

# Addressing mounting climate risks in cotton landscapes: India

India is the world's second largest cotton producer after China, with more than 60 million people working directly or indirectly in the country's cotton value chain. Most cotton in India is grown on farms that are less than one hectare. But cotton production comes with a high environmental impact, mainly from the use of agrochemicals (especially pesticides and nitrogen-based fertilizers) and the consumption of water. Climate change is also increasingly threatening cotton-growing regions across the country, with impacts like water scarcity, changes in rainfall patterns and extreme weather events – from drought in some regions to intense rainfall and flooding in others.

WWF and IKEA have been working in India since 2005 to address the many challenges in cotton agriculture and introduce better farming practices. In doing so, we join forces with farmers and local communities to promote good water stewardship, reduce greenhouse gas emissions and soil erosion, and increase biodiversity by integrating trees in cotton landscapes. We also help farmers use nature-based, low-cost solutions to manage their land and water resources in a sustainable way.

# WHAT WE PLAN TO ACHIEVE BY 2025

- Conserve water by improving irrigation management and groundwater recharge
- Reduce greenhouse-gas emissions per unit of cotton production by up to 30%
- Reduce soil erosion and run-off of soil and pollutants from cotton farms
- Build 2,000 vegetative barriers areas of vegetation planted by cotton farmers around their land – and plant 375,000 trees to improve irrigation efficiency and reduce
- Increase carbon sequestration in cotton landscapes, including increasing organic matter in soils to improve the uptake of nutrients



# FACT SHEET: COTTON – INDIA

# WHAT WE'RE DOING

# Reducing greenhouse gas emissions

IKEA aims to reduce its greenhouse-gas emissions in line with the <u>Science-Based Targets initiative</u>. As part of the partnership, we're running climate mitigation projects in Jalna in the Indian state of Maharashtra, where IKEA also sources cotton, with the aim of reducing greenhouse-gas emissions from cotton production by up to 30%.

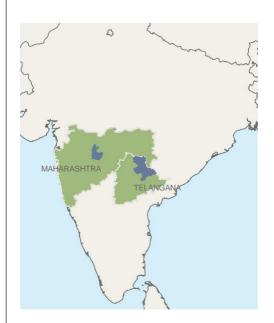
In the same area, we're also implementing <u>nature-based solutions</u> to improve the water management system. Through efficient water usage and water retention, we aim to address important issues such as land degradation and water scarcity. We've trained more than 4,500 cotton farmers to adopt practices that improve soil quality, water retention and carbon sequestration. These include mixed and cover cropping, a natural way to keep the soil healthy, as well as adding compost and incorporating crop residues such as cotton stalks to increase the organic content in the soil.



## Facilitating dialogue, monitoring impact

We're working together with the <u>Indian Council for Agriculture Research</u> and state agriculture universities to develop recommendations for better cotton-farming practices, and to conduct monitoring and impact studies.

# **PROJECT LOCATION**





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### **Planting trees**

We've been working with cotton farmers and the state government of Telangana to promote tree plantations on community land and agricultural lands not suitable for cotton production. This is helping to slow down the process of land degradation and reduced soil fertility. We're now expanding this work to more villages, and supporting the government to identify priority areas for tree planting, especially around watercourses.

### Addressing climate risks

We're supporting farmers to address climate risks by using an Android-based digital platform called "Cotton Doctor". The app alerts farmers on their smartphones about weather vulnerabilities and assists them to make informed and effective decisions to optimize their chances of obtaining a good harvest. So far, 6,500 users have downloaded the app.



#### For more information

wwf.se/ikea/cotton

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