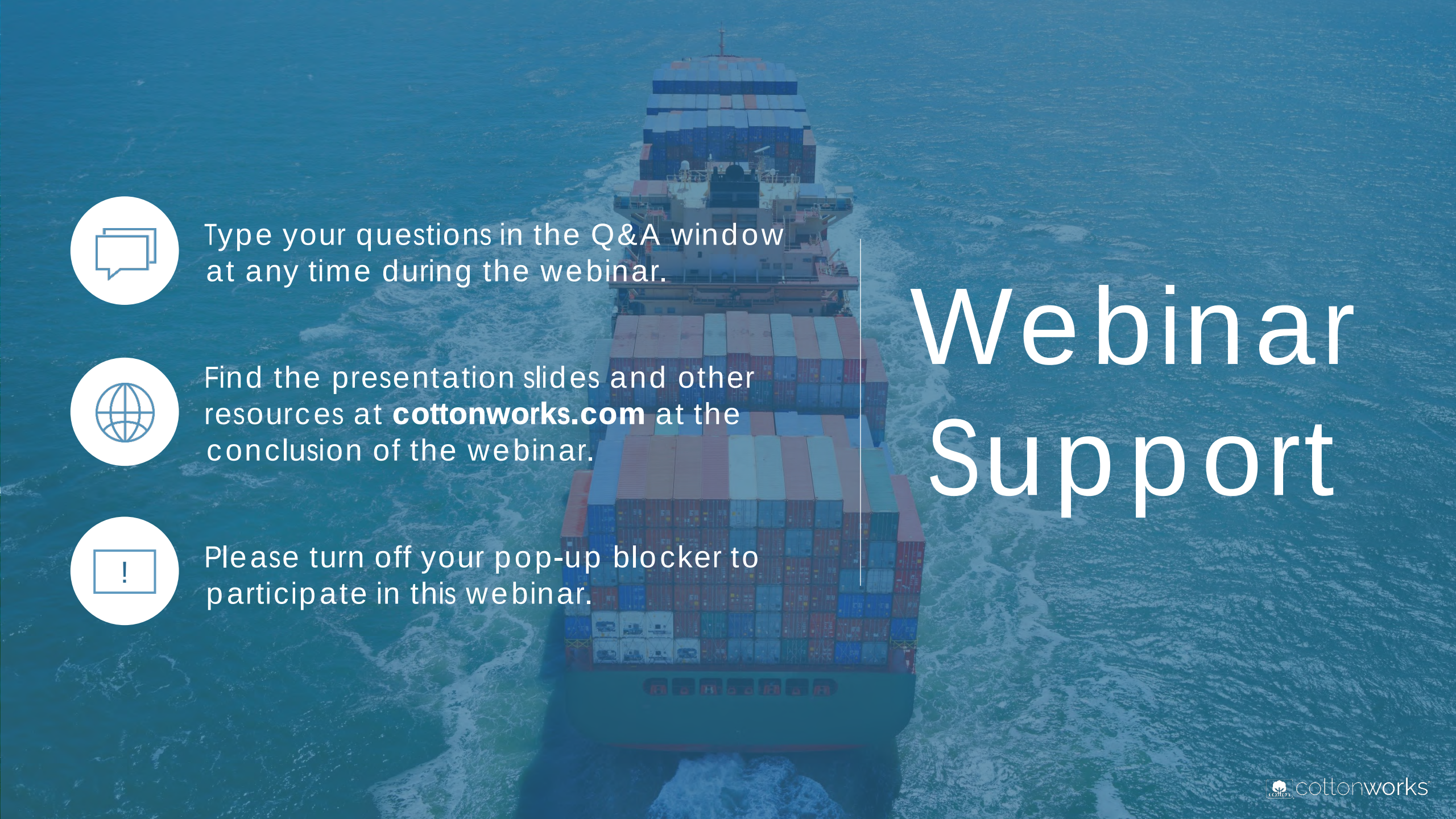

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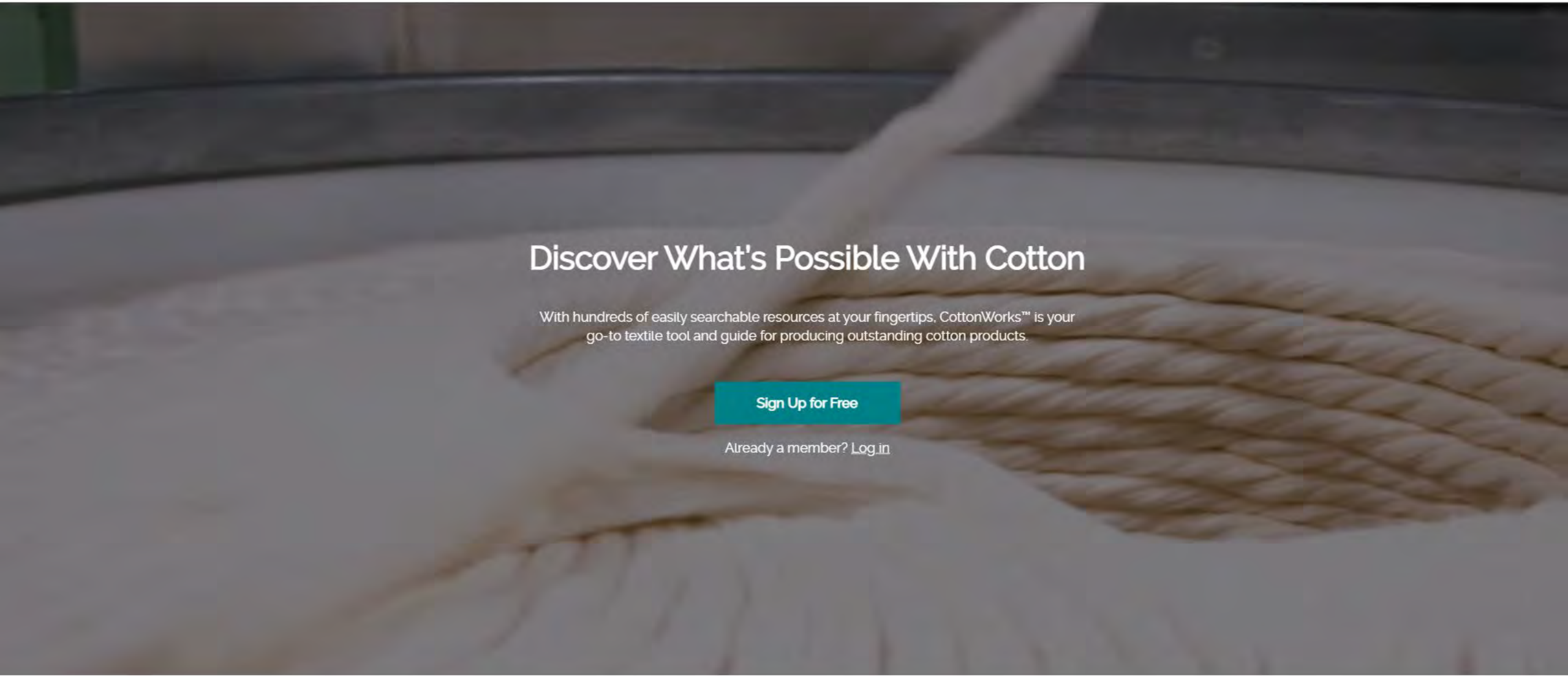

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Sourcing Cotton

Basic Information for Developing or Adjusting Sourcing Strategies

The United States imports textiles from more than 80 countries. Brands, retailers, and companies importing apparel and other textiles have many choices when it comes to the geography of sourcing cotton and cotton products. As companies develop or adjust their sourcing strategies, it is helpful to understand vital information about cotton, trade in cotton and production, and manufacturing practices that can affect sourcing and traceability.

