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Annual Report

1931-32

OF THE

Civil Veterinary Department, Punjab,

For the year 1931-32.

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Lahore :

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Review of the Annual Report of the Civil Veterinary Department, Punjab, for the year 1931-32.

It is satisfactory to find that in this year of financial difficulties there has been little or no falling off in the efficiency of the Provincial Veterinary Services. The work done by this department which is apt to pass unnoticed by the public may be considered under three heads :—

- (1) breeding of all kinds of live stock up to a better standard of efficiency and usefulness ;
- (2) control of contagious diseases ; and
- (3) curative treatment.

The importance of these subjects is unfortunately not sufficiently appreciated. It is easy to watch the work of a veterinary hospital, but only the expert can assess accurately the value of research work in genetics or prophylaxis. No new veterinary hospital was sanctioned during the year owing to shortage of money. One new veterinary hospital sanctioned in the previous year was opened bringing the total in the province up to 288. It is satisfactory to find that the total number of animals treated in these hospitals rose from last year's figure of 1,026,512 to 1,144,647. Every year these hospitals are steadily gaining the confidence of the people. Apart from the treatment given in hospitals, a progressively increasing number of cases are dealt with on tour in villages by the veterinary staff. 7,500 more villages were visited this year than last and 83,000 more animals were so treated. At the Lahore veterinary hospital it is regrettable to find a falling off in the number of in-patients in the general ward due to the fact that cruelty cases which should have been brought to the hospital for treatment, were this year taken to the City Magistrate who released them after inflicting fines on their owners. The Director, Veterinary Services, reports that the only cruelty cases now admitted are the most flagrant, or those in which destruction is necessary.

2. The Hissar Cattle Farm is engaged mainly on the production of satisfactory strains of cattle for breeding purposes but it is also made the field for much useful experimental work in feeding, in the cultivation of fodder crops and in the curative and preventive treatment of disease. Experiments are also being carried out in tattooing for identification purposes, in the hope

that should a satisfactory method of tattooing be evolved, the task of the cattle-thief may be rendered considerably more difficult. In spite of economic depression the sales of stock for breeding purposes increased in almost all sections during the year. Out of the 91 dairy cows, whose lactation was recorded during the year, only 27 produced less than 2,000 lbs. of milk; while 3 produced 4,000 one 5,000 and one 6,000. The Arab horse-breeding section has been closed down. There has been a certain amount of contagious abortion more particularly among goats, and an investigation into the outbreak is in progress in collaboration with the staff of the Veterinary College, Lahore. The expansion scheme, which was undertaken some years ago, is now complete in all important details with the result that the farm is now for the first time self-supporting in grain as well as in fodder. This result has been achieved twelve months earlier than was expected. In future the farm may be in a position to grow some paying crops and derive revenue therefrom in order to reduce the gap between income and expenditure. Towards the end of the year at the request of the Legislative Council a committee was set up to investigate the affairs of the farm from the economic point of view. Their report is now under consideration. There can be no doubt that this farm is doing most valuable work for the province.

3. During the year the post of Live Stock Officer was placed in abeyance as a measure of retrenchment and the superintendence of breeding operations reverted to Divisional Superintendents. District breeding work can be considered under three heads:—

- (1) grantee cattle farms ;
- (2) cattle breeding in special tracts ;
- (3) general breeding work in districts.

The grantee farms are all in the Lower Bari Doab Colony and appear on the whole to be working satisfactorily, though some are better than others. The proprietor of the Jahangirabad Farm deserves credit for undertaking a small buffalo herd at his own charges in addition to the herd of Sahiwal cattle he is bound to maintain under his conditions. On the two cattle farms in the Khanewal tahsil which are devoted to the Sahiwal breed, cows yielding over 4,000 lbs. of milk in

a lactation are common, and unsatisfactory cows are steadily being eliminated. The Director, Veterinary Services, reports that constant supervision is necessary to prevent the grantees relaxing into slipshod methods of breeding, which would defeat the objects of the grants altogether.

The two most important special tracts in which cattle breeding is being encouraged are the Haryana and the Dhanni. In Hissar, Rohtak and Gurgaon efforts are being made to establish an improved stock of Haryana cattle and similar steps are being taken for the Dhanni breed in the districts of Attock, Rawalpindi, Jhelum, Shahpur and Mianwali. In both these tracts the work is at present handicapped by shortage of funds in the coffers of the district boards concerned. In order to stimulate these activities one-day cattle shows with distribution of small prizes would be useful, but for these money is required. Progress is also being made with cattle breeding schemes in the Montgomery district, the Malwa tract, the Lahore district and in Kangra. The proposal to found cattle farms in the Nili Bar has not been proceeded with owing to the prevailing stringency. The land earmarked for the purpose is on temporary cultivation at present. A proposal to set up a buffalo breeding farm in part of this land under private management is under consideration of Government.

4. Operations on grantee farms and in special tracts cannot influence the province as a whole unless the example afforded by them affects cattle breeding methods in the province as a whole. The ordinary work of the veterinary officer in every district of the province should include a practical interest in the breeding of horses, cattle, buffaloes, camels, sheep and goats. The Civil Veterinary Department is largely relieved of their responsibility for horse-breeding by the extensive operations in that direction carried on by the Army Remount Department in selected districts. But there are still 70 horse and pony stallions and 87 donkey stallions supervised by the department. The number of district board stud bulls in the various districts rose from 3,520 to 3,857. The system of issue of stud bulls from the Cattle Farm at Hissar is one of the items which were referred to the committee mentioned in paragraph 2 above, and their recommendations will have the careful consideration of Government. At pre-

sent district boards seem disinclined to find the money required to pay the very moderate prices assessed on these bulls, and Government is faced with the necessity of feeding larger numbers of bulls on the farm than true economy would contemplate. The districts want bulls and plenty of bulls are available. It is merely a question of finding a suitable solution. Up to date buffalo breeding has not received the attention which it deserves. A fine example has been set during the year by Guru Partap Singh of Bheri Sahib who has offered to give annually free of cost all mature male stock bred at his farm and declared fit for breeding purposes by the department to the District Board, Ludhiana, for the improvement of the local breed of buffaloes. Camel breeding is being encouraged in the Fazilka and Muktsar Tahsils of Ferozepore district; but sufficient money is not available at present. The supply of three quarter merino sheep from the Hissar Cattle Farm to the Kangra district continues. The department is keeping in close touch with the shepherds at Faziilka, which is one of the most important wool markets in the Punjab.

5. Every effort is being made to grapple with the important question of the prevention of contagious diseases. A conference was recently held at Dharamsala with a view to find methods of concerted action to prevent the spread of contagious diseases between the Mandi, Bilaspur and Suket States and the neighbouring districts of the Punjab. The total reported mortality from contagious diseases in the year rose from 17,628 to 24,220. Among cattle hæmorrhagic septicæmia was responsible for about 47 per cent. of the total mortality. Rinderpest, which occurred particularly in Lahore, Gujranwala and Sheikhpura districts, was next in importance. At the various surra stations in the province 2,641 horses and camels were treated during the year as compared with 1,925 in the previous year. This disease is restricted mostly to the districts of Sheikhpura, Gujranwala, Sialkot, Rohtak and Karnal. The department undertakes anti rinderpest inoculations and inoculations and preventive vaccinations against hæmorrhagic septicæmia.

6. Towards the end of the year a committee investigated the affairs of the Punjab Veterinary College; and were satisfied that on the whole the college was econo-

mically administered. Some minor economies, which are expected to result in the saving of Rs. 3,881 annually, have been introduced. Apart from the teaching work for which this college has always been held in high esteem valuable research work is constantly being carried on ; while useful demonstrations and propaganda with lectures on veterinary science are arranged for at all important horse and cattle fairs in the province. Financial stringency has unfortunately materially affected the prospects of diplomates. There is at present no outlet for them except into the ranks of the Veterinary Department and these ranks are not at the moment expanding. It is to be hoped that municipal committees and district boards will realise the value of this material for meat and milk inspection, hackney carriage inspection and other such work. Similarly, diplomates of the Lahore Veterinary College are very well fitted to serve as inspectors under the Society for the Prevention of Cruelty to Animals. The meat and milk inspection course at the Veterinary College is probably as thorough as any available elsewhere and it is hoped that local bodies when making fresh appointments to such posts will appreciate the fact.

Mr. Quirke held the post of Director, Veterinary Services, throughout the year and the thanks of the Ministry are due to him and to his officers for the satisfactory way in which their duties were performed. The Ministry also wishes to be associated in the acknowledgments of specially good work recorded by the Director in the last paragraph of his report.

By order of the Punjab Government (Ministry of
Agriculture),

H. CALVERT,

*Financial Commissioner and
Secretary to Government,
Punjab, Development Department.*

JOGENDRA SINGH,
Minister for Agriculture.

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Agriculture),

H. CALVERT,

*Financial Commissioner and
Secretary to Government,
Punjab, Development Department.*

JOGENDRA SINGH,
Minister for Agriculture.

mentally administered. Some minor economies which are expected to result in the saving of Rs. 2,821 annually, have been introduced. Apart from the teaching staff for which the salaries has always been held in the estimate, valuable services work is constantly being carried on with a view to the dissemination and propagation of the various agricultural schemes arranged for in the province. All important horses and cattle fairs in the province, financial management has not only been materially affected, but the management of the same. There is at present no prospect for them to rise in the course of the year. The Government and their agents are not at the moment extending. It is to be hoped that financial conditions will improve and that the Government will realize the value of the various departments and their respective contributions to the revenue of the province. It is to be hoped that financial conditions will improve and that the Government will realize the value of the various departments and their respective contributions to the revenue of the province. It is to be hoped that financial conditions will improve and that the Government will realize the value of the various departments and their respective contributions to the revenue of the province.

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Annual Report of the Civil Veterinary Department, Punjab, for the year 1931-32,

BY

Mr. W. Taylor, M.R.C.V.S., D.V.H., I.V.S., Offg. Director,
Veterinary Services, Punjab.

CHAPTER I.—General Administration.

1. Mr. T. F. Quirke, I.V.S., remained in charge of the Department throughout the year.
Director, Veterinary Services, Punjab.

2. He carried out inspection tours of several districts in the Province and attended many of the important cattle fairs, in order to supervise the special propaganda work, which was being conducted by the staff of the Department.

He inspected on different occasions the Government Cattle Farm, Hissar, in addition to the various grantee farms situated in the Lower Bari Doab Canal Colony. He also visited the Delhi Province, and the North-West Frontier Province, on inspection duty. He toured in the Hariana, Dhanni and Malwa Cattle Breeding tracts, to see personally the progress of the departmental schemes in these areas.

3. He acted as an external examiner of the Punjab Veterinary College, Lahore, for the L. V. P. Final Examination held in May 1931.

4. The Director attended the meetings of the Punjab Retrenchment Committee held at Simla in July 1931, when he was examined in respect of possible retrenchment in the Department.

CHAPTER II—Live Stock.

A.—BREEDING OPERATIONS.

1.—GOVERNMENT CATTLE FARM, HISSAR.

5. Mr. L. W. Smith held charge of the Farm as Superintendent throughout the year, except the period from 29th June 1931 to 6th October 1931, and from 26th January 1932 to 6th February 1932, when he was on leave. Mr. W. S. Read, Assistant Superintendent (Fodder), officiated for him during the above periods.

Visitors to the Farm during the year under report included —

- (1) The Honourable Sardar Sir Jogendra Singh, Kt.,
Minister for Agriculture, Punjab.
- (2) Lieut.-Colonel Ruston.
- (3) Mr. R. A. Butler, M.C., member of the Round
Table Conference Franchise Committee.

6. Annual rainfall was 17·35" compared with 21·72" in the previous year, and against an annual average of 14·00".
Climatic conditions.

The monsoon broke late in Hissar, and, from the cultivator's point of view, it was unevenly distributed. After the 30th October rains ceased completely and winter rains were very meagre, the little which fell was distributed in such minute quantities that it was useless, with the result that most of the barani crops were a complete failure.

From a grazier's stand-point, the rain was well distributed in the months of July; August and September, and sufficient grass was available in the Bir for grazing until the end of the year, with the result that stall feeding was unnecessary, except for equines, working bullocks and dairy cows.

