



# *My Sustainable T-Shirt*

**A Guide to Organic, Fair Trade,  
and Other Eco Standards  
and Labels for Cotton Textiles**



**PESTICIDE  
ACTION  
NETWORK UK**

My Sustainable T-Shirt: A guide to organic, fair trade, and other eco standards and labels for cotton textiles.

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## Introduction: Why this guide by PAN UK?

Are you confused by the proliferation of standards, labels, various “eco” or “ethical” claims about textiles (*eco-friendly, green, sustainable, organic, 100% natural, azo-free, fairly traded, Fairtrade, ethically traded*)? What do they mean? Are they legitimate and reliable labels? What difference do they make? How can we be sure?

*A profusion of labels*

Most consumers are understandably confused, and may consequently be suspicious. The textile industry has tremendous negative impacts on the environment, health and livelihood of cotton farmers and workers. Evidence suggests that it may also threaten the health of consumers. National and international regulations are still too limited to effectively address those issues.

Fortunately, many private certification schemes exist for textile fibre production and processing. Most are very reliable, and are an invaluable tool for consumers who want to purchase textile products which are socially and environmentally sustainable. However, private certification schemes, no matter how stringent, are only valuable if they are understood and trusted by consumers. This guide aims to provide concise and fair information about the major textile certification schemes: Organic, Fair Trade, and other “Eco Labels”. A simplified version for consumers will soon be published.

Pesticide Action Network *UK* is an independent charity, with no formal links to any certification or labelling body, textile, or clothing industry. PAN *UK* Cotton Programme’s objective is to contribute to the growth of the organic and fair trade cotton market in Europe, in order to benefit the health, livelihood, and environment of small scale producers in developing countries.

*...to benefit the health, livelihood, and environment of poor small-scale farmers around the world*

# Background: the unethical clothing industry

Textile and clothing manufacture is an ancient industry which, for thousands of years, has been based on skills, craftsmanship, ground-breaking technologies, and ingenious use of natural resources.

However, pressure to produce quickly increasing quantities of cheap textiles has led the industry to adopt some of the most unethical trade practices on the planet. Sweatshop practices have been denounced very successfully in the past 10 years, and you are probably aware of the unacceptable working conditions which have been the norm in many manufacturing mills in the developing world, such as long working hours, low wages, and child labour. As a result, your expectations as a consumer have forced popular brands to look into the conditions in which their products are manufactured, and some companies are now auditing their suppliers on a regular basis to ensure minimum standards. The **International Labour Organisation** provides guidelines for labour standards to which companies should abide. Things are getting better, very slowly...

On the other hand, the environmental and social negative impacts of **fibre production** and **fibre processing** are only starting to be addressed. Most consumers are still unaware of those severe and wide-ranging negative impacts. You may recognize that synthetic fibres are not sustainable: they are mostly made from oil, and are not biodegradable. But before you, like many consumers, can regard cotton as a natural fabric, ethically and environmentally superior to any man-made fibres, attention needs to be given to the way it is grown.

*Is today's cotton really natural?*

It is true that cotton can be produced in an environmentally friendly way, while contributing to alleviate poverty in some of the least developed countries. But in practice, this is not what we observe today.

Let's discover what our *consumer power* can do to put sustainability back into cotton production.

# How are T-shirts Made?

In order to understand what the various standards are designed for, and what an organic or fair trade T-shirt means, it is important to know how cotton textile is made. This guide follows the life of a cotton T-shirt.

## Fibre production

It started with a farmer who grew cotton plants for over 5 months. He or she may have been a large American farmer with heavy machinery, or a



very poor farmer from West Africa, or a farmer who lives under constant fear of an oppressive regime such as Uzbekistan<sup>1</sup>. All the cotton in your clothes probably comes from a mix of all these places, and many others.

**MADE IN THE UK: this hazardous insecticide<sup>10</sup> has been linked with fatal poisonings among cotton farmers in West Africa<sup>11</sup>.**

It also probably contains, whether you like it or not, genetically modified fibres. One thing is certain, it was grown using a large amount of pesticides, toxic chemicals designed, as the name suggests, to kill pests: insects, weeds, fungus, or any other kind of living things. Most of this cotton was also grown on poorly managed soils, which would be almost sterile

without large amounts of synthetic chemical fertilizers. More insecticides are sprayed on cotton than on any other major crop. Many problems are associated with this production method. Please refer to [www.WearOrganic.org](http://www.WearOrganic.org) for further details. Severe negative impacts include: loss of biodiversity and damage to ecosystems and wildlife, depletion of precious natural resources such as water and soil, and heavy contamination of water bodies. The ecological devastation of the Aral Sea area in central Asia, one of the most visible ecological disasters on the planet, almost entirely due to cotton production, symbolises cotton's environmental impacts. Other impacts include poisoning (sometime fatal) of millions of farmers, and intolerable indebtedness of millions of poor farmers trapped on the "pesticide treadmill", which has led to thousands of suicides<sup>2,3</sup>. In some areas, the cost of chemicals is now reaching 60% of farmers' production costs. PAN UK believes that the use of pesticides on small-scale cotton farms in developing countries has unacceptable negative impacts on the health of farmers and their families, and on their environment. On such farms, the level of training required to avoid hazards

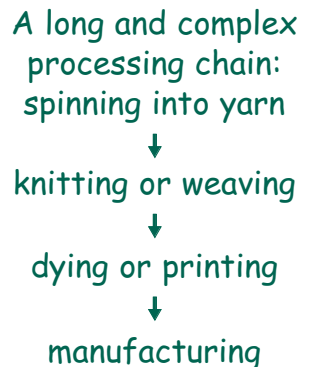
*Destruction of ecosystems and wildlife*

when using pesticides is seldom attainable. The necessary protective equipment is almost never used because of its lack of availability and its prohibitive price, and is inappropriate for use in tropical climates. This problem has long been recognized at the international level. The **Code of Conduct on the Use of Pesticides**<sup>4</sup> of the United Nation's Food and Agriculture Organisation recommends that hazardous pesticides, including many of the pesticides used on cotton, "should be avoided by small-scale users in tropical climates", considering the lack of availability of appropriate safety equipment. Unfortunately these recommendation are still completely ignored.