Many companies are searching for information about cotton production in China and how this may be affected by current regulations by U.S. Customs and Border Protection.

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Many companies are searching for information about cotton production in China and how this may be affected by current regulations by U.S. Customs and Border Protection.

On this page, you will find the following information to help you with sourcing cotton products:

If you have specific questions about this topic that are not addressed below, contact us.

Change has been constant

Successive rounds of tariffs

Mounting human rights concerns

Volatility in fiber prices & exchange rates

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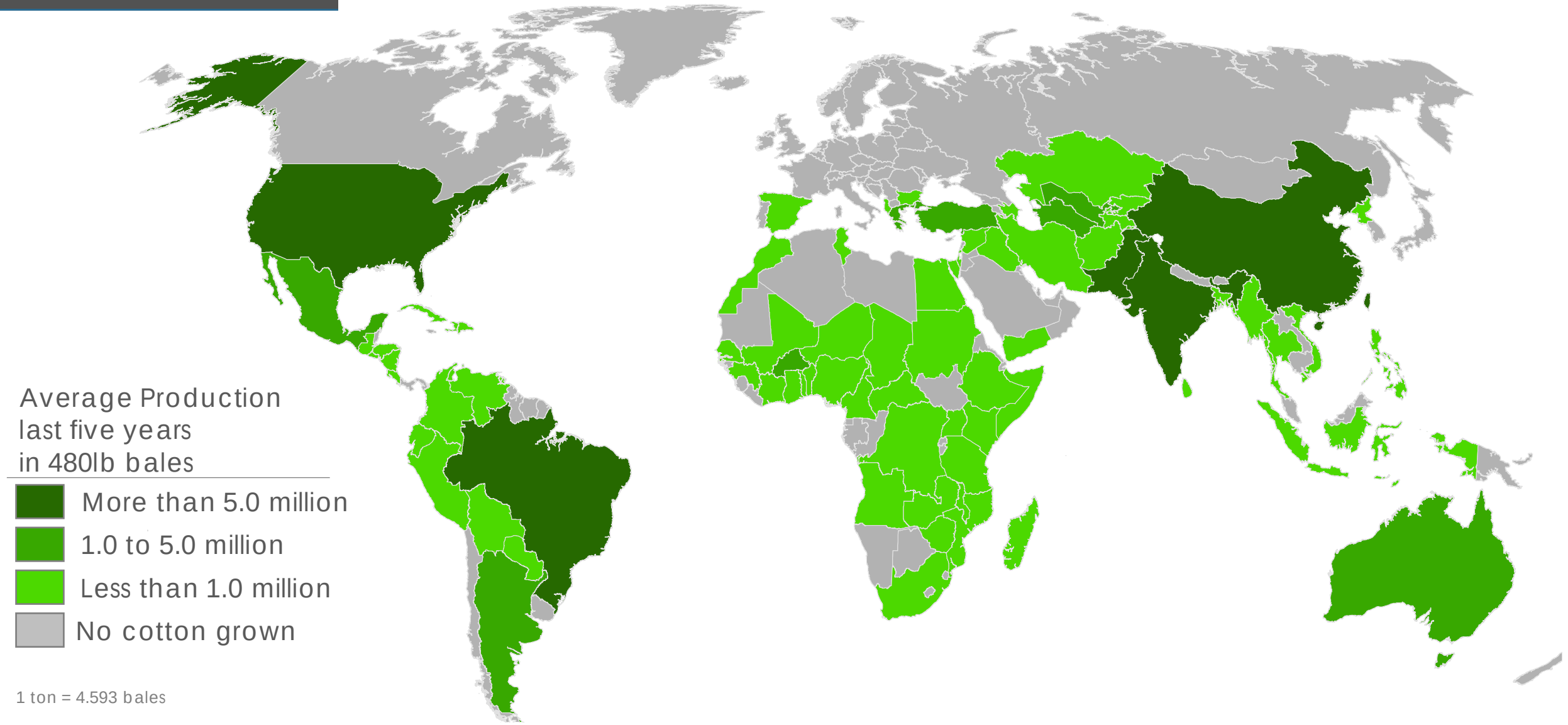
Cotton Production



