

Group V

LOHANI

Origin

The Lohani breed of cattle¹ belongs to that general class of Zebu cattle in India and Pakistan which are found in the hilly areas. These are a smaller type of cattle, which thrive well under poorer conditions of breeding and are able to render useful service as milch animals as well as working animals either for light plowing or for transporting goods in the hilly areas, which have poor roads. They have close resemblance to the Afghan type of cattle.

These cattle are bred in the Loralai district of Baluchistan. They are also widely distributed in the tribal areas of the North West Frontier Province of Pakistan where they are known as Acchai cattle.

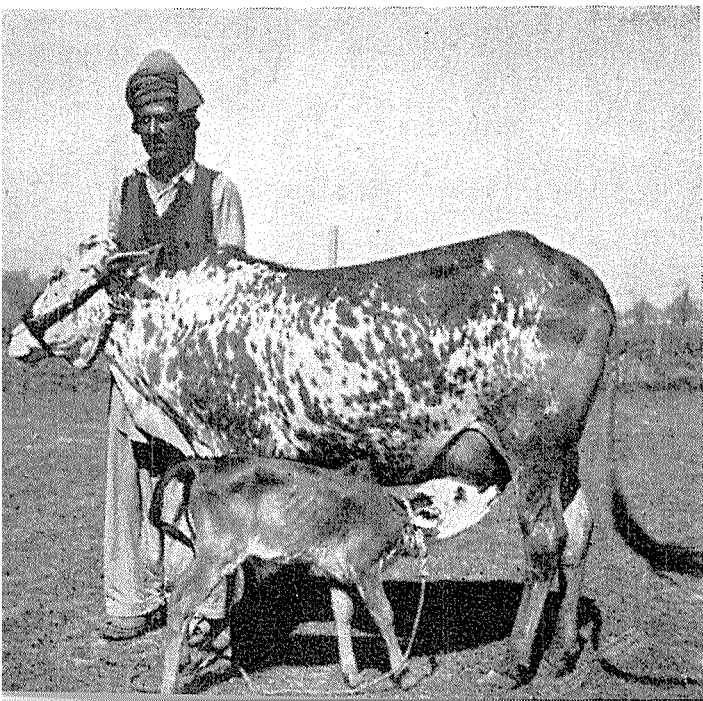
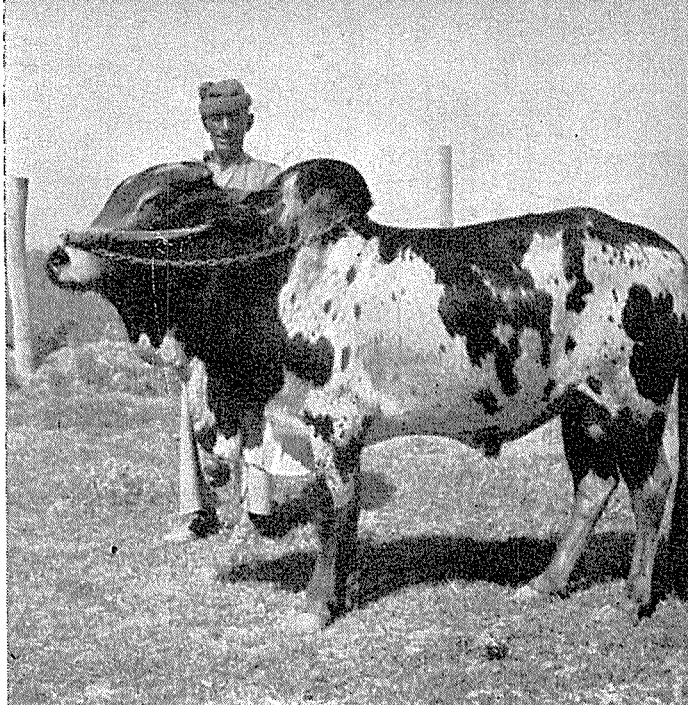
Conditions in the Native Home of the Breed

Location, Topography and Soils

The native habitat of the breed is situated between latitude 29°3' and 31°2' north and longitude 67°4' and 70°1' east. The area is located in the northwest side of Baluchistan and also in the adjacent parts of North-West Frontier Province of Pakistan including the district of Dera Ismail Khan. The area consists of a series of long but narrow valleys hemmed in by rugged mountains, which vary in elevation from 3,000 to 10,000 feet. The soil of the valleys is reddish brown and is fairly productive. Gravel

¹ See Figure 59.