After the harvest of the cotton bolls, the cotton goes to the mill to be "ginned": the seeds are separated from the cotton fibres (2 to 4 cm in length). This is where the fibre production stage ends, and the cotton fibre is ready for processing.

## Processing

There are many stages required to process cotton from fibres to fabrics. The fibres are cleaned, carded (combed), spun into yarn, coated with starches or chemicals, woven into fabric (or knitted in the case of your T-shirt), cleaned up from their coating and their natural wax, bleached, immersed in concentrated caustic soda, dyed or printed, and chemically treated for easy care and other properties. All these stages require a large number of chemicals of various toxicity and hazards. Some of these chemicals threaten the health of workers, while others cause environmental pollution from the mills' waste water. Finally, many of these chemicals are found as residues in the finished product, and some of them may affect the health of consumers, and are suspected to cause allergies, eczema, and even cancers<sup>5,6</sup>.



*Chemical residues in your clothes may cause cancer*

Many improvements have been made in the past 20 years: chemicals are increasingly recycled or replaced by safer alternatives, and waste waters

are treated in order to reduce pollution. However these improvements mostly concern processing mills in rich countries, and sub-standard environmental practices are frequent in developing countries, where most of your clothes are made. Many chemicals have been banned, in particular chemicals found as residues in clothes that have been proven to cause cancer (such as benzidine, linked to “exceptionally elevated risks” of bladder cancer<sup>7</sup>). Some dyes, from a group called azo-dyes, have been proven to release cancer-causing substances, and have recently been banned by a European Union law<sup>8</sup>. Until very recently, these chemicals were widely used. Finally, some chemicals such as formaldehyde, which is a skin irritant and has been linked to cancer<sup>6,7,9</sup>, are restricted, but still allowed. Thresholds for what is considered “safe” are set according to current scientific knowledge, and are often influenced by the powerful industry lobbies. As often, the precautionary principle is rarely exercised: and a chemical is considered safe and remain in use after concerns are identified, until undisputable proof of its harm can be provided.

Many chemicals used in cotton processing which were considered acceptably “safe” 20 years ago, are now unacceptable. And what about today’s safety thresholds? Will they pass the test of time?

## Product Manufacturing

This is the third and last stage where textile finished products are manufactured from fabrics, yarns, and accessories. Some accessories used in the clothing industry (zips, buttons, screen prints, etc) also threaten the environment (such as the production and disposal of PVC material) and the health of consumers (such as materials which can release chrome, cadmium, lead, nickel and other heavy metal residues, suspected to cause cancer or skin allergies).







# My Organic Cotton T-shirt:

How was it made? What difference does it make? How Can I be sure?

Organic standards are without a doubt the most powerful tools to address the negative environmental impacts of modern conventional agriculture. It is important, at this point, to distinguish between ① **a T-shirt made with organic cotton**, and ② **an organic T-shirt**. These are two different things. The common characteristic is that they both use 100% organic cotton fibres.

In short, ① **a T-shirt made with organic cotton** is made with certified organic fibre, but is NOT necessarily certified throughout the supply chain (processing and manufacturing).

In contrast, an ② **organic T-shirt** is certified “organic” throughout the whole chain, from the cotton fields until the retail store. The use of the word “organic” here can be controversial, and varies from countries to others; the word “sustainable” is sometimes preferred (see page 11 for more details).

	① T-shirt made with organic cotton See page 11	② Organic T-shirt See page 14
<b>Cotton Fibre</b> (Raw Cotton) ↓	✓ Certified organic (EU 2091/92) or equivalent	✓ Certified organic (EU 2091/92) or equivalent.
<b>Processing</b> (spinning, weaving, dyeing, etc.) ↓	✗ No organic certification	✓ Certified “Organic” or “Sustainable” (private voluntary standards)
<b>Manufacturing</b>	✗ No organic certification	✓ Certified “Organic” or “Sustainable” (private voluntary standards)
<b>Labelling</b> (example)		plus any of the following     

## Organic Cotton Fibre

Cotton is a plant. It can be grown following the strict principles of organic agriculture. You can find an organic cotton fibre grown from an organic cotton plant on an organic farm in West Africa, in the same way that you can find an organic strawberry grown on an organic British farm. Organic agriculture uses no synthetic chemical pesticides, no synthetic fertilizers, and no Genetically Modified Organisms (GMO). Organic fertilizers (such



An organic farmer sprays a food product on its cotton plants to attract the beneficial insects which will then feed on pests, and keep them under control. This is much safer and cheaper than spraying highly toxic insecticides. Nature and wildlife are preserved.

as manure) and plant-based pest management products (such as neem or garlic extract) are used. However, organic agriculture is not only a mere substitution of synthetic inputs with natural inputs. The major principle is to restore a natural balance within the farm, with healthy and well-structured soils, rich in organic matter. In such an environment, the pests (any living things which damage the crop) are not systematically destroyed by poisons, but are kept under control by their predators, just as they are in nature. Biodiversity (the diverse range of living species: plants, animals, micro-organisms) and agro-diversity (the diverse range of crops planted by the farmer, as well as livestock) are integral parts of an organic farm. Please refer to [www.WearOrganic.org](http://www.WearOrganic.org) for further details.