Source: USDA – Cotton: World Markets and Trade,
data for 2020/21 crop year; August 1, 2020 through July 31, 2021

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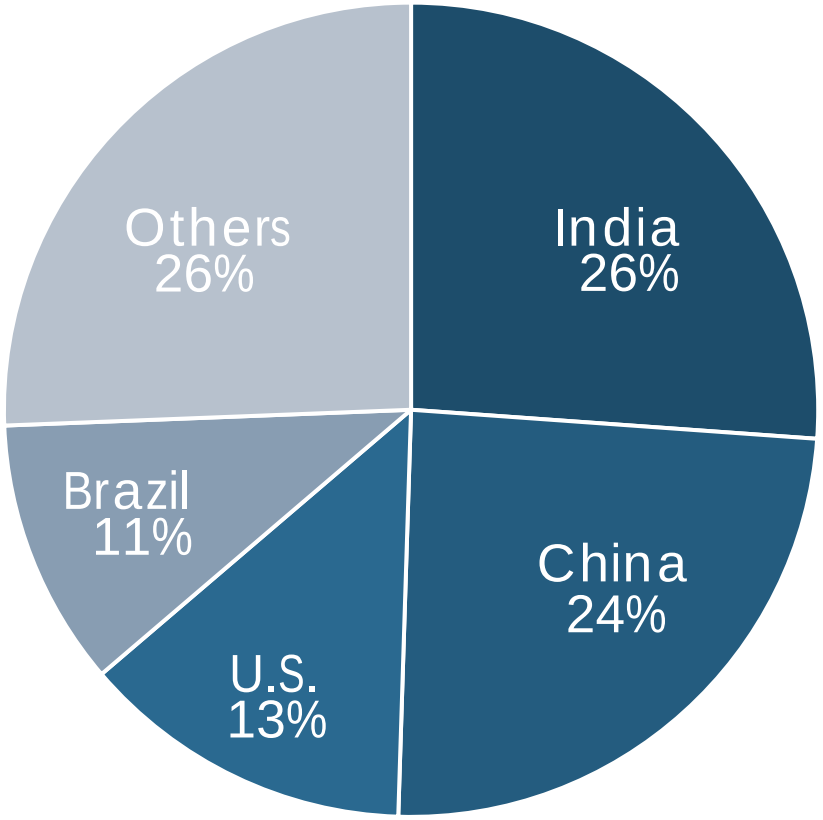
Cotton Production

The top 4 countries account for about 75% of global production



Source: USDA – Cotton: World Markets and Trade,
data for 2020/21 crop year; August 1, 2020 through July 31, 2021

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Cotton Mill Use

Cotton mill-use or **consumption** refers to fiber spun into yarn or used in manufacturing for products such as nonwovens.

There are more than 100 countries that use cotton as a raw material in manufacturing.

Source: USDA – Cotton: World Markets and Trade,
data for 2020/21 crop year; August 1, 2020 through July 31, 2021

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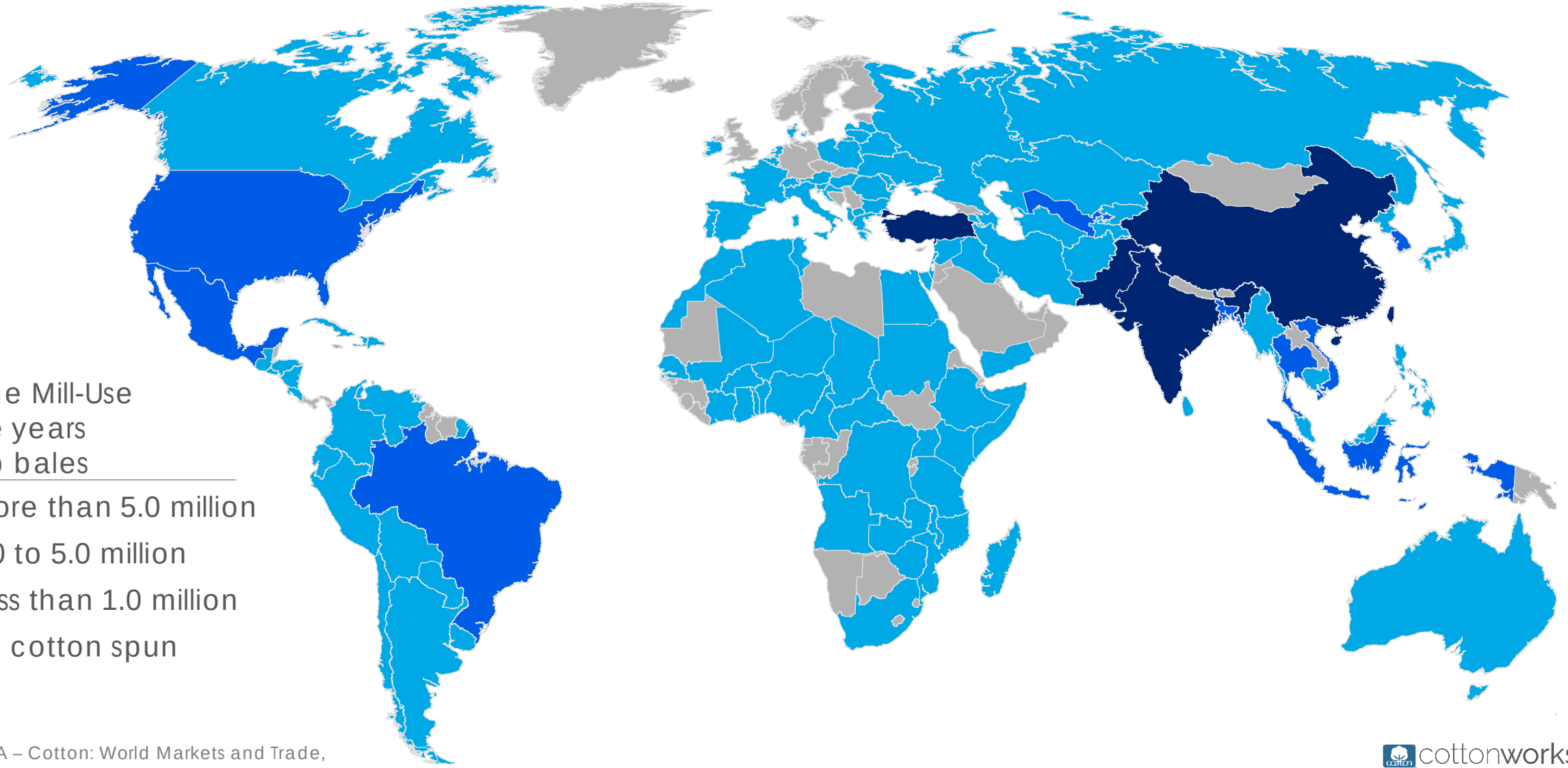
Cotton Mill Use

