

n the June issue of Natural Health I wrote an article called "The Tencel Story". As far as I know, there's only one version to that story. That is, there's only one way to produce Tencel—the award-winning Lenzing way.

One Story, Two Endings

There's another clothing material story, but this one comes in two versions—one with a sad ending, another with a happy one. I'm referring to the cotton story.

There's a big difference between the cotton story and the Tencel story—the former is far more important than the latter. The reason: We use much more cotton than Tencel. According to the European Man-made Fibres Association, 24.35 million tons of cotton fibres were produced in 2010 whereas only 4.28 million tons of cellulosic fibres were produced in that same year. In other words, the cotton market is about six times the size of the cellulosic market. Besides, out of those 4 million odd tons of cellulosic materials, only a small percentage is Tencel. So the cotton story is big—much bigger than the Tencel story—and it needs to be told.



But first, why two different versions?

If you will recall, I wrote several months back that there are basically two ways to grow cotton: the conventional way and the organic way. The two different ways lead to two different endings. Let's briefly consider the differences.

Organic cotton is produced and certified in accordance with organic agriculture standards. Organic agricultural practices may vary slightly from country to country but common to all is the prohibition of synthetic agrochemicals. Such chemicals (e.g. pesticides and herbicides) are bad news, health- and environment-wise—they're poisonous, persistent, and petroleum-based—the 3P's. Unfortunately, cotton farmers farming the conventional way can and do use this sort of chemicals. And this has brought about a great deal of unnecessary pain, suffering and in some cases, death.

I wish the last sentence were not true. But sadly, it is. I'd like to share with you a few chapters from this tragic story. I begin with the episode on Modachirou Inoussa.

The Cotton Tragedy

Modachirou Inoussa is a boy from the West African nation of Benin. Although he's only eight years old, he's already helping his parents in the cotton fields. Benin is highly dependent on cotton—the crop accounts for 40% of the country's GDP. One day, Modachirou runs back to his home, feeling thirsty. Finding nothing to drink, he sets off to look for his parents. Along the way, he finds an empty container. He picks it up, scoops some water, and has a drink. Modachirou does not return home that evening. A search party later finds his body next to a pesticide container—the same container that is used to quench his thirst.

ORGANIC & Wholesome

The second episode is about Issaka. He's also from Benin, but he's an adult with four children, aged between six and eight. One day in August, Issaka treats his cotton field with pesticide. He goes home after a hard day's work. He then does a curious thing: he leaves his work clothes on the roof. This suggests that he is aware of the dangers of pesticides—he's keeping his clothes away from his children because of the pesticide residue on them. Alas, Issaka's precautionary measure fails him that August day. It rains that night and the water passes through his clothes, dripping into domestic vessels. The next day, the children drink from these vessels. Several minutes later, they begin to experience headaches, nausea and convulsions. They are urgently sent to a health centre where they are treated with Diazepam, glucose serum and oxygen. The treatment is, however, ineffective. Within 20 hours, all four of them pass away.



Such heart-breaking episodes are not confined to Benin; they occur in many other countries. Furthermore, such poisoning-related deaths affect not only children but also adults. According to the International Institute of Sustainable Development (IISD) and the World Wide Fund for Nature (WWF), "studies have estimated the human impact from pesticides used on cotton to be as high as 20,000 people killed and 3 million poisoned every year."

But that's not the end of this tragedy. The farmers' reliance on pesticides can also drive them to suicide. Consider the case of India. Cotton accounts for only 5% of India's cropland; but the country's conventional cotton farmers apply an estimated US\$344 million of pesticides annually—this is 55% of the country's entire expenditure on agricultural pesticides! These pesticides aren't exactly cheap and many of the Indian farmers can't afford them. But because they believe their crops can't thrive without pesticides, they're willing to go into debt to buy them. Crop protection is, however, merely one of several success factors. The right weather is another important factor but the weather these days can be unpredictable, possibly due to climate change. Too little rain-or too much-will contribute to crop failure. When that happens, the farmers can't settle their debts. A painful decision is then made: some choose to go to jail, some choose to end their lives.

How to Have a Happy Ending

Is there anything we can do to help the conventional cotton farmers? Yes, we can all buy organic cotton products. By doing so, we help to increase the demand for organic cotton. When they can see the demand clearly, the farmers should be more



willing to switch to organic farming. This in turn will help them attain an agrochemical-free life and ultimately, a better quality of life. You see, organic farmers don't rely on pesticides to manage pests. Instead, they create a habitat for the pests' natural predators and they



plant so-called "trap crops" to lure pests away from the cotton. They don't rely on herbicides, either. They deal with weeds the old-fashioned way—they remove them by hand.

Moreover, when we buy and use organic cotton products, we're actually helping ourselves. A study has shown that the poisonous pesticides applied during conventional cotton production can be detected in cotton clothing. These residual chemicals can leach into our skins, harming our health. More importantly, we're preventing poisons from entering the human food chain when we go organic. How? Besides producing cotton, the farmers also produce cottonseeds. These seeds can be made into cottonseed oil, which makes up roughly 8% of the world's vegetable oils market. They can be made into animal feed too. The bad news is, pesticide residues have been detected in the cottonseed hull. And it's estimated that as much as 65 percent of harvested cotton produce ends up in our food chain, whether directly through food or indirectly through the milk or meat of animals. By going organic, we make sure our food is safe.

We have the power to give the cotton story a happy ending. We have the power to help millions of cotton farmers. The sad truth is we are not exercising that power. Statistics reveal that conventionally grown cotton makes up 99% of the global cotton production. We are, in other words, addicted to conventional cotton. We must break this habit. For the sake of humanity, let us buy and use organic cotton products.





CW Tan is the CEO and Diretor of Nukleusshop – a revolutionary brand for fashionable sustainable and affordable men's and women's underwear and basics.

For more information on Nukleus innerwear, visit www.nukleusshop.com. You can also follow the converastion on sustainable clothing and living at www.facebook.com/Nukleuswear