The organic cotton fibre that is harvested is similar to most conventional cotton fibres, except that it is guaranteed non-GM, and is not contaminated with pesticides. The main difference is that the ecosystem where it has been produced has not been damaged, and the farmer and his or her family have not been poisoned by chemicals.

The cotton fibre is certified as an **organic agricultural product**, along with other crops on the farm, by a private certification body, which guarantees that the rigorous organic standards have been strictly followed. The UK-based Soil Association, for example, is one among over 100 such certification agencies worldwide, which are accredited and

audited by various bodies such as the **International Federation of Organic Agricultural Movement** or the **US Department of Agriculture**. There are many sets of organic standards for agricultural products that have been developed by many certification bodies or other organisations. However they are all based on a limited number of “basic” or “minimum” standards. In Europe, basic organic standards are set in a European Union Council’s Regulation from 1991. The detailed description of the standards is out of the scope of this guide: you can refer to this 60-page EU regulation<sup>12</sup>. This regulation, ratified by EU member states, also regulates the word “organic” for agricultural products. In the USA, the basic standards for organic food products are set by the US Department of Agriculture as part of the National Organic Programme. The standards also apply to the cotton plant, because cotton, apart from the fibre, also produces food products (vegetable oil and animal feed from cotton seed).

Therefore, the certification of cotton fibre as an organic agricultural product is extremely reliable. If the label of your T-shirt claims that it has been made with organic cotton, you can be confident that the cotton fibre has really been grown organically. There is no need for a logo, the word “organic” (or “biologique”, “bio”, depending on the language) is sufficient: it is the law! However, be aware that it only offers you a guarantee on the growing stage of the cotton fibre, and not on the processing or the manufacturing. You will find out more about processing and manufacturing in the next section.

*The EU regulates organic  
agriculture*

## Organic Cotton Fibres: 100% sustainable?

Organic standards and certification are extremely stringent and reliable, and are undoubtedly the best certification scheme to make agriculture more environmentally sustainable. Organic agriculture ALWAYS constitutes a major improvement on conventional practices. With respect to cotton, it also provides outstanding benefits to farmers, especially poor small-scale farmers, in terms of improved health, income, livelihood, and food security. Many of the poorest people on earth are cotton farmers, and your organic cotton T-shirt has probably made a difference in the lives of some cotton farming families.

*Rain-fed organic cotton from West Africa is a model of sustainable agriculture*

However, some observers suggest that organic standards are not always able, by themselves, to guarantee complete environmental sustainability in cotton production, because of two main limiting factors:

Firstly, cotton requires a significant amount of water to grow. Unfortunately, many areas where cotton is now grown do

not get enough rain, and farmers rely on irrigation. Water is a renewable resource, and a carefully managed irrigation system can enable a sustainable use of water resources. Nonetheless, this is not the case in many irrigated cotton areas, and the emptying of the Aral Sea in central Asia is the worst example of this. It is estimated that 60% of irrigation water in central and southern Asia is lost before reaching cotton fields because of poor infrastructure<sup>13</sup>. While there is some evidence suggesting that organic agriculture contributes to water conservation thanks to healthier soils, with better moisture retention capacities, organic standards need to evolve in order to better address the water issue. In spite of this, some organic cotton is grown in 100% rain-fed agriculture, which ensures sustainable use of water resources: organic cotton from West Africa may be the best example. In addition, most organic cotton projects in irrigated areas are often pioneering water management best practices, such as drip-irrigation. Organic cotton projects around the world often go beyond organic standards, and are demonstrating that cotton can be grown in an environmentally sustainable manner.

Secondly, one of the major impacts of agriculture on the environment is the clearing of precious natural habitats, such as rain forests, to increase agricultural area. The risk is particularly high in countries such as Indonesia or Brazil, but also in Africa. Some private organic standards, such as the Soil Association's standards, prohibit clearing of primary ecosystems. However not all standards address this issue, and the risk exist in cotton growing systems. Brazil, for instance, is one country where cotton production could explode in the future, thus posing a potential threat to its natural habitats. Fortunately, none of the 53 organic cotton projects<sup>14</sup> worldwide appear to have caused such impacts, as these projects usually adopt responsible conservation practices .

Finally, economical and social sustainability also need to be considered. While organic cotton farmers can hope for better incomes thanks to lower production costs (no expensive chemicals are used), lower health costs, and organic premium price, they are still at the mercy of highly versatile cotton market prices. Farmers typically receive a 20% premium for their organic cotton, but if world cotton prices drop, their income may also decrease. A wider crop diversification can mitigate this risk, and most organic cotton projects are working toward this goal. Cotton prices are also kept artificially low because of unfair subsidies paid to cotton farmers in the USA and Europe, which violates rules of the World Trade Organisation<sup>15</sup>. Organic agriculture, unfortunately, is unable to directly address this issue, but can mitigate its impact. It can also help raise awareness of the issue, thus pushing for more equitable international trade practices in the future.

*Crop diversification mitigates  
the risk of world market  
price fluctuation*

## My organic T-shirt

You learned in the previous section what organic cotton means: cotton fibres grown organically and certified as an organic agricultural product. Still, there is a long way from the fibre to a T-shirt. The EU Organic standards and USDA's NOP do not address any of the many processes required to transform the fibre into fabric, and to manufacture your T-shirt. Therefore, theoretically, a T-shirt could be made with organic cotton, but still be processed in mills with poor environmental practices, polluting waste waters with heavy metals, and could ultimately contain a high level of toxic chemical residues.