Cotton used in textile mills



Source: USDA – Cotton: World Markets and Trade,
data for 2020/21 crop year; August 1, 2020 through July 31, 2021

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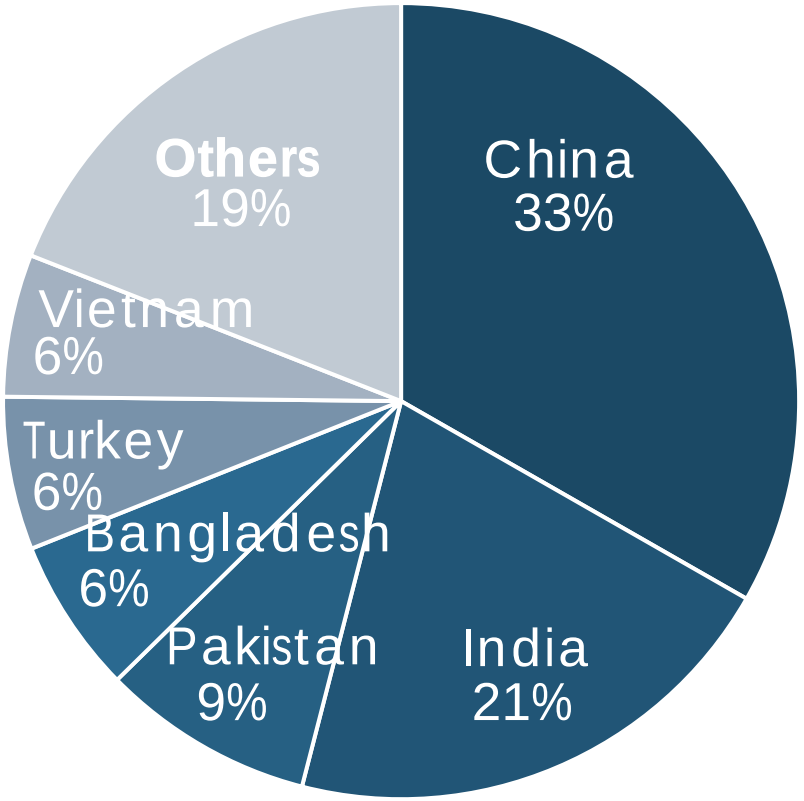
Cotton Mill Use

These six countries account for about 80% of global mill-use



Source: USDA – Cotton: World Markets and Trade,
data for 2020/21 crop year; August 1, 2020 through July 31, 2021

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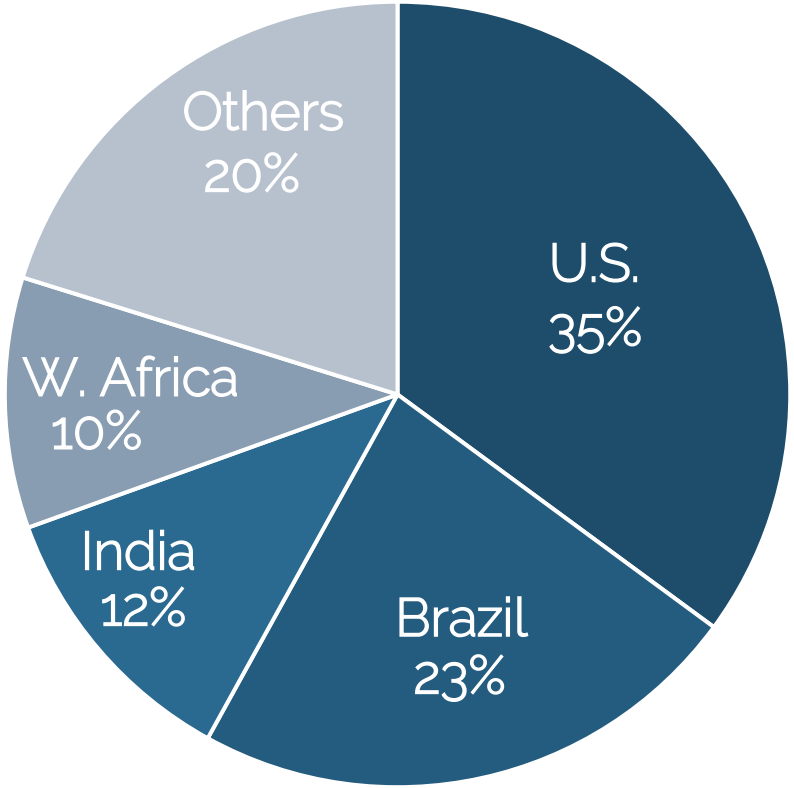
Cotton Exports

