



Organic Cotton – A Positive Solution! - Column 1

We all love cotton - cool, smooth and fresh, colored and decorated in an infinite number of ways. This fabric, which comes in everyday t-shirts, denim jeans, or as intricately designed and exquisitely executed batik pieces, has an image that is as wholesome as it is versatile.

But woven into this ubiquitous fabric is another darker thread - of chemical poisons, health impacts, falling water tables, and even farmer suicides.



Growing numbers of consumers, producers and retailers are becoming concerned about this sinister side of cotton, and its negative impacts on health and the environment. A fabric, previously perceived as harmless and in many ways healthy, is being rebranded as a health and ecological disaster area.

To understand why, we need to look at how cotton is produced. Cotton's positive image starts with the fact that it comes from plants grown in poor countries like Benin, Uzbekistan and India, providing a much-needed income for farmers. But how it is grown, and the chemical soup it is drenched in - from seed to sock, sarong or shirt - is a story rarely told.

The dark side of the cotton story starts with the humble commercial cotton seed, now often genetically modified (GM), especially in India. Farmers are pressurized to use GM seeds which require an expensive chemical arsenal to produce the crop.

Not only are chemical fertilizers used, but a toxic soup of pesticides, insecticides and fungicides are sprayed onto the cotton as it grows. Each crop is sprayed around five times - earning cotton the nickname 'the world's dirtiest crop'.

In India, if the crop fails or the global cost of cotton falls, indebted farmers in their tens of thousands have seen no way out of their situation apart from killing themselves - frequently with the very pesticide which was supposed to provide a better life.

The dark threads of the commercial cotton story continue through the production process. Toxins like aldicarb (the second most used insecticide in cotton production) cannot be washed out of the fabric. Most are not water soluble and a single drop of aldicarb can kill an adult. So we end up wearing these deadly toxins, tiny amounts maybe, for days, hours or years - next to our skin which can potentially absorb them.

The production process for commercial cotton uses even more chemicals - from fiber processing to yarn spinning, from dyeing to manufacture, and screen printing. These chemicals include dioxin, a known carcinogen and hormone disruptor. According to WHO (World Health Organization) 'Dioxins [are] considered highly toxic and able to cause reproductive and developmental problems, damage the immune system, interfere with hormones and also cause cancer'.

In another twist to the increasingly grim cotton story, cotton is one of the thirstiest crops in the world. Scientists have estimated that it takes around 2,700 liters of water to make one cotton T-shirt - enough for one person to drink for 900 days.

Fortunately, for those of us who like happy endings, there is a solution: organic cotton, grown from non-GMO seeds, using compost, crop rotation and traditional organic pesticides. It even needs less water to grow. Organic cotton changes lives for farmers, is healthier for wearers and doesn't destroy the environment. We look forward to sharing more about this positive cotton story in our next column. **B**