FIGURE 59. The Lohani breed, found in the Loralai district of Baluchistan, consists of small, compact and fast plow animals: they are also used as pack beasts. Right: a Lohani bull.



Lohani cows are fair milkers, producing about 2,000 pounds of milk per lactation. Above: a pair of Lohani bullocks: a Lohani cow with calf. Left.

deposits are met everywhere. On the mountain slopes very little soil deposits are met with, which restricts vegetation.

Climate

The climate varies with elevation but on the whole is dry. The summer is cool at higher elevations, but in the valleys the temperature goes as high as 110°F; there is plenty of air movement, however, which makes the climate not unpleasant. Winters are cold: frosts frequently occur and at higher altitudes snowfalls are common. The average rainfall of the area is from 7 to 9 inches and the greatest amount of rainfall occurs during the months of February and March, and again in the months of July and August.

Vegetation

Natural vegetation is restricted to trees such as those belonging to the class of juniper and pistachio at higher levels and acacia and olive at lower levels. Varieties of grasses grow at lower altitudes but there are hardly any grasses at higher altitudes. Various crops, such as maize, lentils, barley, wheat and oats are grown in the area. Straws, stovers and husks from these crops are used for cattle feeding.

Management Practices

On account of the demand for Lohani bullocks, every farmer keeps 3 or 4 cattle, although the question of fodder is most difficult in the area. Bullocks and milking cows are usually stall-fed with stovers. The other stock are taken to the grazing areas, but owing to the larger number of animals in proportion to the available pasturage, conditions for feeding the animals is not very satisfactory.

Physical Characteristics of the Breed

Lohani cattle are small in stature. The mature animal measures from 40 to 44 inches in height. The head is small in proportion to the body compared with other Zebu cattle. The face is flat or slightly convex between the eyes. Horns are short and slender, and emerge in an outward direction from the outer angles of the poll. Ears are short.

The body is well-rounded and moderately long. Legs are short and the bone is dense. The skin is slight and smooth. The sheath is very close to the body. The dewlap is thin and light. The tail is long and the switch almost touches the dewclaws. The udder in better specimens is symmetrical but small in size. The feet are small and hard. The characteristic color is red with white patches especially on the head, neck and dewlap, although entire red color is not uncommon. Average data on certain body measurements are summarized in Table 80.

Table 80. Average Measurements of Lohani Cattle

MEASURE	Mature male	Mature female	Ox
Weight, in pounds	600	575	700
Length from shoulder point to pin bones, in inches	46.07 ± 0.67	45.26 ± 0.31	50.83 ± 1.20
Height at withers, in inches	42.07 ± 0.49	44.03 ± 0.42	48.00 ± 0.65
Depth of chest, in inches	19.64 ± 0.27	22.23 ± 0.34	25.60 ± 0.30
Width of hips, in inches	12.21 ± 0.17	13.53 ± 0.24	16.41 ± 0.33
Heart girth, in inches	52.64 ± 0.70	55.03 ± 0.62	63.00 ± 0.81

Functional Characteristics of the Breed

This breed has not yet been much studied but preliminary observations show that the Lohani has potentialities of milk production and possesses at the same time good draft qualities for the hilly tracts. The bullocks are excellent workers in the plow and as pack animals, especially in hilly or arid tracts. They are said to be sure footed, quick-stepping and strong-hoofed. Carefully selected cows of this breed are reported to have yielded an average of 2,000 pounds of milk in a lactation period of 220 days with an average dry period of 140 days. The average calving interval is reported to be 14 months and the average number of lactations during the lifetime about 5.

Males are ready for service at the age of 3 to 3½ years and the average active breeding life of bulls is 5 years. Males to be used for draft are castrated and put to work when they are about 3 to 3½ years of age. A pair of bullocks can haul about 1,000 to 1,200 pounds and travel at the rate of 3 to 3½ miles per hour. They can cover a distance of 15 to 20 miles in an average working day.