Top four **exporters** by origin of raw cotton account for 80% of global shipments of raw cotton



Source: USDA – Cotton: World Markets and Trade,
data for 2020/21 crop year; August 1, 2020 through July 31, 2021

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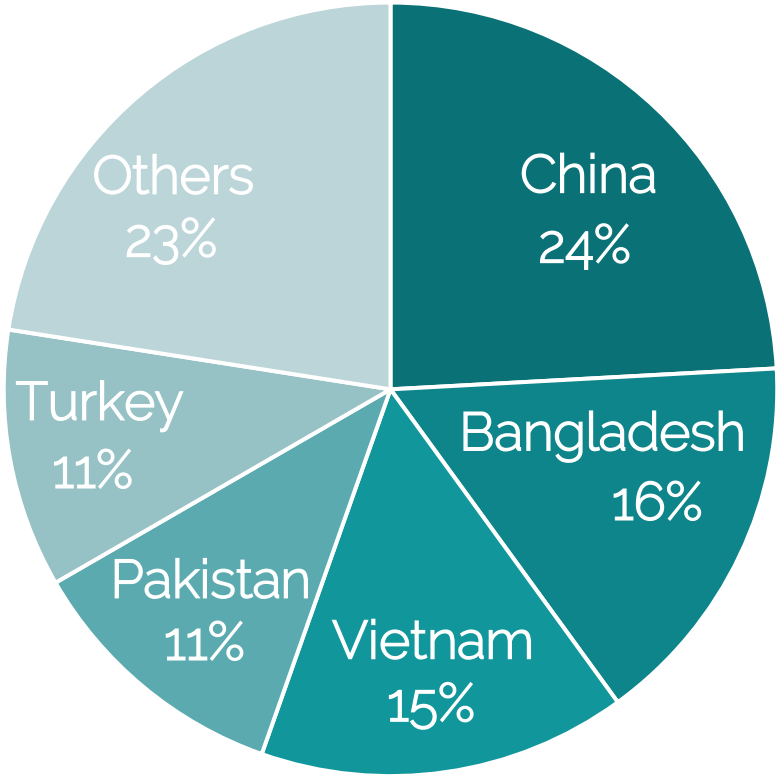
Cotton Imports

Top five **importers** of raw cotton account for about 80% of globally traded cotton



Source: USDA – Cotton: World Markets and Trade,
data for 2020/21 crop year; August 1, 2020 through July 31, 2021

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Chinese Cotton Flow

KEY FACTS

China is the world's:

- Second largest cotton grower.
- Largest cotton spinner.
- Largest manufacturer of fabric.
- Largest apparel exporter.

Source: USDA – Cotton: World Markets and Trade, ITMF – Cotton Industry Statistics, WTO – World Trade Statistical Review
Data in 480 lbs bales. 1 ton = 4,593 bales. Figures may not sum due to rounding.

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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

Grown in China

Spun in China

Manufactured in China

Manufactured in China

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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

Grown in China

Xinjiang is China's top cotton-producing province, expected to represent **90% of China's 2020/21 total cotton grown.**

Source: USDA – Cotton: World Markets and Trade, Beijing Cotton Outlook, and China National Cotton Exchange.
Data in 480 lbs bales. 1 ton = 4,593 bales. Figures may not sum due to rounding.

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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

Grown in China

25 million bales grown in Xinjiang

Xinjiang is China's top cotton-producing province, expected to represent **90% of China's 2020/21 total cotton grown.**

40% of cotton grown in Xinjiang is grown by the Xinjiang Production & Construction Corps (XPCC).

