

STUDY ON ORGANIC COTTON FOR THE ENHANCEMENT OF ECO-FRIENDLY TEXTILES: SPECIAL

REFERENCE TO BIJNOR

Charu Bansal^[1], Dr. Pooja Mishra^[2]
Department of Home Science
^[1,2]OPJS University, Churu (Rajasthan) – India

Abstract

The Indian garment industry has an unbelievable legacy, which is potentially unmatched in the credible landscape of India's mechanical change. India's garment industry advanced and made at an early stage and its hoarding development was among the best. Before colonization, India's physically worked garment machines were among the best in the world and filled in as a model for an era of the primary garment machines in as of late industrialized Britain and Germany. The Indian garments were searched for after for their cunning, quality, and Design. Organic cotton was created in 20 countries worldwide in 2010-11 drove by India and including (all together of rank): Syria, China, Turkey, United States, Tanzania, Egypt, Mali, Kyrgyzstan, Peru, Pakistan, Uganda, Burkina Faso, Benin, Paraguay, Israel, Tajikistan, Brazil, Nicaragua, and Senegal.

1. INTRODUCTION

Cotton is a standout amongst the most chemically concentrated among all field crops. Cotton is developed on an expected 3% of the aggregate developed zone on the planet, yet utilizes around 25% of all insecticides devoured in horticulture. Bugs are such a genuine danger to cotton generation that monetary yields are practically difficult to accomplish without observing nuisances and embracing chemical controls. Plant assurance operations have turned into the significant part of generation practices and pesticides that are prohibited for

use on nourishment harvests are normally utilized on cotton. In numerous nations, particularly where cotton is machine picked, herbicides, insecticides, development controllers and reap help chemicals notwithstanding manures are fundamental parts of generation practices.

Indeed, even in the wake of collecting, cotton texture at garment factories is treated with an assortment of chemicals for enhancing appearance and execution. Cotton textures are frequently handled with lethal colors and formaldehydes before they achieve end clients.

Developing cotton without manufactured composts and different chemicals has been named green, environment well disposed, biodynamic, and so on, yet natural creation is the most prominent name utilized as a part of the cotton industry.

Organic cotton generation is an arrangement of developing cotton without engineered chemical composts, herbicides, routine manufactured insecticides, development controllers, development stimulators, boll openers or defoliant everywhere in India especially in Bijnor. It is a framework that adds to sound soils or potentially individuals. The natural framework advances upgraded organic action, supports supportability and charges proactive administration of production.

Organic cotton

Cotton is a standout amongst the most chemically concentrated among all field crops. Cotton is developed on an expected 3% of the aggregate developed zone on the planet, yet utilizes around 25% of all insecticides devoured in horticulture. Bugs are such a genuine danger to cotton generation that monetary yields are practically difficult to accomplish without observing nuisances and embracing chemical controls. Plant assurance operations have turned into the significant part of generation

practices and pesticides that are prohibited for use on nourishment harvests are normally utilized on cotton. In numerous nations, particularly where cotton is machine picked, herbicides, insecticides, development controllers and reap help chemicals notwithstanding manures are fundamental parts of generation practices.

Indeed, even in the wake of collecting, cotton texture at garment factories is treated with an assortment of chemicals for enhancing appearance and execution. Cotton textures are frequently handled with lethal colors and formaldehydes before they achieve end clients. Developing cotton without manufactured composts and different chemicals has been named green, environment well disposed, biodynamic, and so on, yet natural creation is the most prominent name utilized as a part of the cotton industry in Bijnor.

Organic cotton generation is an arrangement of developing cotton without engineered chemical composts, herbicides, routine manufactured insecticides, development controllers, development stimulators, boll openers or defoliant. It is a framework that adds to sound soils or potentially individuals. The natural framework advances upgraded organic action,

supports supportability and charges proactive cotton generation in Bijnor.

Some facts

1. Many chemicals utilized as a part of routine cultivating were initially created for fighting.
2. A source says that 25 million individuals worldwide are harmed by pesticides consistently.
3. 25% of the pesticides and composts utilized as a part of the world are splashed in traditional cotton crops.
4. Over 0.75 kg of lethal chemicals is utilized to develop the cotton required for a customary cotton sheet set and around 0.5 kg to make a T-shirt and match of pants.

Among every one of the pesticides utilized, approximately 65% of the chemicals are utilized against bugs, 20% are herbicides, and 14% are defoliants and development controllers while fungicides and others contain just 1% of the aggregate dangerous chemicals utilized on cotton.

2. REASONS FOR ORGANIC COTTON PRODUCTION

Regular cotton creation is furthermore a purchaser driven movement. There are various damaging chemicals that people don't consider. Twelve of these chemicals are known as diligent regular pollutions or POPs, which are the most dangerous of all man-made things or misuses that cause passing, birth distortions and afflictions among individuals and animals. They are hazardous to the point that 120 nations agreed at a United Nations Environment Program social affair to criminal them. Of the 151 signatories to the custom 98 states have embraced it; disastrously the United States and Russia have not yet done in that capacity. There are three of those chemicals used as a piece of cotton gathering. The going with are the central components accountable for normal cotton era:

- **Concern for the environment:** Manures and nuisances connected to the dirt, however every one of the chemicals are not taken up by the cotton plant. A few components are discharged into the earth while others filter into the dirt and furthermore contaminate water.
- **Concern for family health:** Peril of Insecticide inward breath by the splash men amid back mounted manual showering with no defensive equipment.