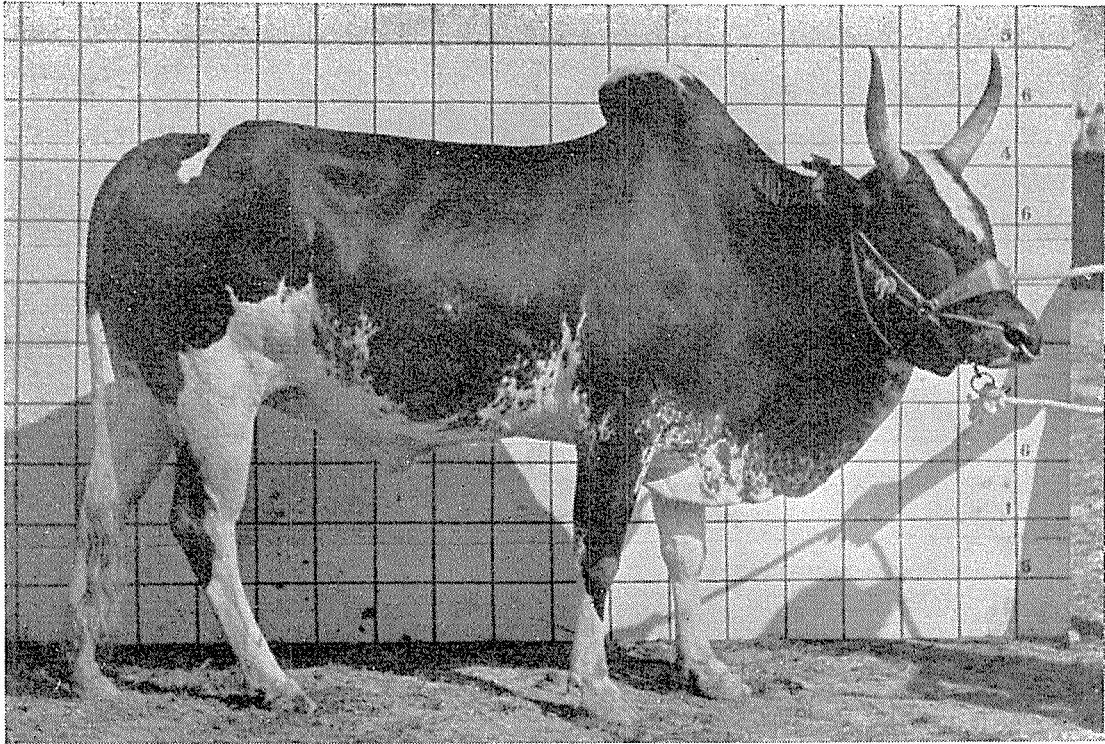
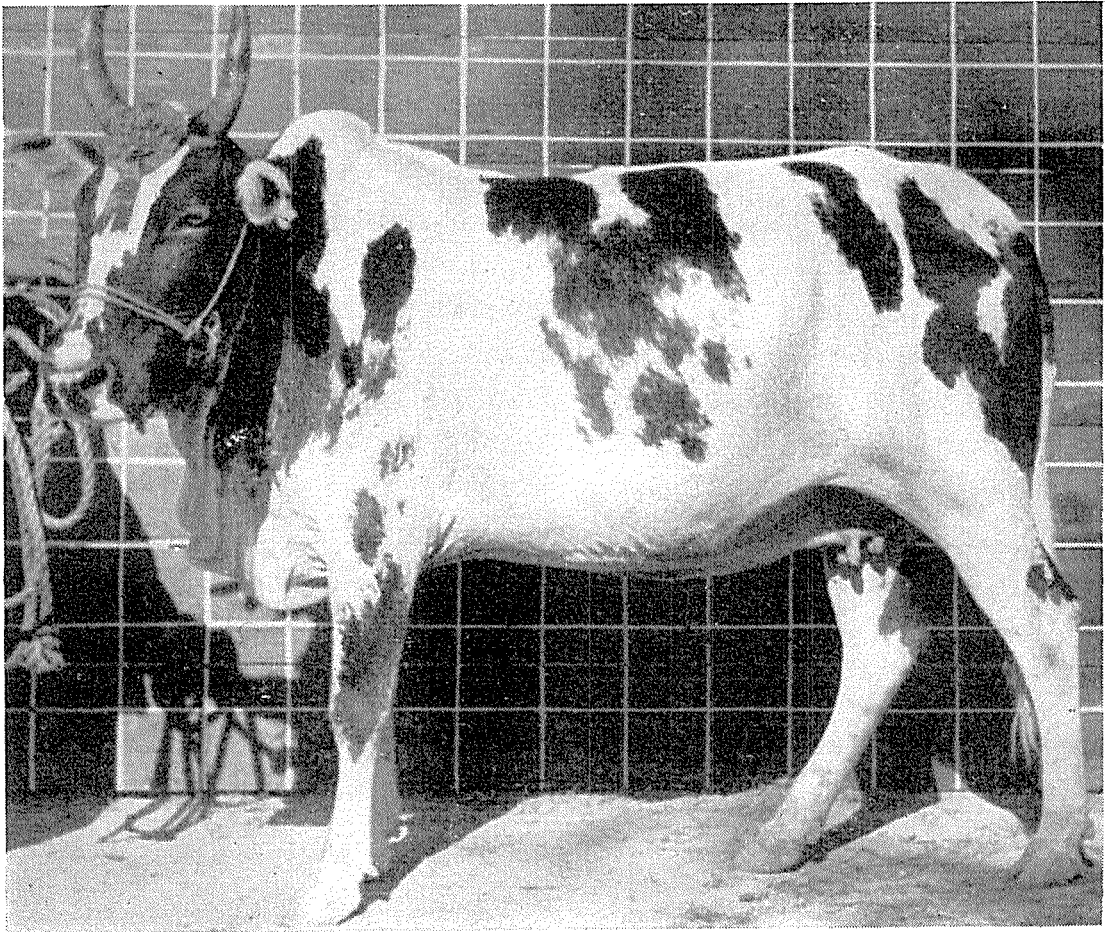