Source: USDA – Cotton: World Markets and Trade, Beijing Cotton Outlook, and China National Cotton Exchange.
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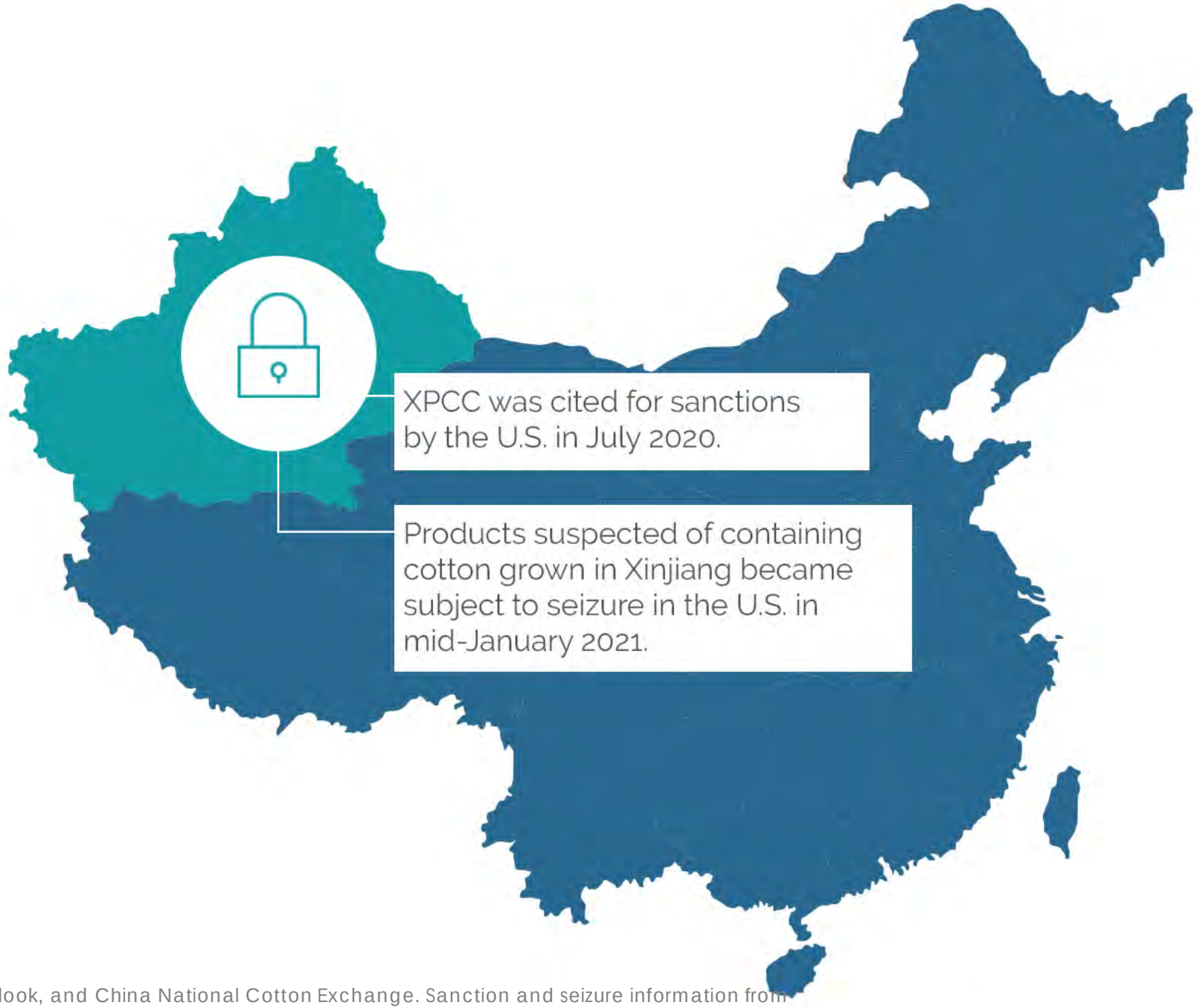

Source: USDA – Cotton: World Markets and Trade, Beijing Cotton Outlook, and China National Cotton Exchange. Sanction and seizure information from US Department of Treasury and US Customs and Border Protection. Data in 480 lbs bales. 1 ton = 4,593 bales. Figures may not sum due to rounding.

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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

Grown in China

Spun in China

Manufactured in China

Manufactured in China

Much of the cotton grown in China is kept in the country for yarn, fabric, and garment manufacturing.

Chinese mills spin
37.5 million bales of cotton
into yarn.

China exports virtually no cotton, but imports fiber as needed for mills and reserves.

Sources: Beijing Cotton Outlook, China National Cotton Exchange, China Customs, Trade Data Monitor.
Data in 480 lbs bales.
1 ton = 4,593 bales.
Figures may not sum due to rounding.

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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

Grown in China

27.5 million bales grown
25 million from Xinjiang
2.5 million from rest of China

Fiber grown in China can flow directly to spinning mills
OR
it can be transferred to the Chinese reserve system.

KEY

Produced in China

Reserves

Sources: Beijing Cotton Outlook, China National Cotton Exchange, China Customs, Trade Data Monitor.
Data in 480 lbs bales.
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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

Fiber grown in China can flow directly to spinning mills
OR
it can be transferred to the Chinese reserve system.

China's reserve system was designed for price stability.

- It can buy to support prices.
- It can sell to support mills.

Reserves can be stored for years & volumes can go up and down.

Sources: Beijing Cotton Outlook, China National Cotton Exchange, China Customs, Trade Data Monitor.
Data in 480 lbs bales.
1 ton = 4,593 bales.
Figures may not sum due to rounding.

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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

Cotton Imports

10.5 million bales imported
0.1 million bales re-exported

Chinese mills and reserves can also be supplied by cotton imported from other countries.

Some imported cotton fiber is re-exported when traders realign on supplies needed.

KEY

Imported

Produced in China

Reserves

Sources: Beijing Cotton Outlook, China National Cotton Exchange, China Customs, Trade Data Monitor.
Data in 480 lbs bales.
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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

China is the world's largest importer of cotton yarn.

KEY

Imported

Produced in China

Exported

Sources: Beijing Cotton Outlook, China National Cotton Exchange, China Customs, Trade Data Monitor.
Data in 480 lbs bales.
1 ton = 4,593 bales.
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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

China is the world's largest importer of cotton yarn.

Weight of fiber available for fabric is ~40% of global cotton use.

KEY

Imported

Produced in China

Exported

Available to meet demand

Sources: Beijing Cotton Outlook, China National Cotton Exchange, China Customs, Trade Data Monitor.
Data in 480 lbs bales.
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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

China is the world's largest importer of cotton yarn.

Weight of fiber available for fabric is ~40% of global cotton use.

China is the world's largest exporter of cotton fabric, and imports very little fabric.