- **Lifestyle:** A few people were occupied with bug spray free cotton attire because of sensitivities.

- **To lessen input costs:** Insecticide utilize changed the creepy crawly complex in numerous nations. Some minor creepy crawlies got to be distinctly major and certain new bugs were presented.

- Consequently, there was an expansion in the utilization of insecticides.

Cotton is the most generally utilized characteristic fiber fabric in garments today. It represents very nearly half of the garment market around the world. It is utilized to make various garment items. These incorporate shower towels and robes, denim, shirts, socks, clothing, T-shirts, bed-sheets, and so on.

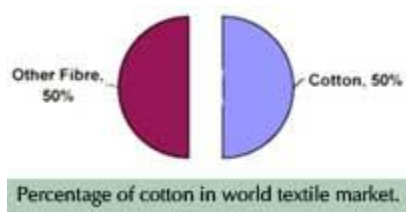


Figure 1: Cotton in World Textile Market

- Cottonseed meal for dairy cattle

Cotton in textile

- T-shirts, Shirts
- Trousers
- Underwear
- Vests
- Socks
- Baby wear
- Towels
- Bathrobes
- Denim
- Bed-sheet
- Napkins
- Diapers



Figure 2: Cotton Generation

Cotton in food

- Cottonseed oil

The cottonseed dinner that is left is by and large encouraged to domesticated animals. As much

as 66% of cotton product can crawl into the natural way of life. Every year, a large portion of a million tons of cottonseed oil advance into plate of mixed greens dressings, prepared merchandise and nibble nourishment; another three million tons of crude cottonseed are sustained to hamburger and dairy cows.

The present review is an examination on organic cotton articles of clothing and its impact on environment, additionally directs how it would create in Bijnor. In this way garments and garments have shaped the single biggest gathering of product in the nation's fare. It has been considered as the single biggest remote trade worker. Before the real information gathering, guiding of instruments would be done in Bijnor in light of comfort inspecting including the workers of garment industry. Guiding empowers the scientist to test the unwavering quality of the instruments. The polls would be conveyed to the representatives of garment industry in Bijnor in the meantime of study. The pilot think about empowers the scientist to acclimate herself with the organization of the instruments.

3. ANALYSIS

Organic cotton vs. conventional cotton

Conventional cotton: A danger to human life

1. Cotton uses around 25% of the world's bug spray and over 10% of the pesticide (counting insecticides, fungicides, herbicides, defoliants).
2. In the United States, 25% of all pesticides utilized are connected to cotton.
3. It takes about 33% of a pound of manufactured manures and pesticides to develop enough cotton for a T-shirt.
4. Five of the main nine pesticides utilized on cotton are malignancy bringing about chemicals (cyanazine, dicofol, naled, propargite, and trifluralin).
5. All of the main nine cotton pesticides in California are named by the US Environmental Protection Agency as Category I or Category II garments, the most lethal arrangements.
6. In India, 91% of male cotton cultivate laborers frequently presented to pesticides eight hours or more for each day encounter some sort of

wellbeing issue, including chromosomal deviations, cell demise and cell rot.

decade, a little number of ranchers and makers have spearheaded the market for naturally developed cotton, creating filaments and garments while fundamentally decreasing harmful chemicals.

Organic cotton: A healthy way of life

The uplifting news is that positive contrasting options to ordinary cotton and its related organizations are accessible. Over the previous

Table 1: Difference between organic and conventional cotton

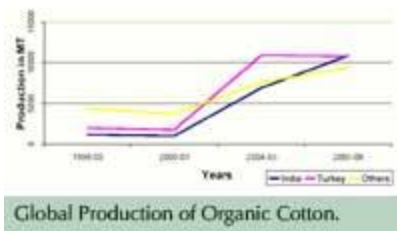
Criteria	Conventional	Organic
Seed preparation	Treatment of seed with fungicide of insecticide.	Uses untreated seeds
	Use of GMO (BT) seeds.	NO use of GMO/BT
Soil & Water	Applies synthetic fertilizers.	Uses bio fertilizers like cow dung.
	Loss of soil due to MONO crop culture	Strengthens soil through crop rotation
Weed control	Applies herbicides and insecticides.	Physical removal of weeds and bio-pesticides.
	Repeated application infecting air, water and soil	Use of mechanical and hand methods and totally harmless.
Pest control	Heavy use of insecticides. Consumes about 25% of world's total insecticides.	Use of natural predators to kill insects.
	Use pesticides which are highly toxic and carcinogenic.	Uses beneficial insects to control pests.
	Use of spray which affects air, water and also affects human life and nature.	Use of trap crop to control pests.
Harvesting	Defoliates with toxic chemicals.	Natural defoliation

Organic cotton: Market Potential

In 1998, Nike, one of the biggest games garments lines on the planet, chose to consolidate natural practices. The vast majority

of their items contain 3-5% natural filaments and they additionally offer a 100% natural line. Despite the fact that 3-5% may appear to be inconsequential, in the plan of things (and in the volume that Nike is delivering) the numbers

are very extensive. Nike alone uses about three-million pounds of organic cotton every year! What's more, other extensive organizations, for example, Patagonia, Timberland, and Orvis likewise fuse natural filaments into their garments lines; without open bolster these organizations would not be effective.