FIGURE 60. The Ponwar breed, found in the districts of Pilibhit and Khan in Uttar Pradesh, are small, active and often vicious. The bullocks are good for draft purposes: the cows are poor milkers. Above: a Ponwar bull. Below: a Ponwar cow.



Performance in Other Areas

The breed is restricted almost entirely to its native area along with the adjacent areas of North-West Frontier Province.

Sources of Breeding Stock and Information Regarding the Breed

Lohanis are available in their breeding areas as well as in the cattle market at Kohat in North-West Frontier Province.

Further information about the breed may be obtained from the:

1. Animal Husbandry Commissioner to the Government of Pakistan, Karachi;
2. Deputy Director of Animal Husbandry, Quetta, Baluchistan.

PONWAR

Origin

Ware (1942) observed that the Ponwar breed¹ does not fit into any definite group of cattle though it is a separate breed of probably more recent origin. Phillips (1944), however, classifies it into the hill type of cattle which are found in the foothills of the Himalayas. As seen from the physical characteristics of this breed, one may be inclined to accept the latter view. It is small and compact with frequent white markings on the forehead, dewlap and limbs. Black and white color is often seen in the hill type of cattle and these features are also common in the Ponwar breed. However, the horns are inclined to be lyre-shaped, which may be due to some mixture of the nearby plains cattle. The breed is restricted to a small geographical area of Pilibhit district of Uttar Pradesh, India.

Conditions in the Native Home of the Breed

Location, Topography and Soils

Animals of the Ponwar breed of cattle are found primarily in the Puranpur subdivision of Pilibhit district of Uttar Pradesh. The area lies approximately between latitude 28°4' and 28°8' north

¹ See Figure 60.

and between longitude 79° and 80°4' east. The area is only a short distance from the outer ranges of the Himalayas. The whole area consists of a level plain with a few depressions but no hills. In the center of the district a long swamp called the Mala lies north and south dividing the district into eastern and western halves. The River Gomti rises from these swamps. The Puranpur subdivision is in the eastern portion. It contains large forest areas. The district consists almost entirely of alluvial soil.

Climate

It is a submontane area, having high humidity. Proximity to hills causes a more even temperature and even the summers are not as unbearable as in other parts of Uttar Pradesh. The annual rainfall ranges from 50 to 65 inches. Winter rains are heavy and occur during the months of November to February. Regular summer rains from the southwest monsoon occur during the months of July to September.

Vegetation

The grasses which are common in the area show remarkably rich vegetative growth, but they are observed to be coarse and not so nutritious. Paddy is extensively grown in the area. As the drainage is poor in most of the area, plants which can stand waterlogging are common. The cattle are maintained on grazing throughout the year.

