

ANIMAL HUSBANDRY PRACTICES: AN OVERVIEW

Dr. Rajendra Kumar Meena*

ABSTRACT

This is the most important occupation and plays a significant role in the economy of Rajasthan. The arid and semi-arid areas are agro-climatically not suitable for agriculture. More than 57 per cent area of Rajasthan is under desert and 37 per cent under wastelands. In the rural areas mixed farming practices have developed which now gained momentum through the cooperative farming.

Keywords: *Animal Husbandry Practices, Farming Practices, Cooperative Farming, Agro-Climatically.*

Introduction

Livestock shares 19% of the state income which comes in various forms like ghee luidy, bones, wool, meat, mutton, milk. This is primarily due to the ability of the desert animal breeds to withstand in the extreme climate and the transmigratory system of animal husbandry impart greater adjustability. Further the state is endowed with best breeds of cattle and drought hardy perennial grasses like sewan, dhaman, anjan and karad. In short, unfavourable climate for agriculture, locality of desert animal breeds, drought hardy perennial grasses, lack of employment and income opportunities and substitute of food are some of the factors which have boosted animal rearing in the state.

Principal Breeds of Animals

Animal species varies according to topography, climate and vegetation of the region. Dairy farming and crop farming are the integral parts of a system of food production. The role of the dairying has gained further importance to provide a direct solution to the problem of rural poverty and emerging imbalances. Dairying has emerged as an important instrument for providing employment and additional income to rural households. In fact as an important component of the mixed farming system bovine rearing has remained an integral part of rural life for several centuries. The breeds of the region have evolved the best breeds of cattle in the country. There are ten well defined breeds of cattle and four of buffaloes found in Rajasthan.

Breeds of Cattle

About 6.06% of the total cattle population of the country is available in Rajasthan. Both qualitatively and quantitatively Rajasthan predominates the areas of cattle rearing. The maximum concentration of cattle is in Bikaner (608597), Banswara (658519), Bhilwara and Chittorgarh (1694048) districts having more than 6 lakh of cattle population while the eastern districts Karoli, Dausa districts, Sawai Madhopur and Jhunjhunu and Udaipur districts have minimum concentration. Corollary to it the best quality milk cows- Malani, Rath, Sanchoi, Kankrej, Malvi, Gir or Reeda are reared in different parts of the State. Nagauri bullocks are considered to be the best draught animals in the country and thus used for cultivation in whole of northern India. There are nine distinct breeds of cattle which are among the best in India for their performance in milk yield or draught capacity. Haryana, Mewar, Rath and Kankraj are dual purpose breeds. Tharparkar, Rath and Gir are good milk breeds and Malvi and Nagauri are among the best draught cattles. The cows of various breeds give milk from 5 to 11 litres/day which is too less as compared to the developed countries 30-35 litres/day. The following breeds of cattle are significant.

* Associate Professor, Department of Geography, BND Government Arts College, Chimanpura (Shahpura), Jaipur, Rajasthan, India.

- **Kankraj**

This breed is found in the western part of the State and in Jalore, Pali, Sirohi and Barmer districts. The local names of the breed are Nagure, Sanchoe, Bannai, Vagadia and Wadhai. The breed originated in north Gujarat in the Mumbai provinces of India and now distributed in south-east Rann of Kutch.

It is one of the heaviest breeds. It has broad chest, forehead dished in the centre, strong curved horn accompanied by skin up to some length, powerful body and straightback. The colour of the male is silver grey, iron grey or black. In females colour markings are lighter.

It is highly prized draught cattle. The bullocks are well known for running and much strong for pulling heavy weights. The average yield of milk per cow varies from 4 to 9 litres/day.

- **Sahiwal**

The other names of this breed are Lola, Montgomery, Lamb, Bar, Multani. This breed originated in the central and southern dry areas of the Punjab particularly in Montgomery district in Pakistan.

Characteristics of this breed are deep body, loose skin, short legs, stumpy horns, broad head and lethargic. General colours has various shades of red, pale red and dark brown splashed with white. Males weight is about 522 kg and females weight 340 kg. This is one of the best dairy breeds of India and yields average 6-8 litres milk per day.

- **GIR**

The other names of this breed are Kathiawarhi, Surti and Deccan. The breed probably originated in the Gir forest of south Kathiawar. In Rajasthan, they are commonly reared in Ajmer district where its local name is Ajmera. They are also found in Nagaur and Jodhpur districts. Appearance strikingly impressive, well-proportional body with robust constitution. Ears are markedly long pendulous resembling a tiny leaf. The head is moderately long but massive in appearance with prominent bony forehead, straight and levelled back are the most making character of the breed and spots of different colours are one of the chief characteristics of this breed.

Cows are good milkers. This cow gives 8 to 10 litres milk/day under stall-fed condition. Bullocks are heavy and powerful medium paced and good for drought.

