



# FIBRE TO FABRIC

# Fibres



- Take a cloth and pull out a thread. Untwist to
- loosen this thread. You will see that it is made up of smaller threads or hair like strands.
- Pull out one of these. This single hair like strand is called a fibre.
- A fibre is a hair like strand from which all fabrics are made.



# Natural Fibres

- Some fibres are obtained from natural sources, that is, from plants and animals. Fibres
- from such sources are called *natural fibres*. Some examples of fibres from natural
- sources are cotton, Jute, silk, wool, etc.



# Man-made Fibres



- The other type of fibres are obtained from chemical substance. These are called *manmade*
- *fibres*. They are rayon, polyester, nylon, acrylic (cashmilon) etc.
- The first man-made fibre is known as rayon and was produced in the
- latter part of 19th century. Man-made fibres are generally filament fibres. Other examples
- are nylon, polyester, and acrylic.



## Animals that can produce wool



alpaca



Yak



goat



Llama



Angora goat



Camel



## Processing fibre to wool



- Shearing is the first step in processing fibre into wool. It is the removal of the fleece of the sheep along with a thin layer of the skin.
- The next step is to clean the sheared skin and hair. This is done in big tanks to remove the grease, dust and dirt. This is called scouring.
- The fleece is sorted according to its texture and type.



- Since the fibres are mostly black, brown or white in colour, they can now be dyed in various colours.
- Once the dyeing process is complete, the fibres are straightened, combed and rolled into yarn.
- The longer fibres are made into wool for sweaters, while the shorter fibres are spun and woven into woolen cloth.



# Silk



- Silk is the strongest of all natural fibres. A soft silk yarn is as strong as a comparable thread of steel.
- Sericulture, or silk farming, is the rearing of silkworms for the production of raw silk.
- As caterpillars eat and grow bigger, they also shed their skin. Underneath the old one is a new skin. Caterpillars may shed skin four or five times.





## Extracting silk from the cocoon:

- The first step is to separate the silk fibre from the cocoon. For this, they need to be exposed to warmth.
- Piles of cocoons are kept under the sun, boiled or exposed to steam. The warmth causes the silk fibre to separate from the rest of the cocoon.
- The next step is called reeling the silk, which is the process of delicately unwinding the fibre from the cocoon. These silk filaments are soft, and 300 to 900 metres long.



- Reeling is also done in special machines.
- The silk thread is then bleached and dyed into many shades.
- The silk fibre is now spun into silk thread, which is then woven into silk cloth by weavers.





THE END