Management Practices

As the cattle are maintained under ranching conditions they are not frequently handled and, being of nervous disposition, are relatively intractable. They are reared mostly on grazing in the forest areas. Only bullocks which are used for transportation or cultivation are retained in the villages and handled. Other stock is always out in the open and rarely handled.

Physical Characteristics of the Breed

The animals of this breed possess a small, narrow face, small ears and big, bright eyes. The forehead is slightly concave and often has white marking. The horns are long, upstanding and lyre-shaped. They measure from 12 to 18 inches in length.

The neck is short and powerful. The barrel is moderately long. The sheath is short and tight. The dewlap is light and thin. The hump is well-developed in bulls but it is small in cows. The cows have small and poorly developed udders. The tail is long and tapering with a white switch.

Ponwar cattle are usually black and white; the color markings do not have any particular pattern, but large patches of black and white are intermixed. The average height of a bull is 50 inches, while that of a cow is about 45 inches. Bulls weigh around 700 to 800 pounds, while the cows weigh about 600 to 650 pounds. The average measurements of Ponwar cattle are summarized in Table 81.

Table 81. Ranges in Measurements of Ponwar Cattle

MEASURE	At one year	At two years	Mature	
Females				
Weight, in pounds	200	400	650	
Length from shoulder point to pin bones, in inches	35-36	42-43	50-51	
Height at withers, in inches	37	43	48-49	
Depth of chest, in inches	13-14	18-19	21-22	
Width of hips, in inches	11-12	13-14	16-17	
Heart girth, in inches	43	53-54	62-63	
Males				
MEASURE	At one year	At two years	Mature bull	Mature ox
Weight, in pounds	225	425	700	700
Length from shoulder point to pin bones, in inches	35-36	42-43	52-53	52-53
Height at withers, in inches	37-38	43-44	52	51
Depth of chest, in inches	13-14	18-19	20-21	20-21
Width of hips, in inches	10-11	13	16-17	16
Heart girth, in inches	43-44	54-55	65	63

Information supplied from the Government Cattle Breeding Farm, Hempur, District Naini Tal, United Provinces, India.

Functional Characteristics of the Breed

The cattle of this breed active and often fiery-tempered. They are observed to thrive well under free grazing conditions. The bullocks are good for draft purposes. They are quick movers. The animals of this breed are observed to mature late and the majority of the heifers calve for the first time when they are 5 years old. The cows are poor milkers and are rarely milked even in the flush of their production. Though the Government of Uttar Pradesh maintains a farm for the breeding of Ponwar cattle at Hempur, Uttar Pradesh, very little information on the functional behavior of the breed is yet available.

Performance in Other Areas

The breed has not spread to other areas beyond its native tract except to some nearby districts of Uttar Pradesh.

Sources of Breeding Stock and Information Regarding the Breed

Information regarding the breed may be obtained from the:

1. Animal Husbandry Commissioner to the Government of Uttar Pradesh, Lucknow, India.
2. Animal Husbandry Commissioner to the Government of India, New Delhi.

SIRI

Origin

Animals of this breed¹ are found in the hill tracts around Darjeeling (Bengal, India) and in Sikkim and Bhutan. Bhutan is said to be the real home of this breed. It is distributed from that area to the various parts of Sikkim and Darjeeling. Ware (1942) observed that if the Zebus of India were classified on the basis of their position of the hump, which may be either cervico-thoracic and muscular, or thoracic and muscular-fatty, the Siri will be the only breed in the former group. Presumably Siri cattle have some blood from the cattle in Tibet.

¹ See Figure 61.