Figure

3: Production of Organic Cotton

1. **Organic has gotten on US and EU buyers like out of control fire:** The deals have been accounted for to increment over 300% in most recent five years. Also, the projections are much more bullish and the deals are relied upon to increment by around 1000% by 2008.
2. **Proven plans of action:** Patagonia in Ventura, California, and Nike, in Beaverton, Oregon are only two of the cases of organizations who have spearheaded the organic cotton advertise and are imparting their skill to the Cleaner Cotton Campaign.

3. **More and more brands joining the alliance:** Next, Adidas, M and S, Roots, Cotton Ginny, Target, Walmart.
4. **Consumer inclination:** Market examiners report that shoppers expect corporate duty as an issue of essential business hones. Organic cotton is an awesome approach to actualize it.
5. **Increasing creation and accessibility:** Global organic cotton generation has expanded quickly, keeping pace with its expanding request. From 99-00 the generation has expanded 4 times with India taking lead and in 05-06 it is relied upon to be most elevated maker of Organic cotton.

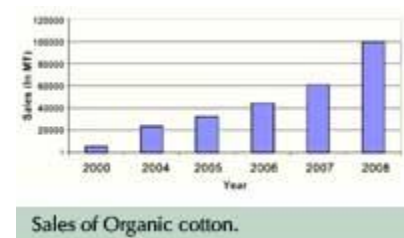


Figure 4: Sales of Organic Cotton

6. **Forthcoming regulations:** Conceivable bans on the most lethal farming chemicals, and also potential directions about marking on hereditarily designed items, indicate the need to create feasible, handy answers for cotton.

7. Quality product differentiation: Most customers who think about nature additionally think about quality; organic cotton filaments give the chance to market separation, especially among organizations with a superb brand picture.

8. A cleaner approach: Every T-shirt produced using one hundred %organic cotton spares 33% of a pound of engineered manures and ranch chemicals.

4. LIMITATIONS TO ORGANIC PRODUCTION

There are many reasons why organic cotton generation has not reached out to different nations. Nineteen nations attempted to create organic cotton amid the 1990s. Be that as it may, a large portion of them have effectively ceased, not for absence of craving or interest for such cotton, however for monetary reasons. Insecticides should be dispensed with from the cotton creation framework since they are perilous to apply, have long haul outcomes on the irritation complex, and pernicious consequences for nature. Likewise, overwhelming dependence on pesticide utilize has pushed numerous nations out of cotton generation.

The following factors have limited the expansion of organic cotton production:

1. Suitable varieties.
2. Fertilizer use.
3. Pest control.
4. Production technology.
5. Lack of information on cost of production.
6. Price premium.
7. Need for alternate inputs.
8. Tied crop rotations.
9. Non-organic genetically engineered cotton.
10. Certification.
11. Marketing.

5. CONCLUSION

The sympathy toward an existence without the utilization of greatly hurtful poisonous chemicals, the requirement for an eco-accommodating mechanical and horticultural culture and an expanding consciousness of exhausting regular assets and the outcomes in that; these are variables which are forming the ways of life of individuals around the world. It is in this setting the significance of organic cotton gets to be distinctly essential.

Organic cotton is better for our bodies as well as better for our surroundings. It improves

things greatly in the wellbeing and solace of our kin, particularly those with hypersensitivities, asthma, or numerous chemical sensitivities. Particularly newborn children can appreciate the purest delicate quality, solace and quality of cotton while decreasing the mischief to our surroundings since what is dangerous to you is 15 times more poisonous to an infant. Not exclusively do these engineered pesticides contaminate our air, water and soil, yet they endanger our future.

The customary cotton cultivating takes a bewildering measure of the duty regarding polluting our planet by utilizing a full quarter of the pesticides around the world. Twenty thousand passing can be licensed to harming by cultivating pesticides; three million individuals experience the ill effects of ceaseless medical issues announced by the World Health Organization.

REFERENCES

1. Organic Cotton Production - 3, the ICAC Recorder, June 1996.
2. Organic Cotton Production - 4, The ICAC Recorder, December 1998.
3. Limitations on Organic Cotton Production, The ICAC Recorder, March 2003.
4. Suitable Varieties for Organic Cotton Production, by M Rafiq Chaudhry, Head, Technical Information Section, ICAC, at the International Conference on Organic Cotton, Cairo, Egypt, September 23-25, 1993.
5. [www.sushantorganics.com/organic cotton](http://www.sushantorganics.com/organic-cotton).
6. www.csipl.net/templates/maral/innovation
7. www.mygoodnessduds.com.