Abstract

Cotton is an important cash crop of India and provides a livelihood to more than 60 million people by way of support in agriculture, processing and use of cotton in textiles (1, 2). Past research has shown that Bt cotton plays a large economic role in local communities, especially in developing countries. For example, genetically modified cotton makes crops resistant to bollworm infestations and can decrease pesticide use and improve yields. Bt cotton was first introduced in India in 2002, and the increase in adoption of Bt cotton by farmers has led to increased government regulation and control of this genetically modified crop. Although a vast amount of research has been conducted on this crop in India, little work has been done to synthesize this research. From 2020 to 2021, a thorough investigation of peer-reviewed literature was performed to expand the understanding of the policy implications of Bt cotton and how those policies impact the local communities in India. Overall, a total of 45 peer-reviewed articles were synthesized and reviewed, and results indicated that while Bt cotton in India has several social, economic, agricultural, and environmental benefits, policies are needed to mitigate the potential downfalls that come from adopting Bt cotton such as price increases in cottonseed and decreases in pest resistance. Future policy recommendations include adopting policies that provide subsidies to farmers and setting seed quality standards to ensure that farmers have the potential to maintain consistent crop yields.

References