In order to address those processing and manufacturing stages, a handful of organisations, mostly organic certification agencies, have developed their own private voluntary "organic" or "sustainable" standards for textile, and are certifying finished products according to those standards. What we commonly call in Europe an "organic T-shirt" is a T-shirt made with certified organic cotton fibre, and processed according to those textile processing standards. All the processing stages described in page 4-5 are certified against a set of standards. The certification agency then authorises the manufacturer to add its logo (or mark, or symbol) on the T-shirt's label. This is essential in order to recognize an organic T-shirt, as there is currently no regulation for organic textiles.

The criteria described in all these standards vary, but the differences are not significant. Consumers need to realise that the processing and manufacturing processes are not really "organic" in a similar way that agricultural products are "organic": some essential chemicals and synthetic materials are still being used. But what those standards aim to achieve is to maintain the integrity of the organic nature of the fibre as much as possible. This is achieved by using as much organic material as possible, and by adopting alternative chemicals and processing practices that minimize the impact on the environment, and protect the health of consumers, while insuring textiles of high quality, and that are economically feasible.

*No regulations yet for processing of organic cotton*

Such certification agencies and their textile processing scheme include:

Organisation	Logo
<p><b>Soil Association,</b> Organic Textiles</p> <p>United Kingdom</p>	
<p><b>Control Union International</b> (fka SKAL International), Sustainable Textile Production Programme Standards for the processing of natural fibres</p> <p>Netherlands, International</p> <p><i>NB: Textiles are described as “sustainable” rather than “organic”; although the cotton fibre is organic, the processing criteria are generally slightly less stringent than other standards listed here.</i></p>	
<p><b>AIAB-ICEA</b> Tessile Biologico (Organic Textiles)</p> <p>Italy</p>	
<p><b>Demeter International e.V.</b> Processing of textiles from DEMETER fibres (includes IVN Standards)</p> <p>Germany</p>	
<p><b>International Association of Natural Textile Industry (IVN)</b> IVN Best – Naturtextil</p> <p>Germany</p>	
<p><b>Naturland</b> Processing Standards for Textile</p> <p>Germany</p>	
<p align="center"><b>Other certification Programmes in</b> Germany, Denmark, Switzerland, Sweden, Japan, USA and Canada.</p>	

A process of harmonisation of these standards started in 2002 when a number of certification and standard bodies met to form an international working group in charge of developing the Global Organic Textile Standards (GOTS). Founding members were the Soil Association (UK), IVN (Germany), OTA (USA), and JOCA (Japan). These standards are being implemented since September 2006. The GOTS also enables the labelling of cotton fibre from the organic conversion period, for example “100% organic cotton – in conversion”. Cotton in conversion is grown on land which has only recently been converted to organic methods (typically less than 2 or 3 years). Therefore, although no chemical pesticides and synthetic fertilizers are being used, residues are still found in the soil. This conversion period is very difficult for farmers, who usually experience an initial drop in yield, while not being able to obtain premium organic price for their crops. Therefore, labelling fibres in conversion can be a very useful method to help farmers convert to organic.

Several other certification bodies are now expressing the wish to join this initiative. Soon, most organic textiles will probably be certified against this unique set of private, voluntary, basic standards. A detailed description of these standards is beyond the scope of this guide, but you can learn more on [www.global-standard.org](http://www.global-standard.org)

*The Global Organic  
Textile Standards:  
harmonisation and clarity!*

## What you can expect from your certified organic T-shirt?

Here is what you can expect from your certified organic T-shirt:

### *Fibre*

- ✓ 100% of cotton fibres are certified organic\*, no synthetic chemical pesticides or fertilisers have been used.
- ✓ Your T-shirt DOES NOT contain ANY conventional cotton: no farmers have suffered from pesticide poisoning to produce your T-shirt's cotton fibre.
- ✓ Your T-shirt is GUARANTEED GM-free.
- ✓ A maximum of 10%\*\* synthetic or man-made fibres (with restrictions) may have been used (for elasticity in socks, for example)

\* Or organic in conversion, as indicated.

\*\* Proportions vary among labels.

## *Processing*

During all stages of processing, from spinning to dyeing and packaging, chemical products containing the following hazardous and polluting compounds (which are commonly used in the conventional textile industry)

**HAVE NOT** been used:

- ✗ Formaldehyde
- ✗ Aromatic solvents
- ✗ Heavy metals (except for iron and restricted quantities of copper)
- ✗ Toxic chemicals
- ✗ Chemicals toxic to aquatic environments
- ✗ Non-biodegradable substances which, for example, can accumulate in fatty tissues of fish, mammals, and humans
- ✗ Chlorine bleach
- ✗ Azodyes that release cancer-causing substances (see page 27)

In addition, any alkaline substances (such as caustic soda) have been **✓recycled**, and have not been released in water bodies. Any waste water discharge has been treated in a **✓waste-water treatment plant** and is monitored.

## Blended organic/conventional cotton T-shirts

Several major brands, especially in the US, have been using for many years a small proportion (typically 5%) of organic cotton in some of their garments (Nike, Timberland,...). The organic and conventional cotton fibres are “blended” together before being spun into yarn, in the same way that conventional cotton fibres of

many different origins are usually blended to produce yarns of consistent quality. The finished products still contain 95% conventional cotton, possibly including GM cotton, and are processed conventionally. Therefore, they can hardly be described as sustainable or even environmentally friendly. However this system has some benefits. First of all it allows very large companies to include some organic cotton into their range of products; the current limited volume of organic cotton available globally would not allow such large companies to offer a significant proportion of their product ranges with 100% organic cotton. Blending also helps organic cotton production to grow, until it will be sufficient to supply 100% organic cotton to the largest brands. Until now, none of those companies have indicated the organic content of their products on the label. The US-based organisation **Organic Exchange** has set up a programme and a certification scheme to allow better control on the true organic fibre content of the blended yarn.