KEY

Imported

Produced in China

Exported

Sources: Beijing Cotton Outlook, China National Cotton Exchange, China Customs, Trade Data Monitor.
Data in 480 lbs bales.
1 ton = 4,593 bales.
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Chinese Cotton Flow

FIBER & FABRIC DEMAND

The flow of cotton fiber through China is driven by fabric demand.

34.9 million bales for finished goods

16 million bales of exported finished goods
- 5.4 million bales to the US
- 3.8 million bales to the EU
- 1.7 million bales to Japan
- 5.1 million bales to other countries

19 million bales of finished goods remaining for Chinese consumers

KEY

Imported | Produced in China | Exported | Available to meet demand

Sources: Beijing Cotton Outlook, China National Cotton Exchange, China Customs, Trade Data Monitor.
Data in 480 lbs bales.
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https://www.cottonworks.com/topics/sourcing-manufacturing/fiber-science/cotton-sourcing/

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Sourcing Cotton

Topics > Sourcing & Manufacturing > Fiber Science

- How and where is cotton grown?
- Where are cotton and cotton yarns traded?
- Why are fiber properties so important to understand when making sourcing decisions?
- What additional resources might help with determining a sourcing strategy for cotton?
- Helpful Terms

Yarn Manufacturers Buy Cotton Based on Fiber Quality

Why are fiber properties so important to understand when making sourcing decisions?

Because cotton is a natural material, it is important for yarn manufacturers to manage variation in fiber properties to ensure the production of consistent, high-quality yarns. For sourcing, this means that yarn manufacturing in a company's supply chain should always have the flexibility to source appropriate qualities of cotton. Yarn manufacturers do not just buy tons or pounds of cotton — they buy the right fiber qualities of cotton to make the best products for their customers.

For further information about the important fiber qualities for cotton, review our e-book, *Classification of Cotton*.

THE CLASSIFICATION
OF COTTON

Interpreting fiber strength

Description of degree of strength	Strength (grams per tex)
Very Strong	31 & above
Strong	29–30
Average	26–28
Intermediate	24–25
Weak	23 & below

Fiber strength is largely determined by variety. However, it may be affected by plant nutrient deficiencies and weather. Fiber strength and yarn strength are highly correlated. Also, cotton with high fiber strength is more likely to withstand breakage during the manufacturing process.

At the classing office, the PBI tag follows the sample through testing. The results are linked to the bale and stored in the USDA AMS Cotton and Tobacco Program's National Database by PBI number. The classification data in the National Database can be accessed by the owner of the cotton or the owner's authorized agent. Users of this system include grower marketing cooperatives, buyers, and textile manufacturers.

PBI tag: The first two digits of the gin code identify the classing office, followed by three digits identifying the gin. The remaining seven digits identify the bale.

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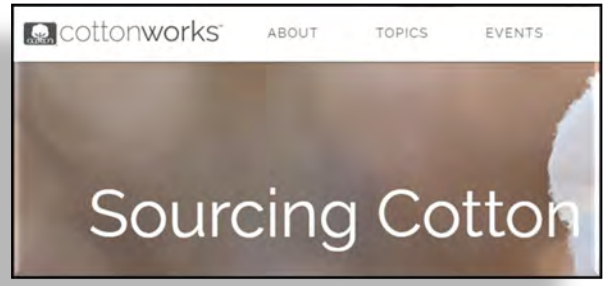

What additional resources might help with determining a sourcing strategy?

Sourcing decisions are complex and often involve many different factors. Knowledge of cotton production, trade, and fiber properties can help companies understand important basic information that can be combined with other factors such as import regulations, manufacturing prices, and companies' own priorities and policies. For additional information, explore these resources.

Cotton Sustainability Basics
More sustainable cotton production means using our natural resources — water, land, and energy — more efficiently. Learn about the issues, progress, prospects, and goals for increased efficiency in these three key resource areas.

Monthly Economic Letter
Cotton Incorporated's Monthly Economic Letter provides a unique analysis of the latest events affecting the world cotton market and world cotton prices. An up-to-date letter is available each month through cottonworks.com/news.

Cotton LEADS℠ Program
The Cotton LEADS℠ program connects textile manufacturers, brands, and retailers with a variety of ways to advance sustainable cotton production. Learn how you can get involved and help advance sustainable cotton in your supply chain.

U.S. Cotton Trust Protocol™ (USCTP)
The USCTP program sets a new standard for more sustainably grown cotton by bringing quantifiable and verifiable goals and measurement to sustainable cotton production and driving continuous improvement in key sustainability metrics.

Tariff Engineering
Get to know the Harmonized Tariff System classification guidelines and learn techniques for modifying fiber content or garment construction that will result in duty savings without compromising design integrity.

American Apparel & Footwear Association (AAFA)
AAFA is the national trade association representing the apparel and footwear industry and works to identify member needs and facilitate engagement with policymakers around brand management, supply chain and manufacturing, and trade.

United States Fashion Industry Association (USFIA)
USFIA represents brands, retailers, importers, and wholesalers based in the United States and doing business globally, and works to eliminate tariff and non-tariff barriers that impede the fashion industry's ability to trade freely.

Helpful Terms

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What should you consider when evaluating traceability technologies?