7. During the year under report the issue of live stock for breeding purposes to Punjab zamindars and district boards included 376 bulls, 6 donkey stallions, 1 Arab stallion, 138 rams and male

rams, 46 ewes and female lambs and 28 male goats. These figures show that, in spite of agricultural depression, the sales for breeding purposes have increased in almost all sections, as compared with the figures for the previous year.

8. One thousand, four hundred and thirty-six calves were born during the year compared with 1,115 in the previous year. The Cattle-breeding Section. method of grazing of stock early in the morning, as commenced last year, proved such a success that the practice has been continued again this year.

The bulls purchased from Rohtak District for use on the Farm have produced excellent stock. The District Board has again been approached to continue this method of exchange with the Superintendent of the Farm.

Since January 1932, all calves born on the Farm have been weighed in order to determine the average weight at birth. Upto 31st March 1932, 379 calves were weighed. The maximum weight observed was 72 lbs. and minimum 40 lbs.

The average weight of newly born calves in the main herd is 57 lbs.

It is proposed to experiment on animals which are otherwise normal, but do not come, or are late in coming, into season, with the urine of pregnant animals which according to recent research possesses the necessary hormones for the stimulation of fertility.

9. The Section has milk recorded 623 cows since its inception. During the year under report 91 dairy cows completed their lactation and are classified as below :—

1,000 lbs per lactation	..	..	..	27
2,000	..	..	..	45
3,000	..	..	..	14
4,000	..	..	..	3
5,000	..	..	..	1
6,000	..	..	..	1
				<hr/>
Total	..	..	..	91

The owing follstatement shows the milk yield of some of the cows of this special herd : -

Cow No.	Total milk yield in lbs.	Days in milk.	Maximum daily yield in lbs.	REMARKS.
253 3/13	2,660	184	22	11th lactation.
253 3/18	5,355	303	27	7th ..
211 2/22	3,717	194	35	6th ..
169 2/25	3,689	230	22	2nd ..
316 3/26	6,909	300	36	2nd ..
4 H. H. 30	3,094	261	17	1st ..
6 H. P. 29	3,073	244	18	1st ..
426 4/27	2,919	233	23	1st ,
70 1/27	2,548	230	18	1st ..
420 4/27	4,739	305	24	1st ..

Handling and quietening of promising cows, and especially of first calvers, is still in progress. The section has devised three different methods of handling which are now under trial.

During the year under report a new type of ghee boiler was introduced into the Dairy Section with good results.

10. The group system of feeding which was started in 1930 is still practised.

Feeding Experiments.

The following chart explains the system : —

Milk yielders from	Group No.	Mixture ration.
1 lb. — 4 lbs.	1	2 lbs.
4 lbs.— 8 „	2	4 „
8 „ —12 „	3	6 „
12 „ —16 „	4	8 „
16 „ —20 „	5	10 „

11. The Kangra District continued to take practically all the young Hissar Dales fit for issue. The Bikaniri flock shows steady improve-

ment. There are now some excellent stud rams, which have been bred on the Farm. Local breeders appear to realize the usefulness of this desert sheep.

12. The goat breeding was seriously retarded by an outbreak of disease caused by *Br. melitensis* and *Br. abortus*. All the goats underwent biological tests, as a result of which the reactors, and the goats which had aborted, were disposed of. The zamindars appear to appreciate the usefulness of our male stock, as 28 were issued for breeding purposes during the year to the following districts:—

Hissar	..	..	..	..	3
Ambala	..	..	..	..	2
Ferozepore	..	..	..	..	12
Amritsar	..	..	..	..	10
Karnal	..	..	..	..	1
					—
			Total	..	28
					—

13. With the exception of 8 cases of abortion amongst the donkey mares, the stud is in a flourishing condition. Two jacks imported from Mona and one from America have produced very good stock. As a measure of economy, the question of amalgamating the Farm stud with that of Mona was referred to Government, but on account of financial considerations, and in the interests of the Province, the scheme did not materialise.

14. It has been decided by the Punjab Government to close down this section gradually. The old Arab mares were sold by auction, and all young stock transferred for use as hacks, for the outdoor staff.

15. There was no outbreak of Rinderpest this year. In future, it is proposed to carry out Serum Simultaneous inoculations for the control of this disease. The mortality among stock was 85 resulting from the following diseases:—

Hæmorrhagic Septicæmia	..	..	..	..	17
Black Quarter	..	..	..	..	63
Other contagious diseases in Bovines	..	..	..	..	1
Contagious diseases in other animals	..	..	..	..	4
					—
			Total	..	85
					—

16. (a) *Cattle*.—The presence of the Br. abortus has been confirmed in cases of abortion in cows which occurred during the year.

Contagious Abortion.

Necessary steps in respect of the control of this disease are being taken.

(b) *Donkeys*.—Fifty-five donkey mares were vaccinated monthly from the date of covering to the date of foaling. Out of this number 8 aborted, compared with 67 vaccinated and 5 abortions in the previous year. The conclusion to be drawn from these two results appears to be that the vaccine is of doubtful value.

(c) *Goats*.—Abortion in goats was again prominent during the year under report and investigation of these outbreaks is in progress in collaboration with the Punjab Veterinary College, Lahore.

17. A brief summary of the work done at the Farm Hospital is as follows:—

	Year under report.	Previous year.	
Daily average number of animals treated	50	63	
Inoculations performed ..	4,881*	1,907	*Includes inoculations against
Castrations performed ..	127	40	abortion in
Post-mortem examinations ..	381	383	equines.

Fourteen animals were tested with the "Double Intradermal" Tuberculin test and two with the subcutaneous test, two animals reacted positively, while two were suspicious, the remainder proving negative.

Nine cases of Johne's disease amongst the animals of the farm were suspected, five proved positive and the remaining four negative.

Six cases of Foot and Mouth disease were injected with fresh serum prepared from recovered cases, but the results were not encouraging.

After suitable preparation, all the equines on the farm were subjected to treatment with carbon disulphide, for the control of internal parasites. The results were encouraging.

In order to eradicate warble infestation on the Farm, the following dressings were used on 2,769 animals:—

- (1) Tobacco and lime.
- (2) Cooper Warble fly powder.
- (3) Cooper Warble cattle wash.

The results with all the three dressings were satisfactory.

18. The following table shows the out put of grain and fodder from the cultivation of the Bir :—

	Direct cultivation.	Tenants.	Total.
	Mds.	Mds.	Mds.
Grain (seed)	9,509	2,277	11,786
Dry Fodder	173,578	4,408	177,986
Green Fodder (ensilage grass bur). ..			
Total	183,087	6,685	189,772

The produce was 17,007 maunds in excess of that of the previous year, in spite of the fact that Rabi 1931 was a small one, owing to poor water supply.

19. The fodder reserve on 31st March 1932, was 257,213 maunds compared with 190,664 maunds in the previous year. Although the threshing of Rabi 1932 is not yet complete, it is possible to forecast that the Farm this year will be, for the first time, self-supporting in grain as well as in fodder. This is nearly 12 months earlier than was estimated when the expansion scheme was started. The Farm is, therefore, now in a position to grow some paying crops for revenue purposes in order to reduce the gap between income and expenditure which will automatically reduce the cost of production of stud bulls.

Supplies of canal water were satisfactory throughout the period of Rabi sowing, and the Farm was able to sow a record Rabi acreage. After this, however, the water supply failed, the quantity received for maturing Rabi crops was very poor, and so reduced the anticipated yields of grain and fodder.

20. The work under this scheme, excepting minor consolidation work, is now completed, and even during the transition period of the past four years, encouraging results have been achieved. The system of rectangulation has resulted in the saving of water, and the speeding up of irrigation, it has been responsible for placing the Farm on a self-supporting basis with regard to grain and fodder, and putting it in a very favourable position to grow other revenue-producing crops.

21. Experiments were continued with Sun-flower, Salt-bush, Irungu cholam, Gowara. A seed rate experiment for oats was also carried out. The results are being tabulated.

Experiments on fodder crops.

22. Grazing in the Bir was exhausted in April 1931 and stall feeding had to be resorted to, until the arrival of the monsoon, which was rather late, but some very good grasses came up, and whatever anjan was available was of very good quality.

The Bir.

Hay making was in progress from the 24th August 1931 until the 25th January 1932, and 43,476 maunds of good hay and ensilage, mostly anjan, were made. Also 11 maunds and 17 seers of anjan grass seed were collected. On account of the lateness of the rains, a lot of good green anjan was available after the silo pits had been filled, so an experiment in the stack method of ensilage was carried out. This had not been previously undertaken on the Farm.

The results of this experiment are most encouraging, for when the stacks were opened, some five months after making, the ensilage was consumed with avidity by the cattle. All issues from the stack are being made by weight so that the Farm can arrive at the loss by shrinkage, etc., with regard to this form of ensilage. Only 2,728 maunds of Palla was made this year. The crop was a poor one owing to the late rains, and the sudden cessation of the monsoon followed by a long dry spell at the time of seeding.

23. (a) Investigations of certain diseases are in progress and their results are being keenly watched.

General.

(b) During the year under report an implement shed 50' long, of a cheap Pusa pattern, was erected at Mundianwala. Owing to lack of funds it was found necessary to keep several urgent projects in abeyance.

(c) *Publications.*—During the year under report the History of the Farm was written by the Assistant Superintendent, Fodder. It is an interesting publication which will give to the public a better understanding of the reasons for the maintenance of the Farm, and, it is hoped, lead to a greater interest in its work.

(d) As usual, advice was also given to several gentlemen regarding sheep and cattle breeding.

(e) Valuable tattooing investigational work was further extended. A batch of heifers varying in age from 9 months to 2 years was tattooed for identification purposes.

A second batch of cows and bullocks of all ages was also tattooed with various inks in March 1930.

The numbers tattooed contained from 2 to 4 digits. All these animals have been treated as the rest of the herd, without any preferential treatment. Observations have been recorded from time to time. The results achieved are encouraging, and hold out definitely a hopeful future.

2.—GRANTEE CATTLE FARMS.

24. There are 6 Grantee Farms in the Lower Bari Doab Canal Colony, including a Dairy grant of 485 acres near Montgomery, under the supervision of this Department. The table below gives details of the number of stock on these farms at the end of the year under report :—

Name of Farm.	Area in acres.	REQUIRED STRENGTH OF HERD.		DETAILS OF STOCK AT THE CLOSE OF THE YEAR.				
		Cows.	Bulls.	Cows.	Herd bulls.	Young stock.		Bulls issued during the year.
						Male.	Female.	
<i>Hissar Breed Farms.</i>								
1. Bahadurnagar Farm.	3,131	400	6	399	6	272	315	59
2. Qadirabad Farm	1,000	125	3	121	4	101	87	..
3. Fazalabad Farm	3,140	400	6	368	6	190	217	26
<i>Montgomery or Sahiwal Breed Farm.</i>								
4. Jahangirabad Farm.	4,226	100	8	506	9	359	364	46
5. Allah Dad Farm	3,800	175	4	173	4	126	158	19
<i>Dairy Farm.</i>								
6. Montgomery Dairy Farm.	485	150	3	119	3	6	97	..
	Buffaloes	..	..	35	3	1	25	..

Of these, the Jahangirabad Farm shows greatest promise, because of the grantee's readiness to develop his farm on

commercial lines, and to carry out generally the recommendations of the Department. During the year under report Government approved the maintenance of 40 buffaloes and 1 buffalo bull of pure breed at this Farm without in any way affecting any condition of the existing lease, with the exception of the latter part of condition 16. Out of the above, 19 buffaloes and one bull have since been approved by the Department. The remaining 21 buffaloes will be made good by the grantee in the year 1932-33.

25. These grants consist of 218½ rectangles of 7 chaks, Nos. 20-26 I. A. L. near Shergarh. The present grantees are required to keep 2 Montgomery cows for each rectangle of 25 acres irrigated, and 1 cow for every rectangle un-irrigated, to the satisfaction of the Department.

The position, with regard to the disposal of the milk on a co-operative basis, was discussed by the Live Stock Officer with the grantees, representatives of the Co-operative Department and many others. Enquiries made showed that there was no desire to sell surplus milk by the grantee as it was all needed by their families.

26. Milk is being recorded on all the grantee farms as hitherto. There is a considerable number of good milkers. On the Jahangirabad and Allahdad Farms, many of their cows are yielding over 4,000 pounds of milk in a lactation. Cows giving an unsatisfactory quantity of milk are being steadily eliminated.