*5% Organic cotton: a good start for large companies.*

# My Fair Trade Cotton T-shirt:

How was it made? What difference does it make? How can I be sure?

Fair trade is a worldwide movement which aims to ensure that producers in developing countries receive a fair price for their work, benefit from acceptable working conditions, and improve their livelihood, including access to education and healthcare. Two thirds of fair trade products are sold in Europe. In contrast to organic agriculture, there are no public regulations for fair trade, and the fair trade movement is not formally unified\*. Therefore it is essential for consumers to learn what fair trade exactly means. Some EU countries, such as France and Belgium, are starting to consider regulating fair trade, and it is possible this could lead to further moves in the EU. To date, anybody can claim to be trading its products fairly. This guide will help you recognise a genuine fair trade product.

There are two very different fair trade models, and this also applies to cotton and clothing. Both models aim to achieve the same objectives mentioned above, but the methods used are very different.

*2 different fair trade models:  
Fair Trade organisations and shops  
Vs.  
FAIRTRADE™ labelled products*

\* Coordination efforts of the fair trade movement have been initiated in 1996, with the creation of "FINE" by FLO, IFAT, NEWS!, and EFTA. However, this remains an informal coordination initiative.

## Fair Trade Organisations and Shops

*"World Shops" sell  
fairly traded  
products*

The oldest pillars of fair trade are represented by fair trade shops, often called World Shops (2,800 in Europe), which are often staffed by volunteers. All products sold in these shops are fairly traded. Many of these products are distributed by fair trade importing organisations. The very existence of these organisations is based on the fair trade philosophy. They are "actively engaged in supporting producers, in awareness raising and in campaigning for changes in the rules and practices of conventional international trade". The products are not labelled, and there are no specific production standards for goods. The best

way to be sure that a shop or organisation sells genuinely fairly traded products is to check that it is a member of one of the existing fair trade associations or federations, such as **IFAT** (International Fair Trade Association), **EFTA** (European Fair Trade Association), **BAFTS** (British Association for Fair Trade Shops), or any equivalent national World Shops associations. Those organisations adhere to voluntary codes of conduct, rather than product-specific standards.

IFAT introduced a logo in 2004. The logo is an "organisation label", NOT a product label. It is awarded to organisations which successfully implement the requirements of IFAT's standards and monitoring system. The standards are verified by self-assessment, mutual reviews, and external verifications. IFAT standards include criteria regarding working conditions, wages, child labour and the environment. Organisations displaying the logo are required to demonstrate constant improvement in their trading practices.



Some organic cotton retailers in the UK are IFAT members: People Tree, Traidcraft, and Bishopston Trading Company. This means they seek to implement the IFAT criteria, in particular working with small scale producers.

## FAIRTRADE™ Labelled Products

Fair trade labelling organisations are the most recent newcomers within the fair trade movement. Yet they have been the most successful in recent years, in terms of increasing the fair trade market. In 1988, the first fair trade labelling scheme called “Max Havelaar” was developed in the Netherlands. The goal was to develop fair trade standards for each type of product, and to certify and label the products accordingly. Those products could then be sold by mainstream retailers and supermarkets.

*The FAIRTRADE  
Mark: a remarkable  
success!*

There are now 21 National Labelling Initiatives (NI's), grouped under the umbrella organisation **Fairtrade Labelling Organisations International** (FLO e.V.), which develops the standards. Its sister organisation **FLO-Cert** certifies all the products. A single logo, or ‘Certification Mark’, is now used throughout the world. The UK's labelling initiative is **The Fairtrade Foundation**, which uses the international Fairtrade Certification Mark and the term “certified cotton”. Companies use the registered FAIRTRADE Mark (Fairtrade in one word) on certified product. In some European countries the same Certification Mark is displayed with the name of the NI (ie “Max Havelaar” in France, Netherlands and Switzerland).



® Fairtrade standards for seed cotton (the raw cotton, before ginning) were developed in 2004, and the first Fairtrade label for seed-cotton was launched in France and Switzerland in March 2005. In the UK, the FAIRTRADE Mark for seed cotton was launched in November 2005. It ensures that cotton producers have received a fair deal for their work. For further details, read the Generic Fairtrade Standards for Small Farmer's Organisations, and the Fairtrade

Standards for Seed Cotton from FLO website [www.fairtrade.net](http://www.fairtrade.net).

To this date, the standards only cover the seed-cotton, with a social compliance assessment covering the processing and manufacturing. This means that a T-shirt bearing the FAIRTRADE Mark was made with at least 50% Fairtrade-certified materials (non-cotton materials such as accessories or elastic fibres do not have to be Fairtrade). However 100%

of the cotton is Fairtrade. FLO Cert completes a social compliance assessment of the processing and manufacturing stages prior to the registration of the whole supply chain. Processors and manufacturers are required to produce evidence that minimum national and international legislations with respect to labour rights are adhered to. In principle, this ensures that your Fairtrade T-shirt, at a minimum, has not been produced in sweatshops or using forced child labour. FLO is currently researching the feasibility of a Fairtrade standard for textiles and certification at a garment making level.