- **Nagauri**

This breed is said to be originated from Shalakh region of Nagaur district. They are also found on adjacent districts of Bikaner, Churu, Jodhpur and Alwar. The breed is purely of draught type. The nagauri bullocks are regarded as the best breed of India. The oxen are well-known in India as heavy load carries. They generally have white grey, blue and silver grey colours. The average yield is 8-10 litres/day.

- **Rathi**

This breed is mostly reared by nomadic tribes who move from place to place in search of fodder and pastures. This breed is found over a tract extending from north-eastern Jaisalmer to western and south-western Sriganganagar district in the north. It is good for dairy but poor in drought capacity.

This breed yield about 5-7 litres of milk per day. Its subsists on very coarse fodder. It is generally white in colour. The head is long, ears are moderately long and slightly dropping. The norms are short and stumpy, growing outwards and backwards and are thick at the base. The hump in the males is well developed and erected.

- **Red Sindhi**

This is also known as Sindhi, Red Karachi and Malir. The home of this breed is Karachi and Hyderabad (Sind). This is a medium sized and compact animal having well-proportioned body and extremely docile. The colour is usually deep dark red, colour varying from deep yellow in almost dark brown. The ears are of moderate to large size and dropping. The hump is of medium size though well developed in the male. Males are darker red than cow. Male weight average 450 kg while females 295 kg. This breed gives about 6-8 litres of milk per day.

- **Tharparkar**

It is said to be originated from Malani area of Jaisalmer district. This breed is found in Barmer, Sanchoe tehsil of Jalore, eastern part of Jaisalmer and western Jodhpur. It can survive in extreme hot conditions of the desert and live on dry fodder of the stocks of bajra and jowar. This is also known as Thari, Grey Sindhi and White Sindhi.

They are strong, well-proportioned frame medium size, deep built, short, straight and strong limbs and good feet. The coat colour is usually white or grey. The head is medium in size, the forehead is broad and flat, and ears are long and broad. It gives milk upto 10 litres/day.

- **Malvi**

The synonyms of this breed are Mahadeopuri and Manthani. The breed takes its name from the Malwa tract. This breed is mainly found in M.P. and Rajasthan. In Rajasthan this breed is found in the southern and south eastern parts of the State. They are mostly found in the districts of Banswara, Dungarpur, Chittorgarh, Bhilwara, Kota, Baran and Jhalawar. They are generally deep, short and compact in body. This breed is short in size but thick norms tapering to a blunt point, short neck, but straight and strong muscular legs, sheath and navel flaps are also short. The general colour of the breed is grey to iron grey and almost black in the neck. Bullocks are good for road and field work, economical feeders and have good adaptability. It is short statured and weak and therefore the average milk yield is only upto 5 litres/ day.

- **Haryanavi**

This is also known as Nil. It is common in Sriganganagar, Churu, Bikaner, Sikar, Alwar and Tonk districts. It is very useful dual purpose animal. The characteristic of breed is proportionate body and compact graceful appearance. Head is carried high, horns are short curving upward and inward and stumpy. The general colour of breed is white or light grey, long and narrow face. The bullocks are good working animals for fast ploughing and road transport. Cows are well built and give milk 5 to 8 litres/day.

- **Mewati**

In Rajasthan this breed is mostly reared in Alwar, Bharatpur and Dholpur districts. It is famous and has been evolved by breeders suited to their soil and natural conditions. The Mewati cow yields average 4 to 7 litres milk per day. The bullocks are in much demand from central provinces of India.

Breeds of Buffalo

The sub-humid parts of Rajasthan are most suitable for rearing the buffaloes. Buffaloes are more valuable than cows as they yield more milk and ghee buffaloes milk is much richer than cow milk with an average fat content is more than 7.0%. The highest concentration of buffalo population is in Jaipur, Alwar and Bharatpur districts.

- **Murrah**

It is found mostly in the eastern districts of Rajasthan in Alwar, Jhunjhunu, Jaipur, Ganganagar, Hanumangarh, Bharatpur and Dholpur districts. The synonyms of this breed are Delhi buffalo. The home of this breed is mainly in Punjab and Delhi. Characteristics of Murrah buffalo are deep massive form with short and broad back and a comparatively light neck and head. It has short, tightly curled horns, well developed udder and a long tail with a white, switch reaching to the fetlock. Short massive limbs with good bone, broad hoofs and drooping quarters. The skin is soft and smooth with scanty hair. This breed is of dark black, shining colour with arc-shaped along horns. The average yield of milk is 10-12 litres/day and the fat contents is more than (5.5%).

- **Haryanavi**

This breed of buffaloes is an inferior and is found mostly in the border district of Haryana and Rajasthan.