The following details of cows yielding over 6,000 pounds in a lactation on the two farms referred to above are given :—

Number of cows.	Number of days.	Total milk yield.	Number of lactation.
<i>Jahangirabad Farm.</i>			
63 J 2/5 ..	300	6,081	2nd.
137 J 3/3 ..	300	6,102	4th.
59 J 2/2 ..	300	6,088	4th.
146 J 4/6 ..	300	8,025	3rd.
32 J 1/4 ..	300	6,070	3rd.
167 J 4/3 ..	300	6,280	3rd.
182 J. P. ..	300	6,829	7th.
154 J 4/3 ..	300	6,015	3rd.

Number of cows.	Number of days.	Total milk yield.	Number of lactation.
<i>Allah Dad Farm.</i>			
91 A 3 3 ..	300	6,393	3rd.
58 A 3 2 ..	273	6,373	5th.
26 A 1 4 ..	297	6,989	3rd.
40 A 2 3 ..	269	6,928	5th.
104 A 2 3 ..	298	7,098	4th.
100 A 2 3 ..	300	6,368	5th.
201 A 4/5 ..	300	6,061	2nd.

The above two farms are supplying cream to the Military Dairy Farm, Lahore Cantonment. The Montgomery Dairy Farm and the Bahadurnagar Farm are selling their milk in Montgomery and Okara, respectively.

27. The grantees have not yet acquired sufficient appreciation of the elaborate arrangements needed for building up pedigree stock, and, but for departmental supervision they would very readily revert to slipshod methods, as being justifiable in these days of agricultural depression. This tendency has to be combated on all these farms. It discloses a regrettable lack of foresight in dealing with live stock improvement.

General remarks.

3.—CATTLE-BREEDING IN SPECIAL TRACTS.

(a) *Haryana Tract.*

28. The following statement shows the allotments made and the expenditure incurred by the District Boards of Hissar, Rohtak and Gurgaon towards the Haryana Cattle Improvement Scheme :—

District.	Government grant.	District Board contribution.	Total.	Expenditure.
	Rs.	Rs.	Rs.	Rs.
Hissar ..	4,000	4,000	8,000	8,690
Rohtak ..	{ 8,000	{ 8,000	} 22,614	} 21,697
	{ (a) 3,307	{ (a) 3,307		
Gurgaon ..	7,500	{ 5,950	} 20,053	} 20,103
		{ (b) 6,603		
Cash prizes ..	..	..	..	..

Note (a) & (b).—The sums of Rs. 6,614 and 6,603 represent the amounts due from the District Boards on account of last year's allotment having remained unspent in accordance with certain conditions imposed by Government.

The number of bulls supplied and the total number of approved bulls now working in the three districts of the Haryana Scheme are as follows :—

Name of district.	Number of approved bulls distributed during the year.	Total number of bulls working in the district.
Hissar	43	302
Rohtak	102	602
Gurgaon	118	611

One-day cattle shows have proved extremely beneficial to the scheme in the past, and a small prize distribution at these shows is proving a very great incentive to private breeders.

(b) Dhanni Tract.

29. The following statement shows the allotment made and the expenditure incurred by the District Boards of Attock, Rawalpindi, Jhelum, Shahpur and Mianwali towards the Dhanni Cattle Improvement Scheme :—

District.	Balance on 31st March 1931.	Government grant.	District Board's contribution.	Expenditure.
	Rs.	Rs.	Rs.	Rs.
Attock	702	4,500	2,500	6,462
Rawalpindi	5,137	4,500	4,500	10,407
Jhelum .. ..	..	6,000	5,000	10,746
Mianwali	877	6,000	3,650	9,243
Shahpur	168	2,000	2,000	4,058
Cash prizes .. ..	..	2,000	..	2,000
Total	6,884	25,000	17,650	42,896

The number of bulls supplied this year as well as the total number of approved bulls now working in the districts in the

Dhanni Tract are shown in the statement below. It shows an increase of 76 stud bulls at the end of the year :—

District.	NUMBER OF BULLS SUPPLIED DURING THE YEAR.		TOTAL NUMBER OF BULLS WORKING IN THE DISTRICT ON 31ST MARCH 1932.	
	District Board bulls.	Subsidy bulls.	District Board bulls.	Subsidy bulls.
Mianwali .. ..	..	37	8	52
Attock .. ..	..	31	15	36
Rawalpindi	11	28	28	36
Jhelum .. ..	..	28	19	40
Shahpur	3	7	56	11
Total	14	131	126	175

The present agricultural depression and the consequent paucity of funds are naturally retarding progress. Local bodies are doing their utmost, but, nevertheless, it is extremely difficult for them to provide money as liberally as previously. However, in spite of adverse circumstances the work has been carried on satisfactorily. There were 126 District Board and 175 subsidy bulls at the end of the year under report, as compared with 124 and 101 such bulls at the end of the previous year.

The Department is steadily pursuing its policy of concentrating its attention on those areas best suited to cattle breeding where nuclei of the indigenous breeds are found to flourish.

(c) *Other Tracts.*

(1) **MONTGOMERY DISTRICT CATTLE-BREEDING SCHEME.**

30. The above scheme started two years ago, was further extended during the year under report in Montgomery District. Several villages were supplied with approved Montgomery bulls free of cost. The progeny of the bulls previously located was seen by the Live Stock Officer. The results are encouraging.

(2) NILI BAR CATTLE-BREEDING SCHEME.

31. This scheme has not yet been inaugurated on account of paucity of funds. The land earmarked for the farm has, therefore, been given out on temporary leases for cultivation purposes.

(3) DAJAL VILLAGE CATTLE-BREEDING SCHEME.

32. A special scheme for the improvement of the Dhundi estate in Dera Ghazi Khan District has recently been evolved, and its preliminaries are being arranged. Owing to financial difficulties, the Dajal Village Cattle Breeding Scheme could not be extended.

(4) MALWA CATTLE-BREEDING SCHEME.

33. During the year under report accurate survey of the present position, and authoritative definition of the distinctive characteristics of the Malwa breed was completed. There are now 247 District Board Hissar bulls working in the Malwa tract with big centres at Moga, Jagraon and Raikot. A fourth centre has also been created at Ghal in Ferozepore Tahsil, by the location of 15 bulls. In addition to these bulls, there are 698 locally bred Malwa bulls liberated by the local zamindars, with the approval of the Department, under sections 56 and 57 of the Punjab District Boards Act. The Malwa breed constitutes the basis of a large number of the best milking and draught animals of the Malwa tract, so it is a matter of great concern when it is realized that the best specimen cows in considerable numbers are now being exported to other provinces of India, through the agency of dealers. The necessity for the immediate protection of this highly specialized and valuable breed is very evident.

(5) JALALABAD CATTLE-BREEDING SCHEME.

34. In order to improve the cattle of this tract which resembles in type the Sahiwal breed, 9 bulls of the Montgomery breed were located in the year 1930-31. The working of these bulls has created a considerable interest in the zamindars' community of that ilaqa, which has been responsible for a further demand of bulls of this type. In the year under report, dependent upon the generosity of the proprietor of the Allahdad Cattle Farm in the Montgomery District, a further supply of 15 bulls was made to this area. Excluding two casualties, there are now 22 Montgomery bulls at work in this tract. Arrangements are also afoot to meet the demand for Montgomery heifers.

(6) KANGRA DISTRICT CATTLE-BREEDING SCHEME.

35. In Kangra District where the district authorities and the Public Health Department have repeatedly pressed for improvement of the milk supply of towns like Dharamsala, Sultanpur and Kangra, etc., Montgomery bulls of small stature were introduced in the year 1929-30 by the location of 40 bulls, free of cost, at suitable places from the Jahangirabad Cattle Farm, in addition to 5 bulls already working in that district. These bulls have produced good progeny which are liked by the people. During the year 1930-31, two bulls, and, during the year under report, ten more bulls were sent from Jahangirabad Cattle Farm. Five casualties have so far been reported, thus leaving a balance of 52 at the close of the year.

(7) IMPROVEMENT OF CATTLE-BREEDING IN LAHORE DISTRICT.

36. One hundred and twenty-eight District Board Hissar bulls were working at the close of the year in the selected area of Kahna Nau in Lahore District. This area is now well equipped with pedigree Hissar bulls, and there is a remarkable improvement in the local cattle. To supplement the services of the existing Hissar bulls in the tract 25 privately-owned bulls have been issued in the area.

4. GENERAL BREEDING WORK IN DISTRICTS.

(a) Equines.

37. At the close of the year there were 70 horse and pony stallions in the non-selected districts of the Province against 64 last year. The number of donkey stallions was 81 compared with 84 during the last year. The following additions and castings were made :—

Number of stallions—Table VIII.

			Horses.	Donkeys.
Additions	..	..	3	8
Castings	..	..	3	11

38. The total number of mares covered by horse and donkey stallions during the year under report was 3,754 and 4,058 as compared with 3,113 and 3,593, respectively, during the previous year. Zamindars and others apparently appreciate the advantages accruing from the use of these stallions.

Services of stallions—Table VIII.

(b) Bovines.

39. At the close of the year under report there were 3,857 district board stud bulls in the various districts of the Province in comparison with 3,520 last year. There were 721 additions and 384 castings during the year.

Stud bulls—Table VII.

40. Indents for 376 Hissar bulls were sent to the Government Cattle Farm, Hissar, all of which were supplied before the close of the year.

The castings include bulls which died, or were cast on account of old age or unsuitability for further retention on the strength of approved bulls. Having carefully reviewed the position I consider that the maximum output of bulls from the Farm at its present stage of development, is definitely needed for absorption into the districts in order to conserve the work already initiated by the Department as represented by the 3,800 odd bulls now located in different villages of the Province. Under provincial control, these would require to be cast and replaced on a less haphazard system than has hitherto been possible under existing circumstances, thereby securing a greater degree of efficiency for the work.

At the instance of the Department, all the District Boards in the Province have framed rules and bye-laws with a view to discouraging the practice of releasing scrub bulls. The necessity of exercising tact and gentle persuasion in this direction has been impressed upon the members of the staff.

BUFFALO-BREEDING.

41. In order to meet the increased demand for milk and ghee, and to aid the commercial production and sale of milk by villagers, efforts are being made to improve buffalo-breeding in the villages. A fairly large number of buffalo bulls owned by zamindars has now been brought under the Department's supervision.

A notable feature of the year under report is the philanthropic offer of Guru Partap Singh of Bheni Sahib (District Ludhiana) to give annually, free of cost, all mature male stock bred at his farm, and declared fit for breeding purposes by the Department, to the District Board, Ludhiana, for the improvement of buffaloes which is a very important industry in this district.

Some of the District Boards ear-marked suitable amounts for the organization of small buffalo shows in suitable areas, to stimulate the interest of buffalo breeders. The amounts were awarded in cash prizes at these shows held during the year under report.

The statistical information in regard to the supply, etc., of buffalo bulls is given in table VII.

(c) *Others.*

CAMEL-BREEDING.

42. All the available evidence conclusively shows that interest in camel breeding is growing in the Fazilka and Muktsar tahsils of the Ferozepore District. The scheme is now in its fourth year, but paucity of funds is a stumbling block to its progress. The District Board of Ferozepore subsidized 10 camels (the same number as last year). Three hundred and forty-seven coverings have been registered against 404 in the previous year. The decrease in the number of coverings during the year was due to the death of one stallion during the covering season.

SHEEP AND GOAT-BREEDING.

43. The Department's scheme for the supply of three-quarters merino sheep to Kangra District at a concession rate has been in force since 1928-29. During the year under report, 87 more rams and 42 additional ewes were introduced from the Government Cattle Farm, Hissar, into the local flocks (from which the local rams were entirely excluded), compared with 120 rams and 20 ewes supplied last year.

44. In the Malwa tract (comprising Ludhiana and Ferozepore Districts) and the Majha tract (comprising Lahore and Amritsar Districts) short ear type of sheep of the Bikaner ancestry owned mostly by the "Od" tribe and Majha sheep with black and red faces, and bodies resembling Bikaner sheep, are met with. The Department's touring staff is keeping in close touch with the owners of local flocks. Fazilka, where these people assemble for sheep shearing, is one of the most important wool markets in the Punjab. The Department in this area carried out a large number of castrations amongst the local flocks, by the Italian method, which is becoming increasingly popular among the breeders.