## Does Fairtrade Cotton Effectively Address the Problems Linked to Conventional Cotton?

The Fairtrade standards include environmental criteria, which mostly require farmers to work toward best environmental practices, and encourage them to convert to organic agriculture. An “Integrated Crop Management” system is progressively adopted, which seek to minimize the use of agrochemicals, and prohibit the use of the most hazardous pesticides. Nonetheless the use of pesticides and synthetic fertilizers is still allowed, as many poor farmers, without strong support to learn organic methods, would not be able to join the scheme if chemicals were completely prohibited. As a result, Fairtrade certified cotton is not necessarily organic.

*FAIRTRADE cotton  
is not necessarily  
organic!*

Fairtrade cotton farmers are required to use individual protective equipment when spraying pesticides. This undoubtedly reduces the risk of pesticide poisoning. However safe use of pesticides is very difficult to achieve, especially by small-scale farmers working under tropical climates in developing countries (see pages 3-4). For this reason, PAN UK's view is that current Fairtrade standards for cotton do not address sufficiently health and safety issues.

Considering that organic cotton projects on every continent have proven the feasibility of organic cotton, and considering the many benefits that organic cotton production have brought to small-scale farmers around the

world, PAN *UK* encourages FLO to continuously revise its environmental, health and safety criteria for cotton, and do more to assist producers to work toward conversion to organic agriculture. Conversion to organic agriculture is a long and difficult process, and Fairtrade, thanks to its efficient Internal Control System, and its price premium, constitutes a great opportunity to assist cotton producers to slowly convert to organic agriculture. The Fairtrade premium can be used in part to finance organic agriculture training, and the successful FAIRTRADE mark can enable farmers to benefit from premium market access during the difficult organic transitional period. The bottom line is that the success of Fairtrade cotton is a unique and unprecedented opportunity to help tens of thousands of farmers to convert to organic. This is already happening in some projects, but it is far from being a general practice with cotton, especially in Africa. PAN encourages FLO to continue and strengthen its efforts to help more African cotton farmers to convert to organic.

## Is my Fairtrade cotton T-shirt GM-free?

FLO has recently strengthened its criteria for GMOs in all agricultural products, and these will be fully implemented by December 2006. Until 2006, cotton farmers were required to avoid using GM varieties “as far as possible”. While FLO recognised that GMOs should not be used, it was not able to guarantee that Fairtrade cotton was GM-free, as small-scale farmers may not always be able to ensure total protection from cross-contamination from neighbouring farms. Organic cotton was therefore the only guaranteed GM-free cotton. From 1st January 2007, Fairtrade cotton will be effectively GM-free, and Fairtrade T-shirts produced after that date can be considered totally GM-free.

## Should my Organic T-shirt be Also Fairtrade?

While organic cotton offers the best benefits to small-scale farmers and the global environment, Fairtrade cotton also offers great benefits to farmers, and you should definitely prefer Fairtrade T-shirts over any conventional alternatives. A significant proportion of Fairtrade cotton, especially in the UK (but not all!), is also organic. Therefore, you should look primarily for organic Fairtrade T-shirts. If you purchase a non-organic Fairtrade T-shirt, write to the manufacturer and to FLO and ask them to do more to assist the producers to convert to organic agriculture.

Fairtrade complements nicely organic cotton, and offers additional benefits: while the organic cotton price still depends on world market prices, Fairtrade guarantees a fixed price to the farmer at the beginning of the season, based, in principle, on production costs. Therefore, in the event of a sudden drop in world market price, the farmer will still receive the agreed price. Farmers are safe from market price fluctuations. A Fairtrade premium is also reserved for community development projects, such as health centres, etc... While organic projects often carry out such initiatives, it is not a requirement of the organic standards. Finally, a Fairtrade cotton mark guarantees that the fibre was grown in a developing country, where it had the greatest positive impacts on producers. Some organic cotton is produced in richer countries, where it does not contribute to poverty alleviation, although it will still have huge benefits on the global environment.

Whenever appropriate for developing countries, PAN UK supports a merging of organic and Fairtrade standards, increased collaboration between Organic and Fairtrade certifiers, and above all, common and local certification capacities, which will decrease the high cost of the double certification.

*Fairtrade cotton farmers  
are safe from world market  
price fluctuations.*

## Other “Eco-Labels” and environmental claims

There are close to 100 different labels addressing environmental or social sustainability, or consumers’ health, in the textile and clothing industry. Those labels have been developed by either public institutions (national or supra-national), private certification agencies, NGOs, industry federations, or by retailers themselves. An exhaustive description of those labels is beyond the scope of this guide. Let’s consider two of the most common labels you are likely to find in Europe while shopping for your new sustainable T-shirt.

### The Öko-Tex Standard 100 Mark

Öko-Tex Standards 100 (or Oeko-Tex or Øko-Tex) are probably the most widely recognised standards in textile. They can be described as health standards rather than environmental, and they set strict limits on the amount of substances harmful to consumers which can be found in the finished textile product. They were developed by the **International Association for Research and Testing in the Field of Textile Ecology**, based in Switzerland, and which comprises member institutes from over 35 countries around the world. The Öko-Tex mark can be used on all kind of textiles, including synthetic textile, and is not specific to cotton. Cotton fibre is not required to be organic.

The mark states “*Confidence in Textiles – tested for harmful substances according to Oeko-tex Standard 100*”, and is displayed on textile products which have been tested by one of the member institutes. Of course, not every individual T-shirt is tested in a laboratory, but representative samples are tested. Random tests are also performed by the institutes. The standards differentiate between several product categories:

- i. baby clothes,
- ii. textile with direct contact with skin,
- iii. textile without direct contact with skin
- iv. home textiles

Criteria are therefore more stringent for baby clothes, and less stringent for home textiles.

