MUD JEANS

Described as "pioneering a lease model for organic cotton jeans" Mud Jeans seek to close the loop on jeans production. Customers can lease jeans and return them for repair or recycling. This reduces supply chain vulnerability to price fluctuations whilst reducing environmental impacts associated with traditional cotton crops.

As a 23 year old Bert van Son, CEO of MUD Jeans moved to China to work in the textile industry. His 30 years' experience in the fashion industry made him see the impact fast fashion has on the environment and its factory workers and made him believe that there is an alternative way. In 2013 he introduced 'Lease A Jeans', an innovative approach to offer guilt-free consumption.

MUD Jeans allows customers to shop guilt free and do good for the environment, while looking fashionable and modern. For this, the company won several awards, such as the Sustainability Leadership Award and the Peta Vegan Awards.

"Sustainability is at the core of our company. Most of all we want the world to be a better place, thus we need a deeper understanding of the topic sustainability. Therefore we present you facts and figures about the different aspects we approach. Because just like our pair of jeans, it's what's inside that really counts".

It all starts with cotton growth. Cotton has the nickname 'a dirty crop'. Just 2.4% of the world cultivated land is planted with cotton, yet it accounts for 24% of the world's insecticide market and 11% of sale of global pesticides. Therefore it is the most pesticide-intensive crop grown on the planet. Mud Jeans plan to use the type of cotton that has the least impact on the environment and allows farmers to have a living wage. Ultimately they strive to use recycled cotton only for obvious reasons – to reach this they are working with several partners on techniques that enable them to increase the use of recycled cotton in their jeans and knits.

While Organic cotton uses no Genetically Modified (GM) seeds, there are two types that do. Conventional Cotton and cotton used by companies certified by Better Cotton Initiative do use GM seeds. Around 70 to 80% of organic cotton production is rain-fed rather than irrigated. As a result there's a lower water footprint in comparison to conventional Cotton. BCI pursues the goal of reducing the damaging effects of global cotton production on people and the environment. Although tangible results have been achieved, no exact data have been published yet. Recycled cotton typically saves 40% of water, also uses no pesticides or insecticides and eliminates landfill by disposed garments.

Several sustainability reports have been published in which the water consumption per jeans in conventional production has been measured. Generally the figure is between 7.000 and 8.000 litres per pair of jeans. In terms of greenhouse gasses the figure is typically 23,5 KG of CO2 per pair of jeans. Together with BlueDot, Mud Jeans have conducted a study in which they analyzed their production process from cotton to jeans. The results are very encouraging.

These results are achieved through their mill partners at DNM who recycle 85% of their water and produce zero wastewater. Also their partner in garment manufacturing and laundering in Tunisia (Yousstex International) largely contributes by recycling up to 90% of the water consumed. This in combination with latest washing techniques such as laser, ozone and Jeanologia's E-Flow. For example their denims in DAVEBLACKOD have not been touched by any chemicals at all; the worn in effect is achieved by a combination of laser, ozone and stonewash

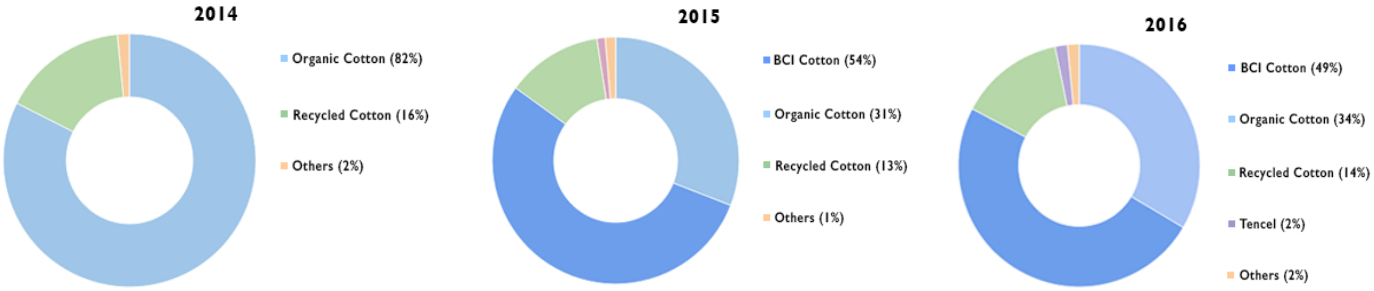
Mud Jeans believe the cotton industry has become a big problem worldwide. They hope to set an example by closing the loop in the production cycle and have cotton return full circle. This concept follows that of a circular economy where products at the end of their lives are still thought of as resources, which can be injected back into manufacturing to produce another product.

