

Title of case study	More resilient fibers to replace cotton
Name of organization(s)	Naturally Advanced Technologies (NAT)
Business sector	Science and Technology
Region(s) relevant to case study	<ul> <li>All regions</li> <li>Africa and the Arab States</li> <li>Asia and the Pacific</li> <li>Caribbean and Central America</li> <li>Europe</li> <li>Least Developed Countries</li> <li>North America</li> <li>Polar regions</li> <li>Small Island Developing States</li> <li>South America</li> </ul>
Country(s) relevant to case study	Canada
Adaptation sector(s) relevant to case study	<ul> <li>Business</li> <li>Education and training</li> <li>Food security, agriculture, forestry and fisheries</li> <li>Human health</li> <li>Oceans and coastal areas</li> <li>Science, assessment, monitoring and early warning</li> <li>Terrestrial ecosystems</li> <li>Tourism</li> <li>Transport, infrastructure and human settlements</li> <li>Water resources</li> <li>Other (please specify):</li> </ul>
Adaptation activity	The dramatic price surges in cotton or sugar demonstrate how climate instability contributes to market risks. Prices for such commodities hit 30-year highs in 2011, as drought ravaged cotton crops in Texas, and floods and a cyclone inundated sugarcane in Australia. These price shocks reverberate throughout the supply chains of interdependent global markets, sending costs higher for companies such as Levi Strauss & Co. and Hanesbrands Inc., which rely heavily on cotton. Naturally Advanced Technologies Inc. (NAT), based in

	the potential of renewable and environmentally sustainable biomass resources from flax, hemp and other bast fibers.	
	NAT, through its wholly owned subsidiary CRAiLAR® Fiber Technologies Inc. and in collaboration with Canada's National Research Council and Alberta Innovates - Technologies Futures, has developed proprietary technology to process bast fibers such as flax and hemp, cellulose pulp, and the resulting by-products. CRAiLAR® technology offers a cost-effective, environmentally sustainable processing solution expected to result in products with increased performance characteristics applicable to the textile, energy, composite materials, and auto, marine and aerospace industries. NAT is partnering with major cotton customers to demonstrate that these cheaper, more resilient fibers can better withstand climate variability and are viable	
	replacements for cotton.	
Cost-benefit	Founded in 1998, NAT adheres to a "triple bottom line" philosophy, respecting the human rights of employees, the environmental impact of the Company's operations and fiscal responsibility to its shareholders.	
	The demand for more resilient, high-performing fibers from crops that can withstand the impacts of climate change provides a growing business opportunity and market for NAT's technologies.	
Case study source(s)	Turn Climate Change Risk Into Business Opportunity (WRI Insights)	
	Naturally Advanced Technologies website	