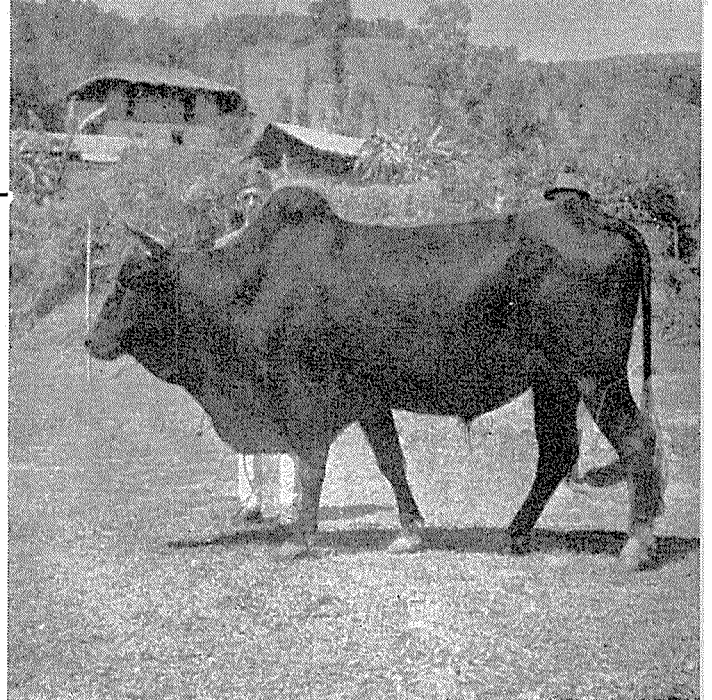


FIGURE 61a. The Siri breed is found in the hilly areas around Darjeeling, India, and in Sikkim and Bhutan. Above: a Siri bull. Left: a Siri cow.

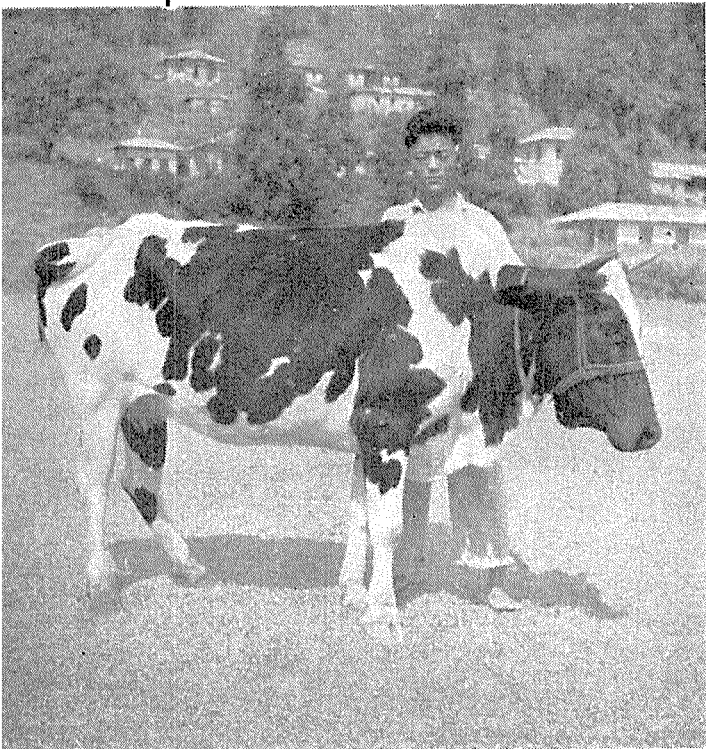
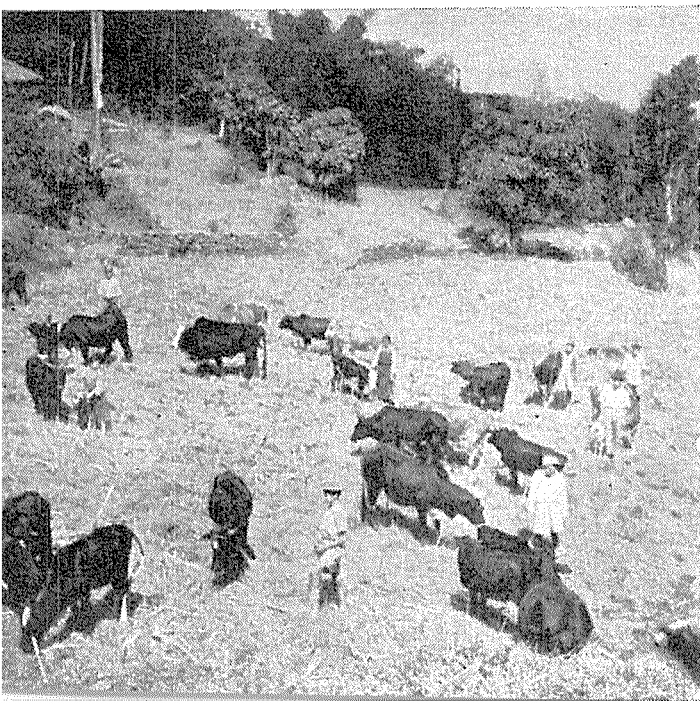
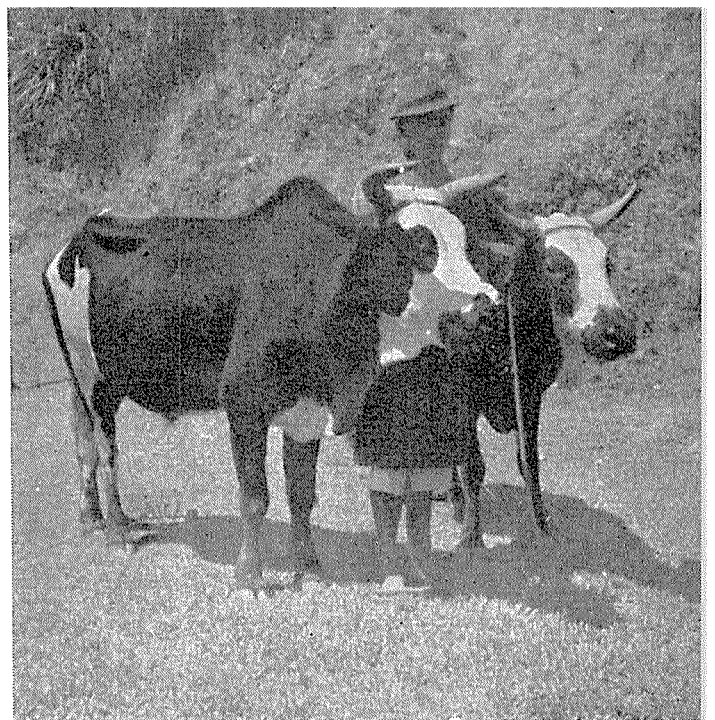