- **Nili**

The Nili buffalo found in the Valley of Montgomery and Ferozpur. The best animals are found in the riverine tract along the Sutlej River. This breed has medium sized deep frame with an elongated, coarse and heavy head, bulging at the top, depressed between the eyes and ending in a five mazzle. Horns are small with a high coil and the neck is long thin and fine. Its face and forehead is distinguish and originated from the Murrah. The udder is well developed, shapely and well placed. It is mainly found in Sriganganagar and Hanumangarh districts where drinking water and green feed and fodder is available in the land irrigated area. It gives averages 10-15 litres milk per day.

- **Surti**

This breed is found in the south-western parts of Gujarat state. The best animals of this breed are found in Nadia, Anand and Vadodara districts. This breed has a fairly broad and long head with a convex shape at the top in between the norms. Horns are sickle-shaped and flat. The neck is long in the female and thick and heavy in the male. The udder is well developed and finely shaped. The tail is long, thin and flexible. They are of medium size and docile temperament. The skin colour is black or brown. The buffaloes of this breed gives milk 10- 12 per/day. It is domesticated for dairy purposes.

- **Jaffarbadi**

This breed is found in the Gir forest of Kathiawar. This breed possesses heavy head with fairly large thick, flat horns which tend to drop on each side of the neck. Body is longer but not so compact. Dewlap and udder are well developed. This breed is generally black in colour and yield is 10-15 litres milk per day.

Migration

Livestock migration is a predominant in arid and semi-arid areas of Rajasthan. It is considered to be an alternative measure of drought and practised by the livestock raisers for generation. Various groups like Raikas (the traditional sheep and goat raisers), Jats, Rajputs, Servi, Bishnoi and Gujars of Hindu community and Sidhi Muslims are the most predominant pastoral nomads of the area. These communities are ecologically adjusted at a particular technological level to utilise the marginal resources which occur in western region for agriculture to be a viable mode of livelihood. The nomadic pastoralists thus make use of these meagre resources for sustenance.

Migration starts in November with the coming of dry season, when fodder becomes scarce and during six to nine months the herds migrate to Haryana, Madhya Pradesh, Uttar Pradesh and Punjab and return to their villages with the next monsoon rains. In the arid districts migration starts in March-April to the fertile areas of Sriganganagar district and Punjab where they reach in mid April with the harvesting of the rabi crops.

About 50 per cent of the livestock migrate from desert area soon after November every year. They migrate to areas near river banks or to valleys supporting large tanks, where green feed is still available. During drought years the migration starts early in September and nearly 90 to 95 per cent of the livestock migrate out of the desert region and return in July next year. The cattle breeders of Rathi (Pugal and Bikaner) migrate to canal areas of Sriganganagar and Hanumangarh districts where they market the surplus cattle, milk and milk products and sometimes stay with their herd on fields. Breeders of Tharparkar cattle (Sanchoe) in Barmer migrate during summer along the Luni river. While others migrate to nearby areas in Gujrat state.

In Jaisalmer cattle breeders maintain their herds after migrating towards Jodhpur, Bikaner and Sriganganagar. Various sheep flocks from Jalore and Jodhpur move towards Madhya Pradesh and Gujarat from Barmer and Jaisalmer. They move to Uttar Pradesh along the Chambal and Yamuna rivers and from Bikaner, Churu and Sikar districts to Haryana, Delhi, Punjab. When they go out of the desert they take circuitous routes depending on the availability of water and fodder. Some of the routes may take them two to four months to reach their destination but during their return journey, they take the shortest route and complete the journey in 15 to 20 days.

Good breeds of animals maintained under migratory system, the economic conditions of the breeders have continued to remain marginal and unstable because the migratory system of livestock farming is brought with great hardship and does not allow the farmers to adopt scientific methods for improving the livestock productivity. During migration some animals die as a result of starvation and a large number of them are sold at distress prices on migratory routes for purchase of items of daily needs.

Migration in ecological condition is of two types, one for a short period of less than one month and the other of a long period of more than one month. It is also classified as chomasa prevalent during rainy season and in hala prevalent during summer season. In summer livestock migrate due to the scarcity of fodder and water whereas during chomasa (rainy season) migration took place due to the shortage of grazing lands and fallow lands as most of these lands are brought under cultivation. The persons who accompanied the livestock during migration included household head, son, relative and hired workers. Scarcity of water fodder, grazing land and recurring droughts and famines are reported to be the chief causes of migration.

Various difficulties faced by migratories are non-availability of food, feed, fodder and water and the risk of theft of animals. The other difficulties are that the settled farmers did not allow the migratory households to pass through the villages, pastures and fields.

Conclusion

In the arid and semi-arid zone, livestock rearing is the primary occupation and source of livelihood for people and is only next to agriculture in importance. In the sub-humid and humid region, mixed farming helps to supplement the income of the farmers. Cattle population is more than buffaloes which indicates the suitability of climate in the state for cattle development.

Livestock population in Rajasthan quite significant then the human population and this trend has been noticed in the livestock enumeration since 1956. Yet the dairy industry is dominating in the region to provide employment and income in the rural masses in the State.

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