5. CATTLE AND HORSE FAIRS AND SHOWS.

45. Detailed information regarding cattle fairs and shows held under the auspices of this Department is given in table IX. These were held in 22 districts of the Province. All fairs were attended as usual by the officers of this Department. The total number of fairs in the Punjab was 124 compared with 129 in the previous year. The decrease is due to fairs in certain districts having been abandoned by the District Boards concerned either on account of paucity of funds, or the prevalence of contagious diseases.

Fairs and shows—Table IX.

B.—DISEASE AMONG LIVE STOCK.

1.—PREVENTION AND TREATMENT OF DISEASE.

46. During the year under report the whole problem of combating contagious diseases amongst live stock in the Province was carefully studied by the district supervising staff, with a view to laying before the local authorities the difficulties which arise in dealing with outbreaks. Each district has its peculiar intricate problems, and by systematic surveys, the exact position, combined with constructive suggestions, is being brought home to each local authority.

This has given rise to serious thought, and local bodies are now becoming anxious to protect the people from the severe losses which are being caused every year by disease.

The survey and veterinary history work of Kangra and Hoshiarpur districts have been completed. Steps are being taken for the preparation of similar histories of other districts of the Province. A conference, with the express object of finding a method for the check and control of the dissemination of contagious diseases among cattle in the Kangra District, between the officers of this Department and the representatives of Mandi, Bilaspur and Suket States has been arranged under the Chairmanship of the Deputy Commissioner, Kangra.

Hospitals.

47. No new hospital was sanctioned by Government during the year under report on account of financial stringency. One Veterinary Hospital outstanding from the previous year was, however, opened at Rajaund, District Karnal,

Number of Veterinary Hospitals—Table V.

making a total of 288. These provide a network in the different revenue divisions as noted below :—

Divisions.	Hospitals.	Villages to each hospital.
1. Jullundur	49	137
2. Multan	60	132
3. Ambala	61	115
4. Rawalpindi	55	104
5. Lahore	63	147

48. The total number of animals treated in the *Veterinary Hospitals* was 1,144,647 which number compares very favourably with 1,026,512 treated during the previous year. In addition, 177,812 cases against 146,530 last year were supplied with medicine, but were not brought to the hospitals. The increase in the number of cases treated at our veterinary hospitals is very satisfactory showing that the Department is steadily gaining the confidence of the populace. The Department, however, insists that its staff must regard the control of contagious diseases and the improvement of the live stock of their ilaqas as their major activities.

49. This scheme is now in its fifth year and is making steady progress. Zamindars of the more remote areas are deriving considerable benefit from the facilities which are now provided at these dispensaries by regularly seeking the advice and services of our veterinary staff. The attendance at these dispensaries is increasing yearly.

50. No grant-in-aid for the construction of veterinary buildings in rural areas was sanctioned by Government on account of paucity of funds.

51. The Simla Veterinary Hospital is maintained out of provincial funds through the agency of the Simla Municipality.

The receipts and expenditure of this hospital during the year under report were Rs. 11,232 and Rs. 7,843 against

Rs. 11,402 and Rs. 7,771, respectively, during the previous year. This represents a decrease of Rs. 170 in income and an increase of Rs. 72 in expenditure. The reduction in shoeing charges by 20 per cent. sanctioned during the year under report was the cause of decrease in income, otherwise the hospital receipts are in excess of those of last year by a sum of Rs. 227. The surplus income amounting to Rs. 3,389, was credited into the Government treasury by the Simla Municipality.

52. Forty-eight thousand, five hundred and seventy-two villages were visited by the district staff on tour and 372,061 animals were treated as compared with 41,066 villages and 289,008 animals during the previous year.

Treatment of diseases in villages—Table IV.

2. INCIDENCE OF DISEASE.

53. The year under report was not a healthy one for the live stock of the Province, the total mortality from contagious diseases, as reported by patwaris, being 24,220 against 17,628 in the previous year.

Mortality.

Hæmorrhagic Septicæmia was responsible for about 47 per cent. of the total mortality caused by bovine diseases. The death roll from rinderpest was also great owing to fairly extensive outbreaks in certain areas, notably Lahore, Gujranwala and Sheikhupura districts.

Rs. 1,500 were again sanctioned by Government for disbursement to patwaris and lambardars showing promptness in reporting cattle diseases. Of this amount only Rs. 600 were awarded and the balance lapsed to Government.

(a) Equines.

Note.—Only those outbreaks of contagious diseases amongst equines which occur in non-selected districts of the Province are dealt with by this Department.

54. During the year under report glanders occurred in Lahore, Amritsar and Gurdaspur districts. The total number of cases was 30. Lahore suffered the most, 16 cases being detected and sent to the Punjab Veterinary College for disposal. Cases of this disease are seldom reported by their owners, but are detected either at the Clinic of the Punjab Veterinary College,

Glanders.

or by the district staff in the course of their tours. A scheme was worked out for the control of glanders in the affected areas. It has been decided that visits to all private premises, including those of owners of tonga ponies, shall be made twice a year, in winter and in summer. The Department is carrying on negotiations with the Municipalities concerned on the subject.

55. The undernoted Surra centres were at work during the last Surra season :—

Surra.

1. Hafizabad.	17. Khudian.
2. Muridke.	18. Sonapat.
3. Sheikhpura.	19. Panipat.
4. Sharakpur.	20. Gohana.
5. Jalalabad.	21. Bhera.
6. Ferozepore.	22. Karnal.
7. Makhu.	23. Isakhel.
8. Mukerian.	24. Dinga.
9. Kahnawan.	25. Rajanpur.
10. Satrah.	26. Kaithal.
11. Qila Harnam Singh.	27. Rohilla wali.
12. Wandoh.	28. Nawanshahr.
13. Pasrur.	29. Gurdaspur.
14. Akalgarh.	30. Bamdas.
15. Wazirabad.	31. Dinanagar.
16. Sambrial.	32. Kanganpur.

In addition, sanction for the opening of Surra centres at Jampur (District Dera Ghazi Khan) and Pindi Bhattian (District Gujranwala) was given during the year under report.

Climatic and other conditions were favourable to the spread of this disease during the year. The total number of Surra cases (including equines and camels) treated at the various centres in the Province was 2,641 compared with 1,925 in the previous year. Of these, 1,965 were equines and 676 camels compared to 1,448 and 477, respectively, during the preceding year. Of this number 2,275 cases came from Sheikhpura, Gujranwala, Sialkot, Rohtak and Karnal. In the Rohtak District, with the exception of one mule, all others treated were camels. This disease is a very difficult problem for stock owners in low-lying and water-logged areas or any other areas where, owing to defective drainage, conditions become favourable for fly borne infections. The Department is doing extensive propaganda in regard to this disease.

In addition to the authorised surra centres, the total number of surra cases confirmed from other areas by

microscopical blood examination was 195 as compared with 97 during the previous year.

(b) *Bovines.*

56. Rinderpest appeared in all the districts of the province except Mianwali. It was particularly severe in the Lahore, Gujranwala and Sheikhpura districts. With the increased net-work of hospitals the Department is establishing closer contact with the actual disease incidence of the Province.

57. The disease appeared in 24 districts of the Province. It was severe in Kangra, Ludhiana and Karnal districts. The use of *taramira* oil as a dressing for mouth lesions and tar oil for foot cases are gaining in popularity. Both remedies are cheap and easily obtainable in the bazars.

58. This disease appeared in all the districts of the Province, except Simla. It was responsible for considerable mortality in Lyallpur, Amritsar and Shahpur districts.

Hæmorrhagic Septicæmia is a disease associated with water-logged low-lying, and riverain areas, where also parasitic diseases of stock are rife. The mortality would have been very severe during the year under report, had it not been for the intervention of sera and vaccines in the well-known Hæmorrhagic Septicæmia areas.

59. This disease was reported from 19 districts of the Province. The heaviest mortality took place in the Rawalpindi and Jhelum districts. The regional distribution of this disease is of considerable interest.

60. There were 27 cases of anthrax during the year under report, all being reported from the Jhelum District.

61. During the year under report other diseases of a contagious nature occurred in 15 districts of the Province.

(c) *Other animals.*

62. The following diseases occurred among other animals :—

Rinderpest, Foot and Mouth Disease, Hæmorrhagic Septicæmia, Surra, Black Quarter, Trypanosomiasis, Rabies, Fowl Cholera, Rani Khet Disease and Sheep Scab.

3.—PREVENTIVE INOCULATION.

63. Anti-rinderpest inoculations were performed in 493 outbreaks and 88,240 cattle were inoculated, against 382 outbreaks and 92,856 inoculations in the previous year.

Anti-Rinderpest Inoculation.

Four hundred and twelve animals died after inoculation. These were probably in the incubative stage of the disease at the time of inoculations.

64. Preventive serum inoculations against Hæmorrhagic Septicæmia were performed in 413 outbreaks and 81,047 animals were inoculated as compared with 548 outbreaks and 130,997 animals during the preceding year.

Inoculation against Hæmorrhagic Septicæmia.

65. Vaccinations against Hæmorrhagic Septicæmia were performed on 182,515 animals in 892 villages of 27 districts against 205,210 animals in 1,200 villages of 28 districts during the previous year. The highest number of vaccinations was carried out in the Mianwali District. The volume of work performed by the employment of sera and vaccine by the Department's staff is very considerable.

Preventive vaccinations against Hæmorrhagic Septicæmia.

66. Vaccinations were performed on 23,629 animals in 119 villages of 14 districts against 21,420 animals in 151 villages of 11 districts during the previous year.

Vaccinations against Black Quarter.

67. No inoculation was performed during the year under report as all the affected animals died before inoculation could take place.

Inoculation against Anthrax.

4.—CASTRATIONS.

68. Two lakhs, four thousand, six hundred and sixteen castrations were performed on tour as compared with 187,605 during the previous year. Two lakhs, thirty-one thousand, nine hundred and forty-five castrations were performed in the veterinary hospitals against 202,817 in the previous year. This steady progress is due to the fact that the district veterinary staff realise their responsibility in carrying out castration work in their respective ilaqas. The Department is doing most valuable service for the Province by means of its large scale castration work which forms a regular feature of its progress in cattle breeding.

CHAPTER III.—Veterinary Education.

1.—PUNJAB VETERINARY COLLEGE, LAHORE.

69. On reversion from the Imperial Institute of Veterinary Research, Muktesar (United Provinces) where he was deputed to officiate as Director of the Institute, Mr. W. Taylor, I.V.S., reverted to his substantive appointment as Principal, Punjab Veterinary College, Lahore, on the afternoon of 9th April 1931 and proceeded on leave *ex-India* from the same hour and date. Captain U. W. F. Walker, M.C., I.V.S., was appointed to officiate during his absence. Mr. W. Taylor returned from leave on the forenoon of 17th October 1931 and held charge of his appointment up to the end of the year.

70. Out of 38 candidates for admission 20 were admitted in September 1931 of whom four were nominated by the North-West Frontier Province.

The academic qualifications held by the admitted candidates are :—

F. Sc. (Medical) ..	..	..	..	..	2
F. Sc. (Non-medical) ..	..	..	..	..	9
F. A. ..	..	..	..	..	9
					—
			Total	..	20

Of the above number 10 are agriculturists. At the close of the year under report the number of students on the rolls was 143 including one in the Refresher Course.

71. The annual examinations took place in June 1931 and the supplementary examinations, for those failing in one subject only, were held in September 1931 with the following results :—

Year.	Number examined.	Number passed in June 1931.	Number passed in September 1931.
1st	27	15	7
2nd	42	28	10
3rd	52	33	12
4th	40	26	6

72. The attendance in the various wards of the hospital was :—

Ward.	In-patients.	Against last year.	Out-patients.	Against last year.
General ward ..	1,234	1,671	5,939	4,397
Dog ward ..	375	372	548	490
Contagious ward ..	392	326	702	155

The falling off in the number of in-patients in the General ward is accounted for by the fact that during the last hot weather cruelty cases, normally brought to the hospital by the Society for the Prevention of Cruelty to Animals authorities, were taken to the City Magistrate, who released them after levying fines on their owners. They were not sent to Hospital for free treatment. This practice continues to persist, and cases of cruelty are now admitted for treatment only when the case is either an appalling one or necessitating destruction.