FIGURE 61b. Siri bullocks are good workers and the cows are fairly good milkers. Right: a pair of Siri bullocks. Below: a Siri herd at pasture.



Small cattle with similar black and white color markings are reported by Phillips, Johnson and Moyer (1945) to occur in Sikong Province of China, which occupies a portion of the Tibetan highlands northeast of Bhutan. Siri cattle crossed with Nepali cattle look like Siri, but they can be distinguished by their color pattern and position of hump and horns. These are known as Kachcha Siri or imitation Siri cattle.

Conditions in the Native Home of the Breed

Location, Topography and Soils

The whole area is hilly, with elevations from 3,000 to 12,000 feet above sea level. The hillsides are mostly steep and separated from each other by deep, narrow valleys. This mountainous region sends out numerous rivers. Owing to the configuration of the country regular crop production is limited to a comparatively few spots.

A distinctive feature of Himalayan agriculture is the terracing of the mountain slopes for rice cultivation. On steep slopes the labor of revetting the narrow terraces with stones is very great, but as the site of a rice field is always selected so that it can be irrigated from some stream, the crop is a certain one and amply repays the labor expended. The incline of the slope, the aspect and the elevation are important factors in the relative fertility of such lands. Many of the terraces are too narrow to admit the use of a plow; these are cultivated with a hoe.

Climate

At altitudes higher than 4,000 feet the climate throughout the year is pleasant. There is heavy rainfall during the months from June to October. The rain comes in heavy showers and skies clear within a short time thereafter. Winters are inclined to be chilly and severe.

Climatological data for Darjeeling and its surroundings are given in Table 82.

Table 82. Climatological Data for the Darjeeling Area

MEASURE OF CLIMATE	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Mean maximum temp. °F. . . .	47.3	48.9	56.5	62.5	64.6	66.2	66.8	66.5	65.4	61.7	55.6	49.4
Mean minimum temp. °F. . . .	35.1	36.1	42.3	48.4	52.3	56.5	58.0	57.6	55.9	50.1	42.8	36.7
Humidity, per cent at 0800 hours I.S.T. .	81.0	82.0	73.0	78.0	88.0	94.0	96.0	95.0	93.0	86.0	78.0	76.0
Rainfall in inches	0.55	1.10	1.84	3.85	8.70	24.26	32.31	26.12	18.38	4.5	0.78	0.24

Information from the Meteorological Department, Government of India.

