25/4/20

SUB- SCIENCE

CLASS - VII

CHAPTER-3

* Write Q1A in f/c.

Q7. What is selective breeding?
Ans. To select special parents for obtaining soft under hair from sheep, is called selective breeding.

Q8. Which type of food of food is eaten by sheeps in indoor?
Ans. Apart from grazing, they eat mixture of pulses, corn, jowar, oil-cakes, leaves, grains and dry fodder.

Q9. What is shearing?
Ans. It is the process of removal of fleece (hair) along with a thin layer of skin from body of sheep.

Q10. What is rearing?
Ans. Rearing means helping someone to grow-up.

Q11. What is sericulture?
Ans. Sericulture refers to rearing of silkworm to obtained silk.

Q12. Which country discovered the silk?
Ans. China.

From fibres to wool

For obtaining wool, sheep are reared. Their hair is cut and processed into wool. Let us learn about this process.

Rearing and breeding of sheep: If you travel to the hills in Jammu & Kashmir, Himachal Pradesh, Uttaranchal, Arunachal Pradesh and Sikkim, or the plains of Haryana, Punjab, Rajasthan and Gujarat, you can see shepherds taking their herds of sheep for grazing. Sheep are herbivores and prefer grass and leaves. Apart from grazing sheep, rearers also feed them on a mixture of pulses, corn, jowar, oil cakes (material left after taking out oil from seeds) and minerals. In winter, sheep are kept indoors and fed on leaves, grain and dry fodder.

Sheep are reared in many parts of our country for wool. Table 3.1 gives the names of some breeds of sheep reared in our country for producing wool. The quality and texture of the fibres obtained from them is also indicated in the table.

Certain breeds of sheep have thick coat of hair on their body which yields good quality wool in large quantities. As mentioned earlier, these sheep are "selectively bred" with one parent being a sheep of good breed.

Once the reared sheep have developed a thick growth of hair, hair is shaved off for getting wool.

Processing fibres into wool

The wool which is used for knitting sweaters or for weaving shawls is the finished product of a long process which involves the following steps:

Step I: The fleece of the sheep along with a thin layer of skin is removed from its body [Fig. 3.8 (a)]. This process is called **shearing**. Machines similar to those used by barbers are used to shave off hair. Usually, hair are removed during the hot weather. This enables sheep to survive without their protective coat of hair. The hair provide woollen fibres. Woollen fibres are then processed to obtain woollen yarn. Shearing does not hurt the sheep just as it does not hurt when you get a hair cut or your father shaves his beard. Do you know why? The uppermost layer of the skin is dead. Also, the hair of sheep grow again just as your hair does.

Table 3.1 Some Indian breeds of sheep

S.No.	Name of breed	Quality of wool	State where found
1.	Lohi	Good quality wool	Rajasthan, Punjab
2.	Rampur bushair	Brown fleece	Uttar Pradesh,Himachal Pradesh
3.	Nali	Carpet wool	Rajasthan, Haryana, Punjab
4.	Bakharwal	For woollen shawls	Jammu and Kashmir
5.	Marwari	Coarse wool	Gujarat
6.	Patanwadi	For hosiery	Gujarat

Step II: The sheared skin with hair is thoroughly washed in tanks to remove grease, dust and dirt. This is called **scouring**. Nowadays scouring is done by machines [Fig. 3.8 (b) and (c)].

Step III: After scouring, **sorting** is done. The hairy skin is sent to a factory where hair of different textures are separated or sorted.

Step IV: The small fluffy fibres, called burrs, are picked out from the hair. These are the same burrs which sometimes appear on your sweaters. The fibres are scoured again and dried. This is the wool ready to be drawn into fibres.

Step V: The fibres can be dyed in various colours, as the natural fleece of sheep and goats is black, brown or white.

Step VI: The fibres are straightened, combed and rolled into yarn [Fig. 3.8 (d)]. The longer fibres are made into wool for sweaters and the shorter fibres are spun and woven into woollen cloth.

***Fig. 3.8** (a) Shearing a sheep*

***Fig. 3.8** (b) Scouring in tanks*

***Fig. 3.8** (c) Scouring by machines*

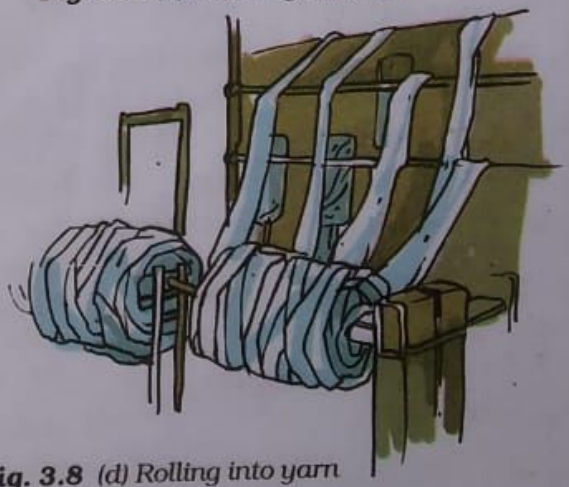

***Fig. 3.8** (d) Rolling into yarn*

The processing of fibre into wool can be represented as follows:

Shearing → Scouring → Sorting → Cleaning of burrs

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Rolling ← Dyeing