Traditional knowledge of processing and value addition to dromedary camel wool

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The paper describes Raika camel breeders’ traditional knowledge about value addition to dromedary camel wool. The information was collected through personal interviews and observation among Raika camel breeders in Pali district of Rajasthan. Though, wool is not a product of very high economic value among the products of camel production system but breeders add value to it by investing their free time and prepare/get prepared ropes, rugs and carpets from it. These are important household items for camel breeding profession and their day to day life.

Keywords: Dromedary camel, Traditional wool processing, Raika, Rajasthan

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The camel (Camelus dromedaries) is an important animal component of the fragile desert ecosystem. With its unique bio-physiological characteristics, the camel has become an icon of adaptation to challenging ways of living in arid and semi-arid regions. The proverbial Ship of Desert earned its epithet on account of its indispensability as a mode of transportation and draught power in desert but the utilities are many and are subject to continuous social and economic changes. The distribution of dromedary camels in India (0.63 million) is confined to the arid and semi-arid areas of Northwestern India spread out in parts of Rajasthan, Gujarat and Haryana1. The dromedary camel is used mainly for transport (draft) and farming besides its use for milk, meat, hairs and hides2. The paper describes the traditional method of processing and value addition to dromedary camel wool (hairs) by the camel breeders in Pali district of semi-arid Rajasthan.

Methodology

The information about traditional knowledge of processing and value addition to camel wool was recorded from old age respondents while collecting the data from 50 camel breeders. Further, the observation of various stages of value addition process, at first hand also helped in understanding it. The interaction with field level officials of state livestock department and interaction with the weaver in action also facilitated the compilation of the information. The information compiled during 2008 is based on the discussion with Aman Baa, Jawan Bhai, Babu Lal, Dhanna Ram, Suja Ram, Jeeva Ram, Gamer Ram, Gokal Ram, Ada Ram, Arjun Ram, Pusa Ram, Babar Ram, Raja Ram, Sangram Ram, Shankar Ram, Oonkar Ram, Gamer Ram, Suja Ram/Sanjwalji, Harlal, Mohan Ram, Ragunath Ram, Mangla Ram, Mangi Lal, and Foola Ram, camel breeders, residents of village Anji ki Dhani in tehsil Marwar Junction, district Pali.

Camel rearing and production

In Godwar area of Pali district, members of Maru Raika community rear and produce camel as a traditional way of life. They reside mainly in foothill area of the Aravali ranges in Marwar junction and Bali tehsils, in and around Jojawar and Sadri villages. The Raikas keep camel herd of small (5-7 camel) to medium (50-60 camel) size. One to four male members of a family are involved in the management of these camel herds. The main source of their income is from the sale of camel. Besides camel rearing, they also practice agriculture on very small holdings and produce maize, sesame, pearl millet, cluster bean, etc. In addition to income from sale of camel, they also get small income from camel milk and wool (locally called Jut). As the production of these two items is very little in quantity and there is no regular market for these, everybody could not sell them. However, these days camel milk has got small market which is considered good due to its nutritive and medicinal value3.

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Production of wool

Once in every year in the months of Feb-March (Falgun month of traditional calendar), camel rearers perform shearing of camel wool (Fig. 1) from its coat using large size scissors. Locally, shearing is called luv. From one camel, they get around 1-2 kg wool depending on the age, health and breed of camel.

Processing and value addition

The wool (jut) sheared from camel coat is collected and dust and other inert materials are cleaned from it. The cleaned wool is filled in bags or tied in large piece of cloth. It is used to prepare wool thread during free time.

Ginning of wool

If the harvested camel wool is of good quality and colour, and camel rearer prepares carpets (locally called bhakal). The wool is ginned from traditional ginners and converted in small lots, called pooni. The wool can be stored in the form of poonis by hanging it on wall pegs (Fig. 2) for longer period till its further use for making thread/ yarn.

