The total amount of land on Earth is 33.1 billion acres. Of this, 10.3 billion acres of land could be suitable for growing crops—and 36% of that land is already producing crops. With the world population estimated to increase significantly by the year 2050, maximizing the productivity of these lands, while minimizing environmental impact, is crucial.

Cotton is a model plant for meeting present and future needs for fiber, as well as food. Occupying less than 3% of the world’s agricultural land, cotton production provides two crops with each seasonal harvest: cotton fiber, which currently supplies 30% of the world’s textile fiber needs; and cottonseed, a source of nutritious cooking oil and a protein-rich supplement for dairy cattle and aquaculture feeds.

Science and modern agriculture have enabled cotton growers around the world to produce more of this dual crop on less land than previous generations of farmers. And, the hardy nature of the cotton plant allows it to thrive in environments that cannot sustain food crops. Cotton, as a cash crop in these challenged regions, provides income for food, healthcare, and other necessities.
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Cotton Uses a Small Percentage of Global Arable Land
Cotton occupies a relatively small percentage of the world's acreage; a fact that may seem at odds with the prevalence of cotton in home textiles and apparel. Each cotton harvest provides two crops: the familiar white fiber, and cottonseed, which can be used as a supplemental feed for cattle and farm-raised fish, or pressed to produce cottonseed oil, a favorite in the commercial food industry. For every pound of cotton fiber, cotton fields produce approximately 1.4 pounds of cottonseed.4

Cotton Uses Less Land to Produce More Fiber
Cotton's global land use has declined 30% over the last 30 years, according to a report by Field to Market, the Alliance for Sustainable Agriculture.5 In the U.S., declining cotton acreage has not hampered fiber yields, which have doubled over the past three decades even as planted acres have declined. These gains have been made possible through the use of higher-yielding cotton varieties developed through both genetic modification and conventional breeding.

Cotton is a Rotational Crop
In the U.S., 84% of cotton producers rotate other crops such as wheat, corn, and soybeans in their fields.7 This practice has a range of benefits for overall soil health, including nitrogen replenishment and the mitigation of pests and prevention of pathogen build-up.

Cotton Tillage Practices Protect and Rejuvenate Soil
Two-thirds of U.S. cotton growers employ conservation tillage, the practice of leaving the previous year's crop residue on fields before and after the planting of the next crop.8 Conservation tillage helps reduce soil loss, increase water holding capacity, and minimize runoff. Conservation tillage practices include no-till, in which all crop residues remain on the field, and reduced tillage, in which a portion of the field residues are left on fields. The widespread adoption of these practices has resulted in a 68% reduction in soil loss on U.S. cotton acreage over the past 30 years.

For more information and citations, please visit http://cottontoday.cottoninc.com.
Citations

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