For example, the maximum amount of formaldehyde (which is a skin irritant and has been linked to cancer) that is tolerated in a baby shirt is less than 20ppm (parts per million, or 20 milligram of formaldehyde per kilo of textile). For home textiles, this limit is set to 300ppm. This means that a typical baby T-shirt cannot contain more than 2mg of formaldehyde (the equivalent of a mass 30 times smaller than the mass of a drop of water). This is important as we know that formaldehyde-based finishing products can account for up to 8% of the weight of some textile products<sup>16</sup>.

Criteria include limits on a wide range of harmful substances, including formaldehyde, heavy metals, pesticides, chlorinated phenols, and phthalates residues. Dyestuffs which can release recognized cancer-causing and allergy-causing substances\* should not be used. Most of the criteria for residues in the baby clothes category are comparable to health criteria of the organic textile standards listed on page 12.

Although *Öko-Text* standards only address specifically consumer's health issues, the necessity to comply with the criteria induces better environmental practices at the processing and manufacturing level. Therefore the standards offer significant environmental benefits.



The Oeko-Tex 100 logo

\* Including Azo-Dyes which can release carcinogenic aromatic amines, see p 27

## The European Eco-Label for Textile Products

The aims of the criteria<sup>17</sup> are to promote, in particular, the reduction of water pollution related to the textile processing and manufacturing chain. The criteria are set at levels that promote the labelling of textile products which have a lower environmental impact. Air pollution from processing mills is also addressed. This Eco-label has not been very successful for textiles yet. As of 2005, only 64 textile companies have been granted the Eco label (including 27 in Denmark, 10 in Italy, 7 in France, and only 1 in the United Kingdom)



The EU eco-label

Similarly to *Öko-Tex 100*, the EU eco-label is not specific to cotton. Synthetic textiles can also be labelled, despite the fact that they are not made with renewable materials.

Unlike *Öko-Tex 100*, criteria cover the whole supply chain, from the fibre to finished products. Another difference is that the criteria relate to the processes themselves, and not the amount of residues in the finished products.

For example, the criteria set limits to the amount of heavy metals contained in the dyes used, and not on the residues left in finished product. Therefore it is very difficult to compare the two standards. However, the *EU Eco-Label* processing criteria induce, in principle, a reduction in harmful residues in finished products, hence benefits for consumers' health.

While the criteria effectively cover the whole supply chain, they often are less stringent than Organic Textile Standards (page 12), and less stringent than *Öko-Tex 100* standards with respect to consumers' health.

## Do Eco-labels Effectively Address the Problems Linked to Conventional Cotton?

Both the *Öko-Tex* mark and *EU Eco-Label* can be used on all kind of textiles, including synthetic textile, and are not specific to cotton. This may lead to some confusion in the mind of consumers, as the issues are very different between natural and synthetic fibre production and processing.

With respect to cotton textiles, there are no criteria about how the fibre should be grown. The cotton does not have to be organic, and there is no requirement to use any kind of sustainable farming practices. It is true that the standards set limits on the amount of pesticide residue that can be found in the final products. However, it should be noted that pesticides are not commonly found in significant quantities in conventional final products anyway. Only on some occasions have high levels of pesticide residues been reported on cotton clothing.

Therefore, both *Öko-Tex* and *EU Eco-Label* standards have very limited impacts on the cotton farmer and his or her health, livelihood, and environment: large amount of toxic pesticides can still be used, as long as they do not show up in the final products. It seems unlikely that those labels will ever promote the use of organically grown cotton. The problem lies in the fact that these labels also cover synthetic textiles. Therefore, any attempt to strengthen criteria for cotton fibre could introduce an incentive for manufacturer to use more synthetic fibres. These oil-based fibres are not made from renewable sources, require a lot of energy to be produced (hence high emission of greenhouse gases), and do not help to support development of the world's poorest countries.

Therefore, when shopping for your sustainable T-shirt, look for *Öko-Tex* certified or *EU Eco-Label* certified T-shirts **made with 100% organic cotton**.

## What is "Azo-Free"

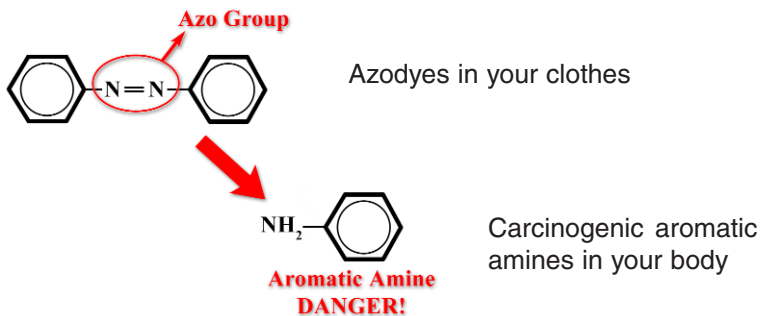
More and more clothing retailers are using the claim "Azo-Free" in their catalogues. What does this mean?

Azodyes are an important group of dyes used in textile, which are made of substances containing a chemical group called "Azo". This chemical group, under certain conditions (including when they are absorbed through your skin\*), can break and produce two new chemical substances: aromatic amines. These aromatic amines may cause cancer.

As a result, the European Union has passed a law<sup>18</sup>, in 2002, to ban all the azodyes which "*may release one or more carcinogenic aromatic amines in detectable concentrations\*\**". This law has been ratified by EU member states<sup>19</sup>.

In theory, any textile product sold in Europe should not contain any of these azodyes, by law. As most textile products are processed outside of Europe, and because of the complexity and lack of transparency of the textile supply chains, it is not clear, at this time, how well this law is implemented.