Preparation of thread

Preparation of thread from camel wool requires skill and is called kataee (spinning) of wool. It is a time consuming and tedious work. Old age people generally do the work (Fig. 3). They use a very simple traditional spindle called dhera. It consists of two parts, a small wooden stick (22-25 cm length and 2.5-3 cm diameter) made of heavy wood and sometime one hole is bored in the centre. At the centre, it has maximum diameter and tapering slightly towards both the ends, and the other part is made from iron wire or thin bamboo or other wood stick and one end it converted to hook. Its diameter is kept such that it can be inserted/ fitted tightly in the hole made in centre of first part. Both the parts fitted together, form a traditional spindle called Dhera. To make the thread from wool, wool fibres tied to hook and fibres are hold together by one hand and by other hand the dheral spindle is rotated. As the dhera rotates hanging with the wool fibres, the fibres are twisted together (spun) and thus converted into thread. The rotation continues until the thread is twisted (spun) up to desired level. Then the thread is rolled systematically on the cross made by two parts of spindle. For continuous supply of wool during the process, the operator either inserts his hand in the pooni of wool or keeps the raw wool in one small bag or tied sack of cloth, which hangs to his hand. When the size of roll of thread on spindle became large sized (700-800 gm) then the hooked rod is pulled out from the wooden stick to free the thread roll for removing it from the wooden stick, and the process continues. These rolls of thread are stored in 6-7 numbers together by inserting a piece of rope in their holes and hanging the rope on wall pegs. Conversion of raw wool to thread through the traditional technique takes 3-4 man-days per kg of wool. The breeders generally perform the work while grazing the camel. The old age people who cannot perform other laborious work also do the work by keeping the spindle with them⁴.

Use of wool thread

The camel rearers use camel wool mainly for preparation of ropes and carpets. Small pieces of ropes are prepared (60-90 cm length and 1.0 to 1.5 cm diameter), whose both ends are weaved using some colourful stripes of discarded clothes; these pieces of ropes are locally called downa. These are used for tying the forelegs of camel during night times at resting place. Downa is also used to tie the forelegs of camel cows to restrict its movement and facilitate mating with camel bull. In addition to this, camel wool ropes are also used to prepare the moori (a rope structure prepared and put on head to control the young camel during long distance solitary movements and other controlled movements), to tie some luggage together during movement from one place to other⁵. In addition to preparation of ropes, the camel wool is mainly used to prepare carpets, locally called bhakal (Fig. 5). As the Raika community is still largely traditional, the bhakal has social as well as cultural significance for community. The bhakal have very much use in daily routine life of the camel rearers. So, every camel rearer owns 4-5 bhakals as his house hold item. It is used as seating carpet laid on ground or seating platform and offered specially to guests (Fig. 3). A bhakal used in home can last up to 30-40 yrs. The other most significant and vital use of bhakal by camel breeder is its use as bedding material during night stays at temporary halts in camel grazing area (Fig. 6). The camel wool is thermostatic in nature, hence, carpet made from it remains hot during winter and cool during summer. During rain, it can be used as umbrella, as it doesn’t get wet and rainwater doesn’t pass through it. During the movements camel breeder also use it to tie all daily use items. Due
camel’s movement through bushes and trees, there is so much wear and tear that bhakal doesn’t last more than one year.

Carpet weaving
Carpet weaving is done by a family of Kumhar (potter) caste migrated from Barmer area on traditional handloom (Fig. 4). The size of the traditional handloom can be decreased or increased as per the desired size of the carpet. Weaving of a carpet of approximate size 210 cm × 120 cm takes four man-days on this loom, i.e. two skilled men working for two days for 10 hrs daily (Fig. 5). The above size carpet will require around 6.0 kg traditionally spun camel wool thread; besides this, around 2.5-3.0 kg brightly coloured (red/yellow/blue) cotton fibre thread is also used make more attractive designs. The camel breeders do not sell the bhakal but the weavers sell it. These people get the camel wool thread from the camel breeder in lieu of their labour charges; roughly, they get one roll of spun camel wool thread for weaving carpet of six spun-wool-thread-rolls. When the weavers collect sufficient camel wool thread, they weave the carpet of their own and is available for sale.

Conclusion
The camel breeders are able to utilize the camel wool, a minor product of camel rearing in a better way by traditional techniques of processing and value addition. The minor product of camel production system can add more to the income of camel producers if it is processed by use of some improved techniques. As the camel wool products are available with high value and quality globally, efforts should be made to popularise the indigenous value added camel wool products.

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