They produce jeans, probably the most famous trouser in the world, and create goods which can be re-used, refurbished, and recycled in a continuous cycle. Combining this along with a lease- where the customer doesn't actually own the jean but takes a view of leasing and returning them, creates a different way in which customers view the products they purchase. The product provides a purpose/service, which in itself may become outdated but can be fed back into something new.

When the jeans reach the end of their useful life they are shredded, the material is then sent to Italy were it is made into new jeans. This is done using a mix of the previously recycled cotton, which is reintroduced into the production process as a raw material along with new cotton. Essentially a mix of old denim and new cotton to make new denim which is strengthened by the mixture of both, which produces a stronger canvass material. This required drawing upon 100 years worth of experience in the industry.

It is claimed that the circular economy could provide a major boost to the EU. Mud Jeans hope to help lead the way as an example of how to combine growth and jobs with the use of fewer resources.

		INDUSTRY STANDARD	NEW MUD JEANS	REDUCTION %	VINTAGE MUD JEANS	REDUCTION %
WATER USAGE	(L)	7000	1554	78%	777	89%
CO2 EMISSION	(KG)	23	9	61%	5	78%



LASER	Treatment of the jeans by laser is replacing the conventional use of sandpaper and potassium permanganate. Sandpaper is used to brush the surface of the fabric and basically 'open up the yarns' to make the white base of the yarns visible. This will only become apparent after applying the chemical substance of potassium permanganate. By the use of laser we basically burn of the surface (and consequently part of the indigo dye stuff) of the yarns. The white, worn effect, will become more apparent after applying Ozone to it. With this process we eliminate though manual labour and the use of harmful substances. Also, the jeans will be stronger because the yarns are less damaged by the manual brushing.
OZONE	Oxygen (O2) is converted to ozone gas (O3), jeans are dampened, exposed to the ozone, and rinsed; the ozone is reconverted to ordinary oxygen before release into the environment. While chemical bleaching or stonewashing uses six to seven washes and rinses, ozone finishing requires two to three. Ozone finishing reduces energy consumption. Because it reduces the amount of water that must be heated for wet finishing and the temperature required. Furthermore, replacing some traditional finishing with ozone reduces effluent, including the sludge pumice stones create. Ozone bleaches more quickly than chemicals and stonewashing. Ozone can clean back stains in three seconds.

It is estimated that the average person throws away 32kg of clothing per year. That adds up to 1.7 billion kg of unnecessary waste added to our landfills. Clothing and household textiles currently make up 5.2% of the waste in landfills (SMART: Secondary materials and recycled textiles, https://www.smartasn.org).

Mud Jeans is committed to reducing clothing waste, starting with recycling. The fabrics they use contain at least 98% of cotton, and they don't use leather labels but printed logos. They also use buttons made out of recycled cotton.

Mud Jeans reuse the fabrics from their jeans and make them useful again. Worn out jeans are sent to factories where the jeans are shredded and mixed with new organic cotton. A new spun yarn containing recycled denim is born, out of which new products are manufactured.

MUD Jeans only send out their products with RePack, a returnable and reusable packaging that rewards its customers for every order. It is a sustainable alternative to traditional packing waste and throw-away consumerism, as RePack can be reused up tp 20 times. No polybags are used in the packaging and tags are made out of recycled paper.

Useful links and articles;

https://www.youtube.com/watch?v=JaX60U2_Ibw

https://www.youtube.com/watch?v=KZjswM0Qiq8

http://www.mudjeans.eu/

https://www.ellenmacarthurfoundation.org/case-studies/pioneering-a-lease-model-for-organic-cotton-jeans

https://www.circulareconomyclub.com/circular-fashion-practice-mud-jeans/

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