Average daily attendance was 139·04 against 152·14 last year.

Forty-seven animals underwent *anti-rabic* treatment during the year.

One hundred and fifty-three skiagrams were taken during the year by the Radiologist.

Ninety-nine gallons of Electrolytic chlorine were prepared.

73. The total income and expenditure of the College as given in Table I were Rs. 31,190 and Rs. 1,71,444, respectively, against Rs. 33,180 and Rs. 1,88,525 in the previous year.

74. None of the candidates who passed from the College are known to be unemployed.

75. The health and behaviour of the students have remained satisfactory throughout the year, as usual.

2.—SHORT COURSES.

76. Two sessions were held at the Government Cattle Farm, Hissar. Eighteen syces from different district boards in the Province were trained and granted certificates.

77. As a measure of economy, no member of the subordinate veterinary staff nor any student of the final class of the Punjab Veterinary College was sent to Sheikhpur (Surra Training Centre) for training at Government expense.

Training in Surra treatment.

78. Ten candidates attended the Dressers' Class and passed successfully during the year.

Dressers' Class.

79. Twenty-seven candidates joined the Farriers' Class during the year. Twenty candidates passed the examination.

Farriers' Class.

3.—VETERINARY RESEARCH AT THE PUNJAB VETERINARY COLLEGE, LAHORE.

80. A large amount of useful data concerning the conditions obtaining in the slaughter-houses of the Punjab has been collected. This information is now being consolidated.

Hygiene Section.

This section analysed the College made Electrolytic chlorine, and Chlorogen as manufactured commercially by certain firms. It was found that the College made products contain about four times as much available chlorine as the commercial product, and is produced at a very low cost.

81. In addition to teaching and demonstrations to the students the undernoted work was done in the Pathological Laboratory during the year :—

Pathological Section.

Post-mortem examinations	132
Pathological specimens examined	231
Samples of milk examined, in Hygiene Section for public	27
Parasitological specimens of blood, fæces, and skin scrapings, etc., examined	428

No work of a special or original nature in the Pathology Section of the College could be performed, as all the larger experimental animals were disposed of, on account of lack of funds to feed them.

82. Surra cases were treated experimentally with a single dose of "Naganol." The results have been encouraging, but only a comparatively small number of animals have been so treated.

Parasitology Section.

As recommended in some countries the Mercuric Chloride test for the diagnosis of Surra in camels was carried out. The results have not been found entirely reliable.

83. Forty museum specimens and 30 dissected specimens were prepared in this section during the year.

Anatomy Section.

A skeleton of a horse for the students was scientifically articulated and a skeleton of a camel is similarly under preparation.

The work of the measurement of bones of Indian bred ponies and bullocks has also been taken in hand, and up to the present about two dozen skeletons of these animals have been measured, and the average length, width and weight of bones has been arrived at. No definite conclusions can yet be drawn until a considerably larger number of skeletons have been measured and weighed.

84. Three hundred and one specimens received from the subordinate veterinary staff were examined in the laboratories at the headquarters of Circle Superintendents at Ferozepore, Rawalpindi and Ambala.

Examination of Pathological specimens at Superintendent's headquarters.

85. In addition to teaching the subject of medicine the following work has been undertaken:—

Medicine Section.

- (i) *Urine analysis.*—This subject is taught in practical classes, and is regarded as an important aid to diagnosis. It also provides a field for experimental work.
- (ii) An enquiry is being made regarding the incidence of Deg Disease in buffaloes in the Sheikhpura District, a report on which is under preparation.

Useful research work on modern scientific lines is being carried out on indigenous drugs. The results obtained are so far very encouraging. A detailed report is being compiled.

86. Owing to the abolition of the post of Veterinary Research Officer no whole-time officer could be deputed to carry out original research work in the Province.

4. DEMONSTRATION AND PROPAGANDA WORK.

87. During the year under report lectures on Veterinary Science, supplemented by practical demonstration in inoculations and castrations, were delivered by the Subordinate

Veterinary Staff at all the important horse and cattle fairs in the Province and were very much appreciated by the public. Hand-bills and leaflets, in the simplest possible vernacular language, dealing with various contagious diseases of animals were also distributed.

Demonstrations by means of magic lantern slides, diagrams, charts, and pathological specimens, as well as exhibits of live stock were made, as usual, at all the important horse and cattle fairs in the Province. These are proving very valuable for the zamindars, who are now realising the advantages of keeping good live stock and the economic losses resulting from the maintenance of inferior stock.

88. (a) Mr. Aggarwala of the Punjab Veterinary College brought out his book on "Feeding and Milking of Cows."

Literary work done by the staff of the Department.

(b) He wrote the following articles :—

- (1) "*Pashuon ke kuchh chune chune rog aur unke chikitsa*" (some common ailments of cattle and their treatment) in Hindi.
- (2) "Bacteria or Jarasim" translated into Urdu from an article in English in the June 1930 issue of the "Milk Industry."

(c) He sent the following 8 articles in Urdu to the Director, Information Bureau, Punjab, for publication in the papers on his mailing list :—

- (i) *Hindustan men mowashion ki ahmiyyat* (the importance of cattle in India).
- (ii) *Punjab men mowashion ki mashhur naslen* (important breeds of cattle in the Punjab).
- (iii) *Nasal kashi mowashian* (Cattle-breeding).
- (iv) *Dudh dohna* (milking).
- (v) *Mowashion ke kharidne ke mutaliq chand mufid hidayat* (A few useful hints on the purchase of cattle).
- (vi) *Mowashiyon ke sath hamdardi aur rahmdili* (Kindness to animals) in collaboration with Mr. R. L. Kaura, L.V.P.
- (vii) *Mowashiyon ki chand chida chida bimaryan, aur unka ilaj* (some common ailments of cattle and their treatment).

CHAPTER IV—Establishment.

A.—GAZETTED OFFICERS.

89. The following statement shows the strength of the gazetted officers (excluding the Director) employed in the Department during the year 1931-32 :—

Sphere of jurisdiction.	Superintendent.	Assistant Superintendent.	Deputy Superintendent.	Total.
Lahore and Jullundur Divisions, Ferozepore.	1	..	3	4
Ambala Division, Ambala ..	1	..	4	5
Rawalpindi and Multan Divisions, Rawalpindi.	1	1	4	6
Live Stock Section, Lahore ..	1 (Live Stock Officer).	..	1	2
Government Cattle Farm, Hisar.	1	2	2	5
Officers under training ..	2	..	..	2
Punjab Veterinary College, Lahore.	4 (Principal, and three officers in the superior service).	..	*7	11
Total ..	11	3	21	35

*Professors, Assistants to Professors, and Hospital Surgeon, holding the grade of Deputy Superintendents.

As a measure of economy and in view of the recommendations made by the Provincial Retrenchment Committee, the entire live stock section has been held in abeyance indefinitely with effect from 1st May 1932. In addition to this, the following posts have been abolished from the dates specified against each :—

1. Research Officer 28-9-1931, forenoon.
2. Superintendent, Nili Bar Farms .. 5-7-1932, forenoon.
3. Deputy Superintendent, Nili Bar Farms 2-5-1930, forenoon.

Note.—Number 3 was lying unfilled from the date noted, but was definitely removed from the cadre of the Department during the year 1932-33.

B.—NON-GAZETTED OFFICERS.

90. Owing to financial stringency no addition was made to the cadre of the subordinate veterinary staff of the Department during the year.

At the close of the year the sanctioned cadre of the subordinate veterinary staff employed on district work was—

Veterinary Inspectors	..	..	..	11
Veterinary Assistant Surgeons	..	..	..	66
Veterinary Assistants	..	..	..	281
				—
		Total	..	358
				—

The decrease in the number of Veterinary Inspectors was due to retirements. New recruitment could not be made, as the posts of Veterinary Inspectors are being eliminated in accordance with the policy of Government.

During the year under report financial stringency was also responsible for holding in abeyance the two posts of Farm Overseers and for the abolition of the posts of 2nd Bir Darogha and the Head Jamadar at the Government Cattle Farm, Hissar.

CHAPTER V.—Expenditure of the Department.

91. Details of expenditure under different heads are shown in table X.

Expenditure—Table X.

During the year under report the total expenditure amounted to Rs. 19,89,988 as compared with Rs. 20,68,573 in the previous year. Of the total expenditure, a sum of Rs. 12,64,649 was contributed by Government and Rs. 7,25,339 by local bodies. The figures shewn under "Provincial" were supplied by the Accountant-General, Punjab, while those under "local" were obtained from the local bodies concerned.

CHAPTER VI.

1.—PROGRESS MADE BY THE DEPARTMENT IN GIVING EFFECT TO THE RECOMMENDATIONS OF THE ROYAL COMMISSION ON AGRICULTURE DURING THE CALENDAR YEAR 1931.

1.—(a) *Sheep-breeding.*

92. The work has been making steady progress. Eighty-eight cross bred merino rams and fifty-two ewes were issued at concession rates from the Government Cattle Farm, Hissar, to selected breeders in the hilly district of Kangra, as against 120 cross bred merino rams and 20 ewes last year. Government has extended the scope of this concession to breeders of the above district for a further period of three years with effect from 1st April 1931.

From the flock of Bikaner desert sheep maintained at the Government Cattle Farm, Hissar, 30 rams were issued to those districts for which they are suited with a view to improving the local indigenous breed. Useful work is being done in this direction.

(b) *Goat-breeding.*

93. The flock of indigenous goats, which was commenced on the Government Cattle Farm, Hissar, in 1928, is giving satisfactory results. Thirty-five male goats of this milk strain were issued from the Hissar Farm to different districts of the Province in order to improve the milking qualities, as well as the size of the local goats. The results will be watched with interest.

2.—PROGRESS MADE IN ESTABLISHING PURE AND IMPROVED TYPES OF GOOD CATTLE AND BUFFALOES WITH SPECIAL REFERENCE TO THE POLICY OF PRODUCING "DUAL PURPOSE CATTLE."

94. The financial resources of district boards have suffered to such an extent that it is becoming more difficult to find a ready sale for the large output of stud bulls from the Hissar Farm.

Notwithstanding the present depression in agriculture, a considerable number of pure Hissar bred bulls were supplied during 1930-31 to districts from the Government Cattle Farm, Hissar. On March 31st 1931 there were 3,517 approved bulls working in the districts under the supervision of the Department.

Special effort is being made to foster the dual purpose type of cattle by supplying as large a number as possible of pedigree bulls, from the Government breeding farms, to various districts in the Province, also by the castration of unsuitable bulls on a large scale in the villages.

Special live stock schemes subsidised by Government are in operation in certain areas, most suited to cattle breeding, including the Haryana and Dhanni Cattle tracts.

3.—IMPROVEMENT OF THE URBAN MILK AND GHEE SUPPLY.

95. Efforts are in progress to foster pure and improved types of buffaloes in the canal-irrigated districts by the distribution of selected buffalo bulls in the villages.

A scheme is also in operation for providing selected buffalo bulls for service in municipal areas where large numbers of buffaloes are kept for milking purposes by private owners.

4.—LIVE STOCK SHOWS AND FAIRS.

96. One hundred and twenty-four cattle fairs were held during the year as against 129 last year. Special departmental exhibits of live stock were arranged on the fair grounds in as attractive and instructive a manner as possible. The award of prizes, at small village shows, which is a regular feature of our live stock propaganda, is giving very encouraging results in the breeding areas.

5.—CASTRATIONS.

97. Castration of useless animals was carried out zealously in every part of the Province.

6.—CONTROL OF LIVE STOCK IMPROVEMENT.

98. The action taken on this recommendation has already been mentioned in the report of the last year.

7.—DISEASES OF LIVE STOCK AND THEIR CONTROL.

Adoption of serum simultaneous method of inoculation against rinderpest.

99. No large scale application of this method of inoculation could be undertaken owing to financial stringency.

8.—INCREASED PROVISION OF VETERINARY HOSPITALS AND DISPENSARIES.

100. There was a net-work of 270 Veterinary Hospitals in the Punjab last year. Seventeen new Veterinary Hospitals were added during the year 1930-31, making a total of 287. The number is being increased each year as district board

funds permit. A closer net-work of veterinary hospitals is gradually being secured which is increasing the efficiency of the Department for dealing with live stock work and veterinary aid.