Organic textile and eco-labels are able to **certify** that the textile products have been processed according to the law. The claim "Azo-free" is a slightly inaccurate shortcut to describe a textile product which, in effect, abides by the law. In reality, some azodyes are considered safe and are still in use.



\* Azo group splitting bacteria and enzymes exist in the skin, liver, and digestive system.

\*\* "Detectable concentration" is set at 30ppm. A list of 22 of these amines are listed, including benzidine, (see page 4)

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## Useful Contacts

### Organic

#### **The Soil Association**

South Plaza, Marlborough  
St., Bristol BS13NX, UK  
+44 (0)1117 914 2407  
[www.soilassociation.co.uk](http://www.soilassociation.co.uk)

#### **Naturland**

Kleinhaderner Weg 1,  
82166 Gräfelfing,  
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+49 (0)89 / 89 80 82-0  
[www.naturland.de](http://www.naturland.de)

#### **Demeter International**

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64295 Darmstadt,  
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+49-6155-8412-40  
[www.demeter.net](http://www.demeter.net)

#### **Control Union Certifications**

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8000 AD ZWOLLE  
THE NETHERLANDS  
+31 (0)38 - 426 01 00  
[www.certification.controlunion.com](http://www.certification.controlunion.com)

#### **The Swedish Society for Nature Conservation**

P.O. Box 7005,  
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SWEDEN  
+46 31-711 64 50,  
[www.snf.se](http://www.snf.se)

#### **IVN**

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[www.naturtextil.com](http://www.naturtextil.com)

#### **ICEA**

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[www.icea.info](http://www.icea.info)

#### **AIAB**

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00187 Roma, ITALY  
+39 06 45437485  
[www.aiab.it](http://www.aiab.it)

#### **Organic Exchange**

5332 College Avenue,  
Oakland, CA 94618, USA  
+1 510 597 9949  
[www.organicexchange.org](http://www.organicexchange.org)

### Fair Trade

#### **Fairtrade Labelling Organisations**

Kaiser-Friedrich-Str. 13  
53113 Bonn, GERMANY  
+49 228 949 230  
[www.fairtrade.net](http://www.fairtrade.net)

#### **The Fairtrade Foundation**

16 Baldwin's Garden  
EC1N 7RJ London, UK  
+44 207 405 5942  
[www.fairtrade.org.uk](http://www.fairtrade.org.uk)

#### **European Fair Trade Association**

Kerkwegje 1  
6305 BC Schin op Geul  
THE NETHERLANDS  
+31 43 325 69 17  
[www.eftafairtrade.org](http://www.eftafairtrade.org)

#### **British Association for Fair Trade Shops**

Unit 7, 8-13 New Inn St  
EC2A 3PY London, UK  
+44 207 7349 4197

#### **International Fair Trade Association**

Prijssestraat 24  
4101 CR Culemborg, NL  
+31 345 53 59 14  
[www.ifat.org](http://www.ifat.org)

### Other

#### **International Labour Organisation**

4, route des Morillons  
1211 Geneva 22  
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+41.22.799.6111  
[www.ilo.org](http://www.ilo.org)

#### **Öko-Tex**

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SWITZERLAND  
+41 (44) 206 42 35  
[www.oeko-tex.com](http://www.oeko-tex.com)

#### **EU Eco Label Helpdesk**

c/o Bio Intelligence  
Service  
1, rue Berthelot  
94200 Ivry-sur Seine,  
FRANCE  
+33 1 56 20 28 98  
<http://europa.eu.int/ecolabel>

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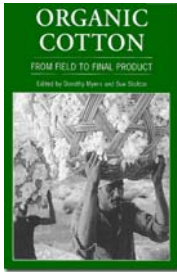
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# Other Cotton Resources from PAN UK

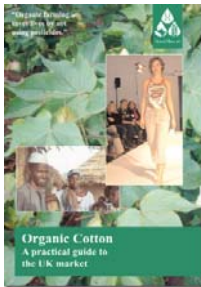
All are available to download or order at [www.WearOrganic.org](http://www.WearOrganic.org), or +44 207 065 0905



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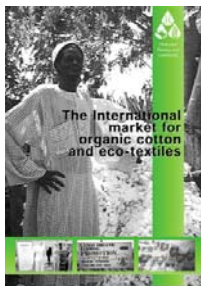
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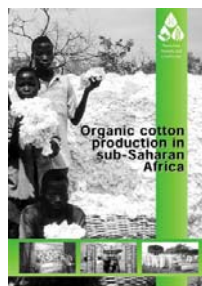
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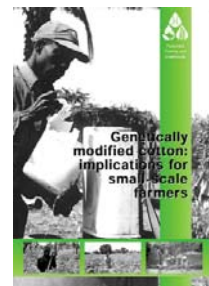
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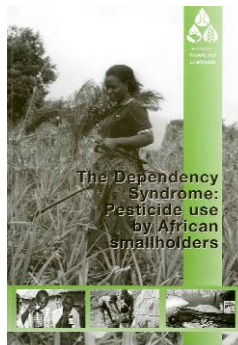


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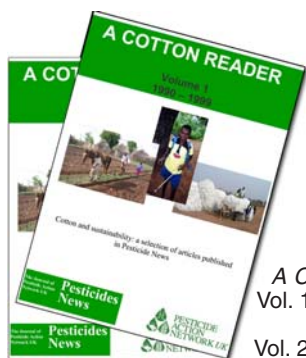


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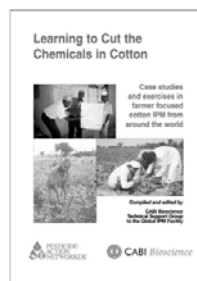


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