



COTTON 2040 MASTERCLASS 1 SUMMARY

Commodities and Supply Chain Risk: From Farm to Factory



ALASTAIR BAGLEE

Senior Director, WTW Climate
and Resilience Hub

This document presents a summary of the recent masterclass “Commodities and Supply Chain Risk: From Farm to Factory”. The masterclass, the first in a series of six co-hosted by [WTW](#) and [Forum for the Future](#) in October 2022, provided practical guidance on how brands and retailers can proactively manage the impacts of climate change within their supply chains.



ERIN OWAIN

Climate Risk Analyst, WTW
Climate and Resilience Hub

The masterclass first outlined physical climate risks along the cotton value chain by drawing on key findings from the [Cotton Explorer tool](#). **By 2040, half of the world’s cotton growing regions will face drastic exposure to high temperatures, changes in water availability, and extreme weather events.** Approximately 90% of cotton farmers are in developing countries, mainly in Central and West Asia, Southeast Asia and Africa, and grow cotton on less than 2 hectares (ha) of land. These regions are at the front line of climate impacts.



HAMMAD NAQI KHAN

Director General, WWF
Pakistan

The masterclass then outlined novel research examining cotton production in India. This study showed that **the complexity and non-transparent nature of cotton value chains make them more vulnerable to climate impacts.** Climate vulnerability of commodity supply chains is multi-faceted and entwined with social risks, including risks to human rights. Climate resilience and positive ESG outcomes can be achieved when brands and retailers engage with producer communities to identify risks, support adaptation at community level, and address underlying vulnerabilities to farming and production.

The final part of the masterclass focussed on opportunities and actions that brands and retailers can take to manage climate risk and build resilience. The starting point is supply chain transparency: **companies must understand who’s in their supply chains and the climate and social vulnerabilities of each link.** Critical next steps include dialogue across the industry, including with cotton producers and processors, to facilitate awareness and collective action on climate risks.

Key Takeaways

- Climate and weather-related disruptions can impact each actor in the cotton value chain directly, but also indirectly and cumulatively. Complex, non-transparent supply chains are more vulnerable to climate impacts.
- The apparel sector lags behind other sectors in adapting to climate change and in incorporating climate risk to risk management. It is inevitable that brands and retailers will have to catch up
- Supply chain transparency is the starting point for an effective response. Brands and retailers should engage with stakeholders across their value chains to identify climate risks and develop inclusive responses.

“Weaving climate risk management into existing sustainability programmes enhances supply chain resilience. Lack of supply chain traceability undermines this.”

- Erin Owain, Climate Risk Analyst at WTW