2.—GENERAL REMARKS.

101. (i) The Provincial Retrenchment Committee which was appointed by the Local Government during the year under report, having reviewed the work of this and other departments recorded its opinion that "they had no criticism to make on the way in which the Veterinary Department deals with its district work."

(ii) The Department is working in close touch with the people, and veterinary operations have achieved a measure of success which is very commendable. It is hoped that with the further confidence of the zamindars of the Province, the Department will be in a position to find necessary funds for making its work still more effective in future.

(iii) In recognition of his long record of useful service, rendered to the Department, Government was pleased to confer upon Khawaja Ghulam Hasan, Deputy Superintendent, Lahore, the title of "Khan Sahib" in June 1931.

(iv) On the recommendations of the officers of this Department various persons were granted Deputy Commissioners' sanads for rendering help to the Department in its multifarious activities.

(v) Owing to financial stringency the touring work of the members of the Subordinate Veterinary Staff as well as officers had to be restricted. It is, however, fortunate that the work of the Department was not affected so adversely as might have been expected under the circumstances.

(vi) As it is becoming increasingly difficult to absorb all the diplomates of the Punjab Veterinary College into the Department, attempts to find additional spheres of activity for them are being made. The question of absorbing them as Hackney Carriage Inspectors and Cruelty Inspectors under local bodies, and societies for the Prevention of Cruelty to Animals, respectively, is receiving attention.

(vii) It may be noted that an all round increase has been effected in the work of the Department on account of considerable expansion which has taken place in recent years. The appointment of the Provincial Retrenchment Committee by the Local Government during the year under report is

responsible for further increase in the clerical work of the headquarters' office at Lahore. It is gratifying to note that the members of the office establishment have responded satisfactorily to the call of duty under the able supervision of the Office Superintendent, Lala Ram Rattan, whose name is specially brought to the notice of Government for good work.

The present clerical staff of the Department as a whole is very small as compared with other departments of the Government. Proposals in this connection would have been laid before Government, but, in view of the acute financial difficulties, their submission has been purposely deferred for the present. The want of increase in the clerical staff is keenly felt in order to enable the officers of the Department to devote more time to their touring duty and professional study.

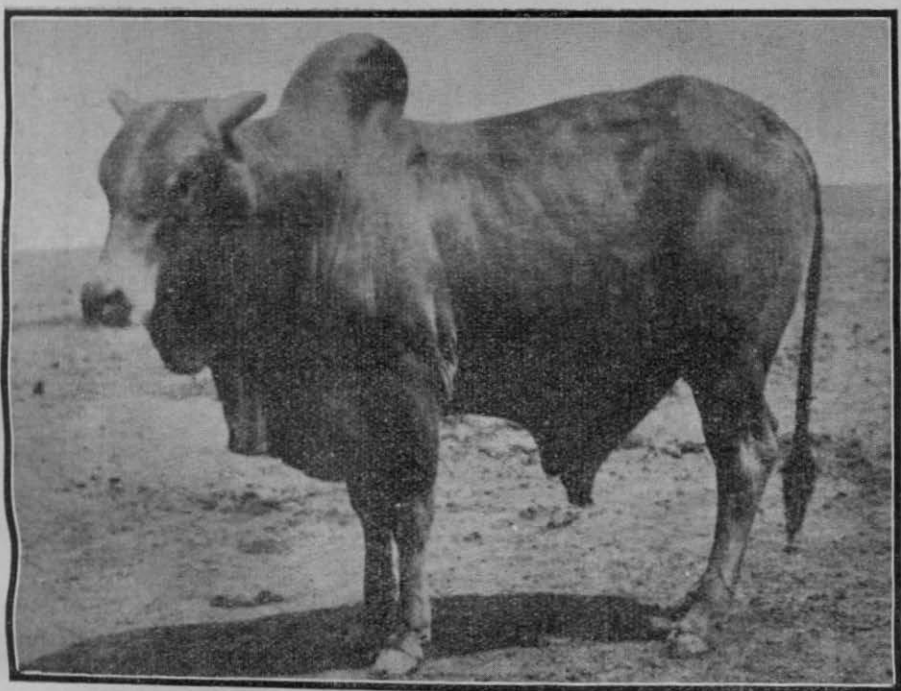
(viii) The Director wishes to record here his appreciation of the assistance received from all officers and staff of the Department who have served well during the year. The names of the following District Deputy Superintendents deserve special mention of their good work :—

- (1) Khan Sahib Khawaja Ghulam Hasan, Lahore Division.
- (2) Chaudhri Kahan Singh, Lahore Division.
- (3) M. Muhammad Abdullah, Jullundur Division.
- (4) Chaudhri Baldeo Singh, Ambala Division.

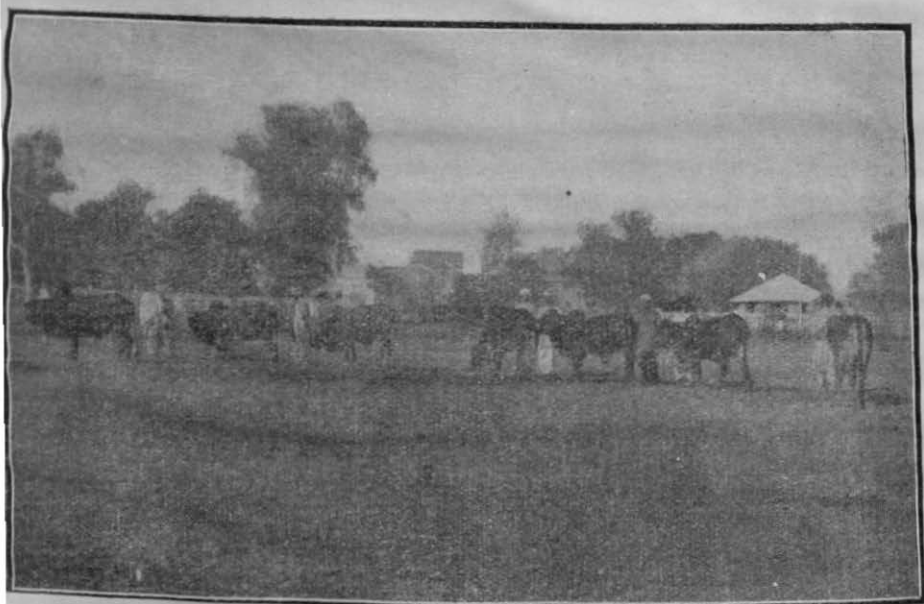
He also takes this opportunity of thanking district officers, who, in spite of their many duties, have shown interest in making the veterinary organisation of their districts effective, and productive of good results to the stock breeding industry of the Province.

W. TAYLOR,

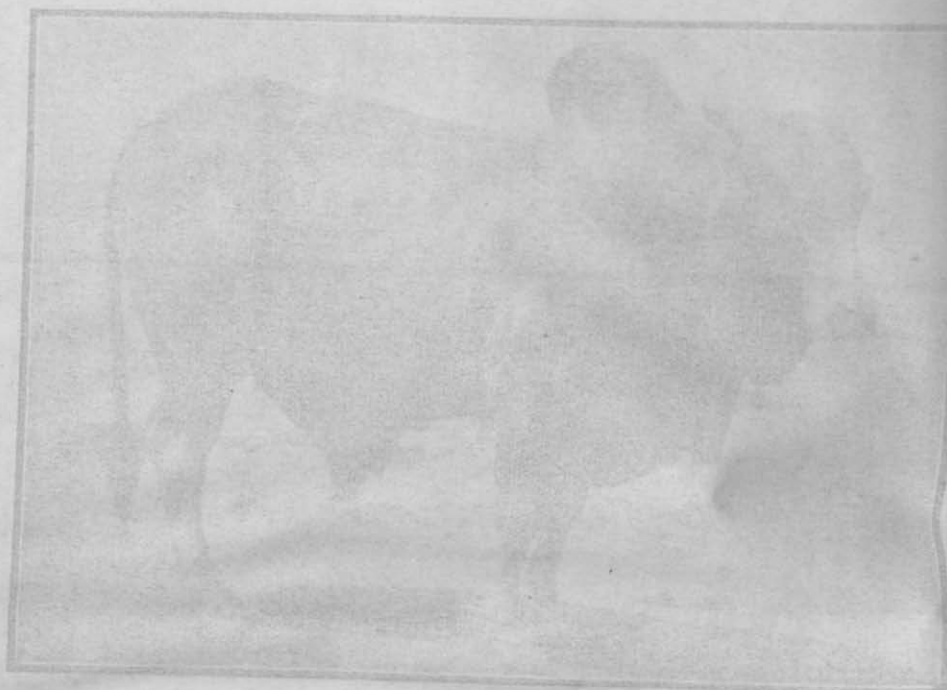
Offg. Director, Veterinary Services, Punjab.



Bull King-bird (Montgomery Dairy Farm, Montgomery.)



Some of the Montgomery bulls working under Jalalabad Cattle Breeding Scheme in the Ferozenore District.

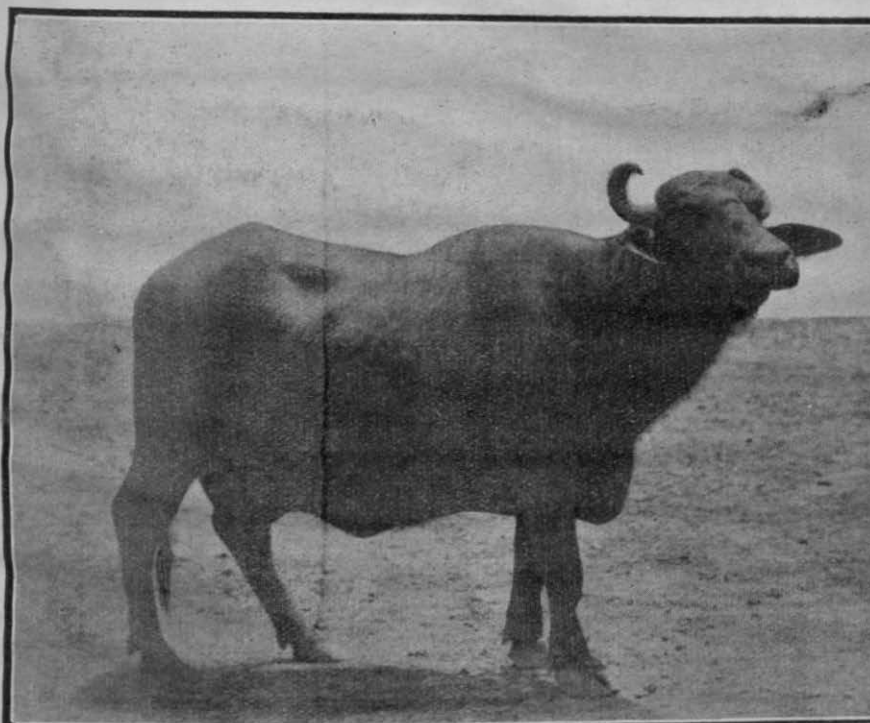


Ball King-bird (Montgomery Dairy Farm, Montgomery.)

Some of the Montgomery bulls working under Jalafand
Cattle Breeding Station in the Koroqoro District.



He-goat bred at the Government Cattle Farm, Hissar, imported in the Ferozepore District showing his progeny at village Ghal Kalan of Ferozepore District.