Vegetation

In the cultivated areas the chief crops grown are rice, maize, wheat, buckwheat, millets, mustard, potatoes and oilseeds. Tea is extensively grown in the area. The principal pasture grounds are the forest areas between the altitudes of 6,000 and 12,000 feet. In the cold and hot seasons the lower ranges provide ample grazing but during the rainy season it is impossible to graze in these areas because of leeches.

Management Practices

The animals are allowed to graze throughout the year, though the amount of pasturage is extremely scanty during most of the year on account of limited pasture area and the large number of animals. Milking cows and bullocks are stall-fed and they receive rice straw, maize stover or hay along with green grass. Very little concentrated feed is given. Dry animals and young stock are taken for pasturing in the government reserved forests at higher altitudes during summer months.

Physical Characteristics of the Breed

The color most frequently seen are black and white or extensive solid black, in color patterns similar to that of Holstein-Friesians. The animal carries a thick coat all the year round, and it is generally believed that this protects them from heavy rains and severe cold.

The general form of the animal is massive. The head is

small, square cut and well set on. The forehead is wide and flat. The horns are sharp and directed forward and slightly upward. The ears are small.

The hump is placed well forward and is usually covered with a tuft of long coarse hair. The position of the hump is slightly forward compared with that of other Zebu breeds. The dewlap is moderately developed and the sheath in the male is tight. Strong legs and feet are characteristics of this breed. The hooves are broad but strong. The udders of the cows are well developed. The measurements in Table 83 are taken from about 500 animals in the area where the breed is found.

Table 83. Ranges in Measurements of Siri Cattle

MEASURE	At one year	At two years	Mature	
Females				
Weight, in pounds	325-390	400-480	700-900	
Length from shoulder point to pin bones, in inches	32-35	36-39	48-54	
Height at withers, in inches	33-37	38-43	42-50	
Depth of chest, in inches	16-20	22-25	26-29	
Width of hips, in inches	10-12	10-13	15-20	
Heart girth, in inches	46-50	50-55	66-70	
Males				
MEASURE	At one year	At two years	Mature bull	Mature bullock
Weight, in pounds	340-410	440-510	830-1200	700-1000
Length from shoulder point to pin bones, in inches	32-36	38-41	51-64	48-57
Height at withers, in inches	37-40	40-44	43-54	42-53
Depth of chest, in inches	18-21	24-26	28-31	28-31
Width of hips, in inches	10-12	11-13	15-20	15-18
Heart girth, in inches	48-51	53-56	68-78	65-74

Functional Characteristics of the Breed

It is observed that the animals of this breed can stand the rugged conditions of the mountains very well. When the animals are brought down to the plains they do not seem to do so well. Bullocks of the Siri breed are eagerly sought after for draft

purposes owing to their size and reputed great strength. The animals have very strong feet and a pair of bullocks can haul a load of about 2,000 pounds at an average speed of about one mile per hour on steep hills. They are usually castrated and trained for work when they are about 4 years of age. They are also used for all agricultural work such as plowing, cultivating, threshing, etc. On an average they are observed to work for 180 to 190 days in a year, at the rate of 8 to 10 hours per day.

The Siri is a late maturing breed and it has been observed that females do not calve for the first time until they are 5 to 5 $\frac{1}{4}$ years old. Though there is no definite breeding season, most of the animals are observed to be bred in summer. The average weight of female calves at birth is about 40 pounds, while male calves weigh about 50 pounds. Males are said to start serving at about the age of 4 years, and the average breeding life of well-kept bulls is about 8 years. It has been observed that Siri bulls tend to be shy breeders.

Average production of a few selected cows (records of 20 cows) has been 3,000 pounds in an average lactation period of 280 days. Superior production has been as much as 4,250 pounds. The fat percentage varied from 6 to 10 percent. Siri cows are fairly regular breeders and well-fed animals have an average calving interval of about 370 days, but average animals kept under village conditions usually produce a calf only once in 18 to 20 months.

Performance in Other Areas

The breed is restricted to the areas mentioned above.

Sources of Breeding Stock and Information Regarding the Breed

Further enquiries regarding the breed may be made to the Animal Husbandry Commissioner to the Government of India, New Delhi, India.