Cotton Incorporated works with companies and technology providers to evaluate and promote solutions that are beneficial to manufacturing with and sourcing cotton. While information about technologies and products is not always publicly available, Cotton Incorporated encourages thoughtful consideration of technologies and performance claims. The following information is intended to serve as guidance for thinking about traceability technologies:

- Traceability technology fundamentals
- Traceability technology considerations for cotton
- Evaluation recommendations
  - Questions to consider regardless of the technology approach
  - Questions to consider specific to inherent technology methods
  - Questions to consider specific to additive technology methods

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Considerations When Evaluating Traceability Technologies

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Traceability Technology Fundamentals

The fundamentals of existing traceability technologies intended to confirm cotton origin are based on one of two processes: inherent or additive. In an **inherent approach, the product inherently has a detectable component reported to be linked to the origin.** The inherent component could be trace elements, isotopes, microbiome, or other naturally occurring components in the material that are inherent to the origin's environment. For cotton fiber, where it is grown would be, in theory, associated with those inherent attributes. For the **additive approach, an additive that can be identified through some test technique is applied at any point in the supply chain where the origin is known.** Additives could be DNA tags, tracer chemicals or elements, dyes, or fibers designed to be detected.

Traceability Technology Considerations for Cotton

For inherent and additive technology processes, it is feasible that these technologies could work for 100% single origin cotton if all the factors outlined in the evaluation recommendations section (see below) associated with textile processing are scrutinized. **The critical challenge for both processes for most cotton products is the amount of blending that occurs during textile processing.** Depending on the origin of cotton, blending can begin as early as ginning. In some countries, cotton from multiple farm locations may be combined either before or as part of the ginning process. Blending then occurs in the laydown in a textile spinning mill. The textile mill might know the position of every bale in a laydown and may know the origin of each of those bales, but by the time the cotton goes through opening, carding, and multiple stages of sliver and roving production, those materials have been continuously blended at each stage. Many spinning mills run multiple laydowns and opening ranges where cotton fibers may also be blended during sliver and roving formation, making it impossible to know the absolute blend of which fiber origins end up in a specific lot of yarn. Blending further continues with the mixing of yarns for knitting and weaving

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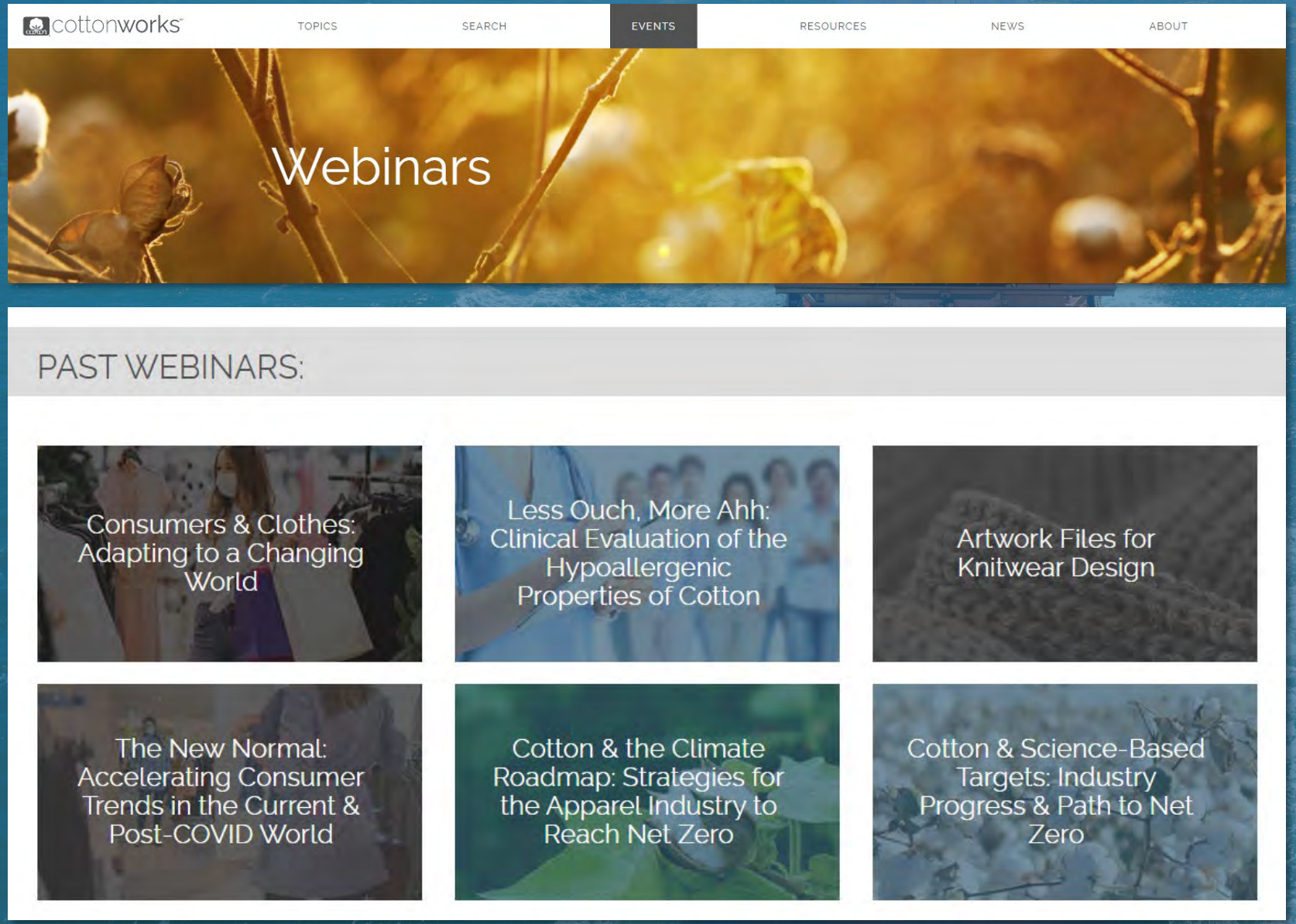

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