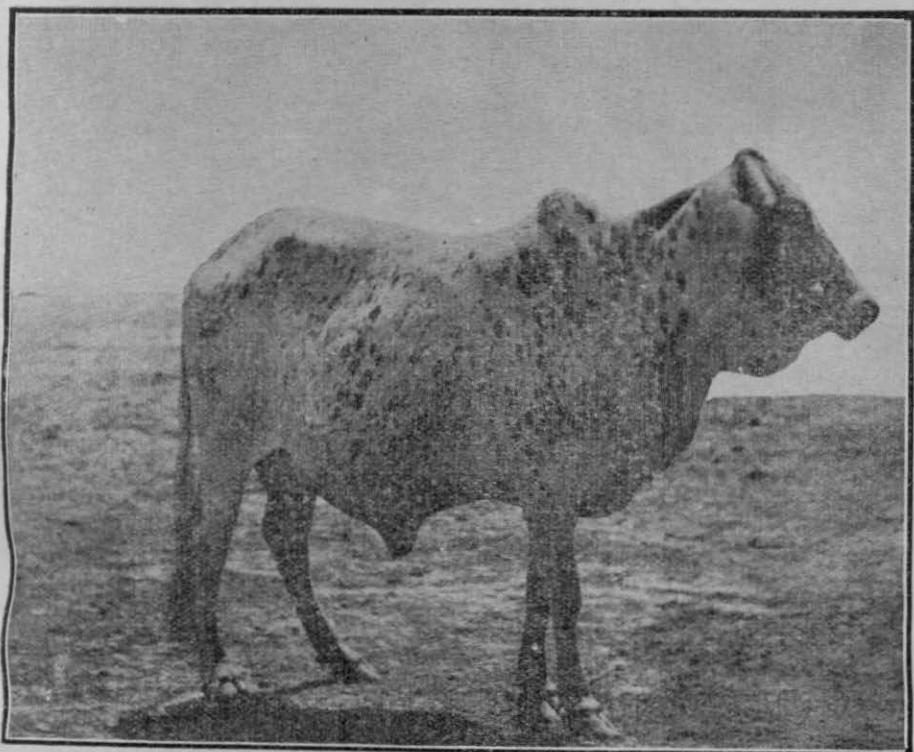


Buffalo Bani No. 106 (Montgomery Dairy Farm, Montgomery.)

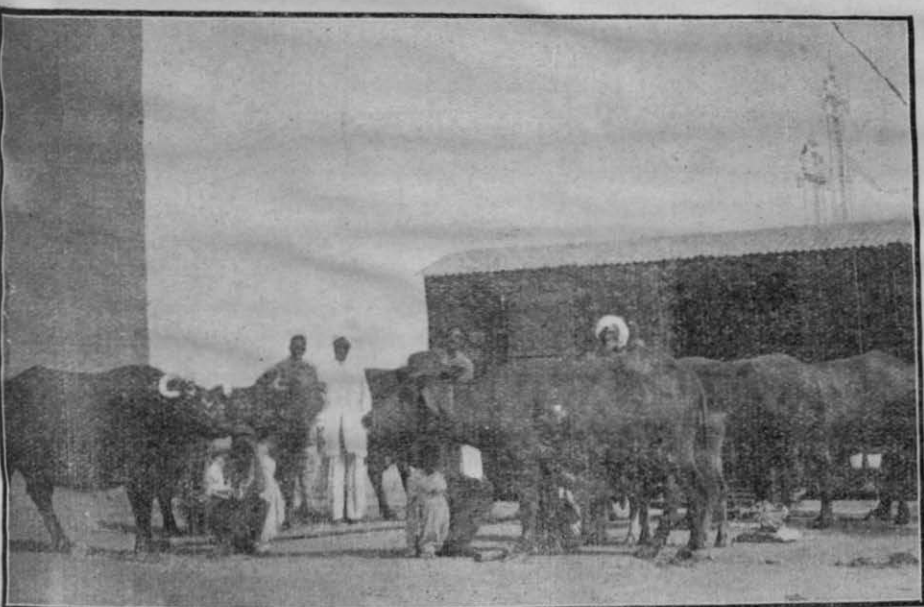


He-goat bred at the Government Galle Farm. Here imported in the
Luzon District showing his progeny at village Ghal Kalam of
Luzon District.





Cow Todi, No. 86 (Montgomery Dairy Farm, Montgomery.)



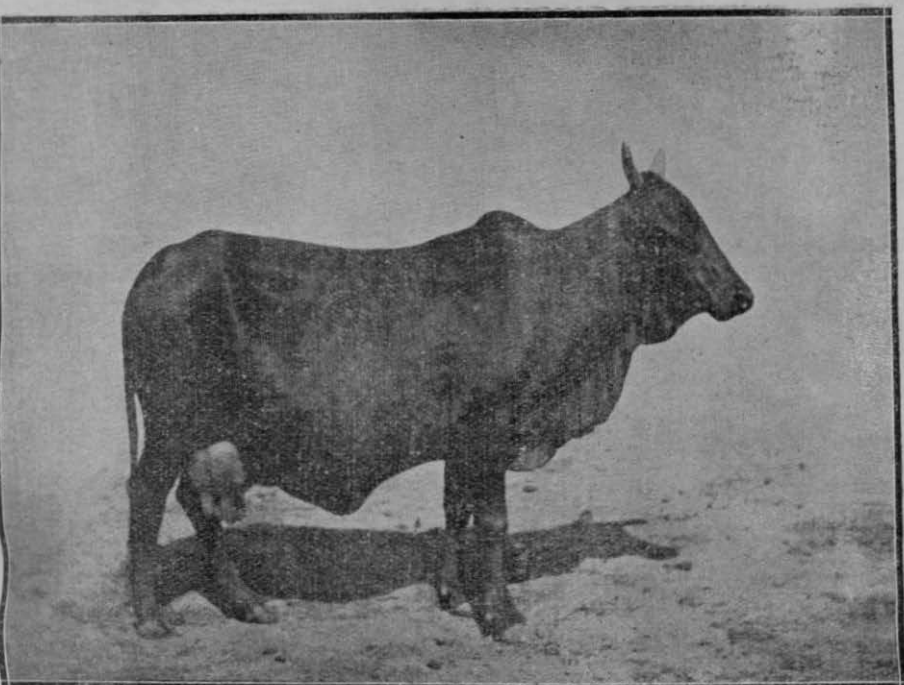
Nili buffaloes, being loaded at Moga for export to Calcutta, Bombay, etc.



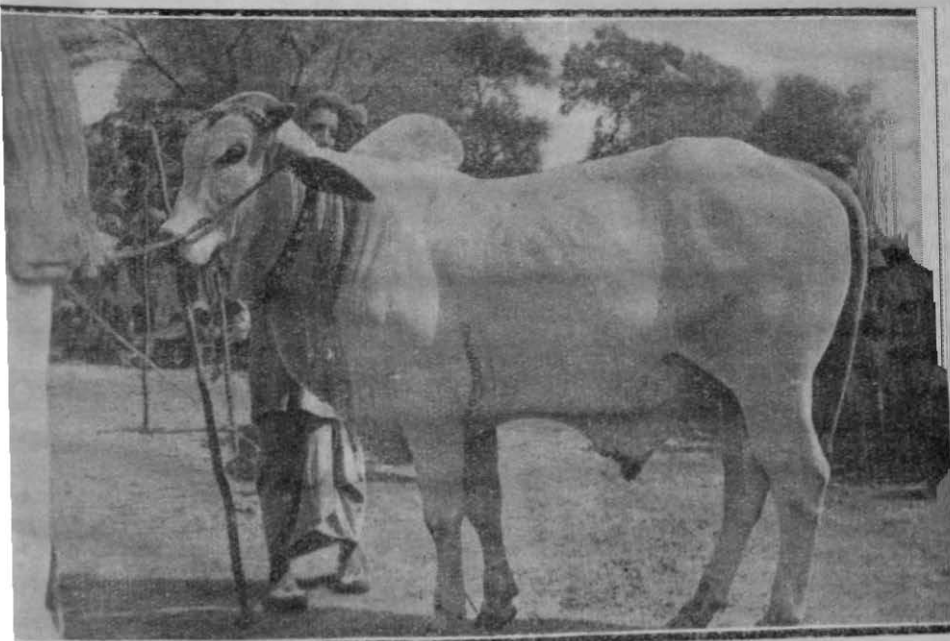
Cow Tobi, No. 86 (Montgomery Dairy Farm, Montgomery).



Kill bull, being loaded at Moga for export to Calcutta, Bombay, etc.



Cow Lari, No. 40 (Montgomery Dairy Farm, Montgomery.)



Prize bull at Shahgharib Cattle fair, District Gurdaspur.

TABLE II.

SHOWING NUMBER OF DEATHS FROM CONTAGIOUS DISEASES AMONGST ANIMALS DURING THE YEAR 1931-32.

District	EQUINES.					BOVINES.						OTHERS.								REMARKS.							
	Glanders.	Anthrax.	Surra.	Dourine.	Other contagious diseases.	Total.	Rinderpest.	Foot and mouth disease.	Hæmorrhagic Septicæmia.	Black quarter.	Anthrax.	Other contagious diseases.	Total.	Rinderpest.	Foot and mouth disease.	Contagious pleuro-pneumonia.	Mange.	Gillat.	Rabies.		Goat Pox.	Hæmorrhagic Septicæmia.	Black quarter.	Liver Flukes.	Influenza.	Other contagious diseases.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Government Cattle Farm, Hissar.	17	63	..	1	81	..	..	..	..	..	..	..	..	4	..	..	..	..	4
Total for 1931-32	17	63	..	1	81	..	..	..	..	..	..	..	..	4	..	..	..	..	4
Total for 1930-31	3	4	9	16	..	1	..	..	..	..	..	..	..	..	..	..	18	19	
Total for 1929-30	28	2	2	5	..	1	38	..	..	..	..	..	..	3	..	..	..	..	..	3	

(a) Navel ill.

TABLE

SHOWING THE NUMBER OF AWARDS TAKEN IN THE SEVERAL YEARS

Year	Number of awards taken				Total number of awards taken	Number of awards taken by students of the University of Toronto	Percentage of awards taken by students of the University of Toronto
	1911	1912	1913	1914			
1911	1	1	1	1	4	100	100
1912	1	1	1	1	4	100	100
1913	1	1	1	1	4	100	100
1914	1	1	1	1	4	100	100
1915	1	1	1	1	4	100	100
1916	1	1	1	1	4	100	100
1917	1	1	1	1	4	100	100
1918	1	1	1	1	4	100	100
1919	1	1	1	1	4	100	100
1920	1	1	1	1	4	100	100
1921	1	1	1	1	4	100	100
1922	1	1	1	1	4	100	100
1923	1	1	1	1	4	100	100
1924	1	1	1	1	4	100	100
1925	1	1	1	1	4	100	100
1926	1	1	1	1	4	100	100
1927	1	1	1	1	4	100	100
1928	1	1	1	1	4	100	100
1929	1	1	1	1	4	100	100
1930	1	1	1	1	4	100	100
1931	1	1	1	1	4	100	100
1932	1	1	1	1	4	100	100
1933	1	1	1	1	4	100	100
1934	1	1	1	1	4	100	100
1935	1	1	1	1	4	100	100
1936	1	1	1	1	4	100	100
1937	1	1	1	1	4	100	100
1938	1	1	1	1	4	100	100
1939	1	1	1	1	4	100	100
1940	1	1	1	1	4	100	100
1941	1	1	1	1	4	100	100
1942	1	1	1	1	4	100	100
1943	1	1	1	1	4	100	100
1944	1	1	1	1	4	100	100
1945	1	1	1	1	4	100	100
1946	1	1	1	1	4	100	100
1947	1	1	1	1	4	100	100
1948	1	1	1	1	4	100	100
1949	1	1	1	1	4	100	100
1950	1	1	1	1	4	100	100
1951	1	1	1	1	4	100	100
1952	1	1	1	1	4	100	100
1953	1	1	1	1	4	100	100
1954	1	1	1	1	4	100	100
1955	1	1	1	1	4	100	100
1956	1	1	1	1	4	100	100
1957	1	1	1	1	4	100	100
1958	1	1	1	1	4	100	100
1959	1	1	1	1	4	100	100
1960	1	1	1	1	4	100	100
1961	1	1	1	1	4	100	100
1962	1	1	1	1	4	100	100
1963	1	1	1	1	4	100	100
1964	1	1	1	1	4	100	100
1965	1	1	1	1	4	100	100
1966	1	1	1	1	4	100	100
1967	1	1	1	1	4	100	100
1968	1	1	1	1	4	100	100
1969	1	1	1	1	4	100	100
1970	1	1	1	1	4	100	100
1971	1	1	1	1	4	100	100
1972	1	1	1	1	4	100	100
1973	1	1	1	1	4	100	100
1974	1	1	1	1	4	100	100
1975	1	1	1	1	4	100	100
1976	1	1	1	1	4	100	100
1977	1	1	1	1	4	100	100
1978	1	1	1	1	4	100	100
1979	1	1	1	1	4	100	100
1980	1	1	1	1	4	100	100
1981	1	1	1	1	4	100	100
1982	1	1	1	1	4	100	100
1983	1	1	1	1	4	100	100
1984	1	1	1	1	4	100	100
1985	1	1	1	1	4	100	100
1986	1	1	1	1	4	100	100
1987	1	1	1	1	4	100	100
1988	1	1	1	1	4	100	100
1989	1	1	1	1	4	100	100
1990	1	1	1	1	4	100	100
1991	1	1	1	1	4	100	100
1992	1	1	1	1	4	100	100
1993	1	1	1	1	4	100	100
1994	1	1	1	1	4	100	100
1995	1	1	1	1	4	100	100
1996	1	1	1	1	4	100	100
1997	1	1	1	1	4	100	100
1998	1	1	1	1	4	100	100
1999	1	1	1	1	4	100	100
2000	1	1	1	1	4	100	100
2001	1	1	1	1	4	100	100
2002	1	1	1	1	4	100	100
2003	1	1	1	1	4	100	100
2004	1	1	1	1	4	100	100
2005	1	1	1	1	4	100	100
2006	1	1	1	1	4	100	100
2007	1	1	1	1	4	100	100
2008	1	1	1	1	4	100	100
2009	1	1	1	1	4	100	100
2010	1	1	1	1	4	100	100
2011	1	1	1	1	4	100	100
2012	1	1	1	1	4	100	100
2013	1	1	1	1	4	100	100
2014	1	1	1	1	4	100	100
2015	1	1	1	1	4	100	100
2016	1	1	1	1	4	100	100
2017	1	1	1	1	4	100	100
2018	1	1	1	1	4	100	100
2019	1	1	1	1	4	100	100
2020	1	1	1	1	4	100	100
2021	1	1	1	1	4	100	100
2022	1	1	1	1	4	100	100
2023	1	1	1	1	4	100	100
2024	1	1	1	1	4	100	100
2025	1	1	1	1	4	100	100

TABLE IV.

