

SUSTAINABLE TEXTILES – PART V

REF: TT/ MAY 2022/ WK 5

Sustainable raw materials (Continued)

Recycled cotton

Recycled cotton is the cotton fiber converted from cotton fabric that can be reused in textile products. These cottons are mainly used in products like casual clothing, filters, agricultural storage bins, flooring materials, home insulation materials, home furnishing etc. Since cotton recycling avoids cotton cultivation, it reduces the use of natural resources like water and also reduces the negative environmental impacts of producing cotton.

BENEFITS OF RECYCLED COTTON
Reduces the amount of waste sent to landfills.
Conserves natural resources such as water.
Prevents pollution by reducing the need to cultivate cotton.
Saves energy.

Recycled cotton is made from two primary sources.

- **Pre-consumer waste** - Pre-consumer waste is excess textile from clothing production. It is the material left over from the production of garments. The material can be cutting leftovers, roll ends, overproduction and rejected fabrics. It also includes scraps created by yarn and fabric by-products. These wastes are recycled to a new fiber and designed to form new textile materials. Pre-consumer waste is also known as post-industrial waste.

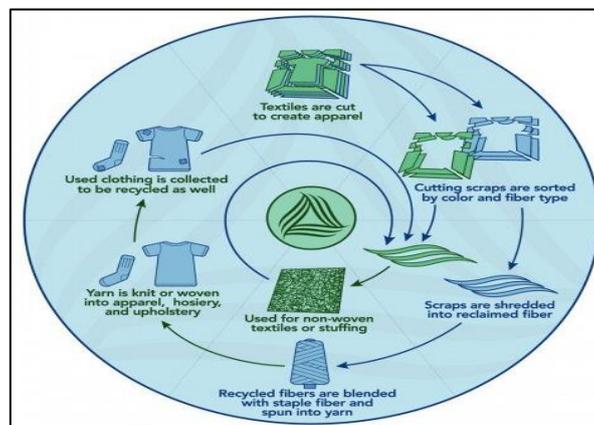


Fig 1.1 Recycled cotton from pre-consumer waste

Ref: martextfiber.com



- **Post-consumer waste** - Post-consumer waste is textile waste that is collected after consumers have discarded the finished products, such as used apparel and household items.

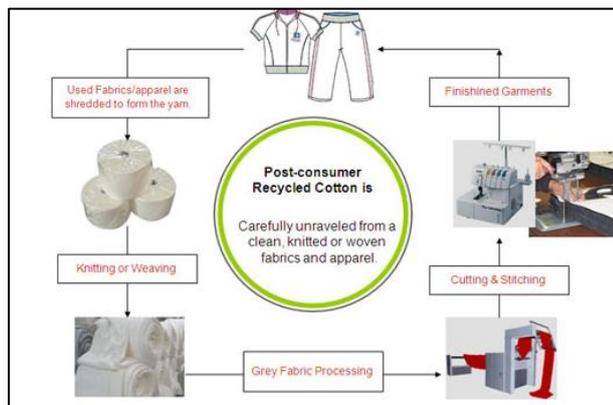


Fig 1.2 Recycled cotton from post-consumer waste

Ref: masoodtextile.com

The recycling process includes assessing the quality of cotton fibers through systematic collection, manually sorting the materials, and undergoing a mechanical or chemical process to break down the textile fabric into reusable fibers. In the mechanical process, fabrics are torn into individual fibers through a machine, and in the chemical process, the fabrics are broken down through chemical reaction processes.

- **Mechanical process** – In this process, fabric breaks down into fiber by cutting, shredding etc. The fibers are spun into yarns then fabrics are made. Flocking is another technique, wherein the fibers are reduced to fine powdered particles. It is used to give a decorative and soft finesse to products. The finished products are used in fabricating garment lining, home textile upholstery, for insulating and sound absorption in automobiles, carpeting, and toys.
- **Chemical process** - The fabric is dissolved in chemicals and then spun into yarn.

References:

1. <https://www.2bfuntex.eu/>
2. <https://agood.com/>
3. <http://www.fibre2fashion.com/>
4. <https://textilevaluechain.in/>
5. <https://www.cottonworks.com/>

.....To be continued.....

UNSCRAMBLE THE JUMBLE WORDS
SUMCONER
ROPCSES
RADEVETIOC
NIOSRTG

Last week`s Answers: 1) INNOVATION 2) SUSTAINABLE 3) PESTICIDES 4) CHEMICALS

Wishing you a great week ahead!

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