SHOWING THE NUMBER OF ANIMALS TREATED AND CASTRATED

DISTRICT.	Number of villages visited.	Number of Veterinary Assistants employed.	CASTRATIONS PERFORMED.			
			Equines.	Bovines.	Others.	Total.
1	2	3	4	5	6	7
Hissar	3,258	12	8	7,777	7,072	14,857
Rohtak	3,473	17	16	13,880	2,495	16,391
Gurgaon	3,596	16	47	7,740	2,179	9,966
Karnal	2,158	12	22	13,322	748	14,092
Ambala	2,129	9	11	5,144	1,354	6,509
Simla	611	3	1	543	533	1,077
Kangra	2,929	14	191	4,677	3,937	8,805
Hoshiarpur	1,256	9	2	3,672	1,046	4,720
Jullundur	1,944	11	5	5,370	1,059	6,434
Ludhiana	1,893	8	..	7,074	1,392	8,466
Ferozepore	2,010	15	27	8,728	4,604	13,359
Lahore	1,318	13	26	4,698	1,771	6,495
Amritsar	1,913	14	6	2,098	174	2,278
Gurdaspur	993	10	24	3,182	477	3,683
Sialkot	1,241	12	26	4,023	1,007	5,056
Gujranwala	960	10	815	5,270	797	6,882
Sheikhupura	978	12	26	2,938	1,055	4,019
Gujrat	1,275	10	4	2,289	271	2,564
Shahpur	1,525	15	44	2,832	2,404	5,280
Jhelum	1,446	10	12	2,026	772	2,810
Rawalpindi	1,437	11	1	2,199	176	2,376
Attock	1,875	9	37	2,994	1,583	6,414
Mianwali	1,799	12	50	2,265	1,994	4,309
Montgomery	1,286	9	34	4,990	2,780	7,804
Lyallpur	2,064	16	31	5,941	2,500	8,472
Jhang	978	9	18	5,864	426	6,308
Multan	1,527	13	103	9,144	1,643	10,890
Muzaffargarh	944	9	41	6,928	2,342	9,311
Dera Ghazi Khan	756	8	72	5,349	1,368	6,789
Total	48,572	328	1,700	152,957	49,959	204,616
Total of 1930-31	41,066	340	1,647	149,220	36,738	187,605
Total of 1929-30	41,779	311	845	145,845	32,324	179,014

IV.

BY VETERINARY ASSISTANTS ON TOUR DURING 1931-32.

TREATED FOR CONTAGIOUS DISEASES.				TREATED FOR NON-CONTAGIOUS DISEASES.				Total number of cases treated and castrations performed.
Equines.	Bovines.	Others.	Total.	Equines.	Bovines.	Others.	Total.	
8	9	10	11	12	13	14	15		16
10	1,156	1,858	3,024	688	6,902	6,127	13,717	31,598
9	5,062	130	5,201	501	8,244	1,098	9,843	31,435
23	5,034	78	5,135	773	19,853	911	21,537	36,638
1	3,457	5	3,463	405	8,636	407	9,448	27,003
9	4,795	126	4,930	335	5,990	349	6,674	18,113
..	2,994	..	2,994	9	2,185	138	2,332	6,403
..	45,274	11,389	56,663	1,875	20,540	10,096	32,511	97,979
21	3,344	14	3,379	721	3,785	100	4,606	12,705
19	4,678	48	4,745	612	5,557	506	6,675	17,854
10	5,749	561	6,320	222	7,480	690	8,392	23,178
73	7,477	3,828	11,378	574	5,008	631	6,213	30,950
3	2,104	15	2,122	535	4,195	613	5,343	13,960
5	1,520	65	1,590	797	6,609	316	7,722	11,590
3	1,656	36	1,695	627	3,987	104	4,718	10,096
41	3,281	58	3,380	821	5,120	337	6,278	14,714
21	2,551	36	2,608	1,215	3,284	398	4,897	14,387
68	2,197	138	2,403	705	3,181	257	4,143	10,565
6	900	52	958	1,240	2,765	188	4,193	7,715
22	4,977	659	5,658	1,583	3,446	1,140	6,169	17,107
5	3,511	188	3,704	1,078	3,222	526	4,826	11,340
1	1,501	86	1,588	588	1,062	804	2,544	6,508
17	1,359	207	1,583	1,917	3,327	1,311	6,555	12,752
52	323	1,265	1,640	1,202	2,307	977	4,486	10,435
13	2,537	134	2,684	964	3,572	929	5,465	15,953
97	3,292	120	3,509	1,716	7,990	923	10,629	22,610
37	1,153	22	1,212	1,281	3,573	471	5,325	12,845
55	1,903	99	2,057	1,810	7,143	1,345	10,298	23,245
9	1,443	8	1,460	786	2,645	995	4,426	15,197
21	1,826	45	1,892	985	1,553	583	3,121	11,802
651	127,054	21,270	148,975	26,565	163,161	33,360	223,086	576,677
1,111	86,749	12,738	100,598	27,971	132,074	28,365	188,410	476,613
774	115,479	15,855	132,108	26,448	123,606	22,650	172,104	483,826

SHOWING NUMBER OF ANIMALS TREATED AND CASTRATED AT

District.	Number of Veterinarily Dispensaries.	Number of Veterinarily Assistants employed.	NUMBER OF IN-PATIENTS TREATED DURING THE YEAR.				NUMBER OF OUT-PATIENTS.	
			Equines.	Bovines.	Other animals.	Total.	Equines.	Bovines.
1	2	3	4	5	6	7	8	9
Bihar	11	12	310	495	146	951	4,622	20,275
Rohtak	15	17	336	1,251	260	1,847	4,768	48,683
Gurgaon	13	17	377	544	60	981	6,173	28,016
Karnal	11	12	363	579	71	1,013	4,064	28,532
Ambala	8	9	570	810	33	1,413	3,792	24,239
Simla	3	3	311	99	288	698	488	4,374
Kangra	13	14	351	202	87	640	7,942	23,086
Hoshiarpur	9	11	628	358	36	1,022	7,487	25,197
Jullundur	9	9	528	622	30	1,180	4,393	27,408
Ludhiana	7	8	422	632	87	1,141	4,268	24,592
Ferozepore	11	15	835	628	346	1,819	8,484	29,235
Lahore	11	13	563	579	25	1,167	9,162	21,800
Amritsar	12	14	753	667	59	1,479	11,943	33,724
Gurdaspur	10	10	478	264	200	942	7,562	20,981
Shaikot	11	12	566	245	8	819	12,356	32,718
Gujranwala	9	10	1,045	294	32	1,371	12,022	21,995
Sheikhpura	10	12	1,137	312	16	1,465	12,594	19,313
Gujrat	8	10	274	222	17	513	14,241	22,442
Shahpur	12	15	665	549	156	1,370	16,138	25,627
Jhelum	9	10	298	195	36	529	7,835	16,566
Rawalpindi	7	11	536	212	462	1,210	7,151	13,456
Attock	8	9	382	254	117	753	6,687	16,393
Mianwali	11	12	454	125	77	656	10,730	14,365
Montgomery	8	9	644	445	73	1,162	6,554	13,469
Lyallpur	15	16	714	1,159	73	1,946	12,631	37,128
Jhang	9	9	478	282	57	817	9,423	16,471
Multan	13	13	959	737	185	1,861	11,051	20,653
Muzaffargarh	8	9	543	431	320	1,294	8,572	17,116
Dera Ghazi Khan	7	8	580	215	105	900	9,547	11,775
Total	288	329	16,100	13,417	3,442	32,959	243,582	660,199
Total of 1930-31	287	287	15,282	13,045	3,497	31,824	229,147	595,403
Total of 1929-30	270	270	14,378	11,862	3,188	39,428	218,885	531,419

V.
 VETERINARY HOSPITALS AND DISPENSARIES DURING THE YEAR 1931-32.

PATIENTS TREATED THRU YEAR.		Grand total of in- patients and out- patients treated during the year.	Total number of cases supplied with medicines but not brought to hospitals.	CASTRATION PERFORMED.				Receipts.	Expenditure.
Other ani- mals.	Total.			Equines.	Bovines.	Other ani- mals.	Total.		
10	11	12	13	14	15	16	17	18	19
15,831	40,728	41,679	15,616	67	7,756	5,681	13,504	161	16,749
8,288	61,739	63,586	6,643	47	16,801	2,901	19,749	871	16,801
10,320	45,109	46,090	8,944	67	9,913	1,965	11,945	9,241	14,882
7,372	40,868	41,881	16,238	140	10,252	2,002	12,394	2,065	16,592
5,271	33,302	34,715	4,295	186	5,463	1,076	6,725	1,250	10,616
1,445	6,307	7,065	883	13	269	308	590	11,612	9,318
11,835	42,863	43,503	73,274	279	4,594	2,745	7,618	..	10,818
6,435	39,119	40,141	3,564	158	8,084	2,150	10,392	96	11,614
6,047	37,848	39,028	3,070	39	10,103	1,817	11,959	379	12,480
8,449	37,309	38,450	3,714	30	8,414	882	9,326	104	8,031
10,982	48,701	50,520	4,298	331	9,624	2,650	12,655	182	13,759
4,800	35,762	36,929	3,156	128	4,058	1,371	5,557	..	14,331
6,259	51,926	53,405	2,046	75	4,883	393	5,353	..	13,185
4,094	32,637	33,579	1,747	76	4,565	558	5,139	108	11,234
5,010	50,084	50,963	3,472	62	5,346	930	6,398	70	12,343
6,090	40,077	41,448	1,935	66	7,089	1,084	8,239	..	9,282
4,153	36,060	37,325	4,170	70	4,381	616	5,067	..	9,928
4,315	40,998	41,511	737	147	7,245	605	7,997	618	14,880
12,674	54,439	55,809	2,281	175	7,160	3,458	10,793	194	13,292
4,702	29,103	29,692	1,636	48	3,943	468	4,459	176	10,035
5,211	25,820	27,030	1,072	59	4,171	56	4,286	2,707	9,665
6,243	29,323	30,076	1,049	68	4,054	206	4,328	32	14,709
10,829	35,924	36,580	913	212	2,131	1,473	3,816	13	10,982
5,167	25,190	26,352	2,177	211	4,838	756	5,805	39	10,462
8,242	58,091	59,947	2,228	155	8,533	1,486	10,174	1,355	20,730
5,152	31,046	31,863	1,312	39	6,239	97	6,375	57	10,085
8,580	46,284	42,145	1,757	128	6,737	211	7,076	631	20,421
8,912	34,600	35,894	2,968	171	6,504	862	7,537	34	18,614
5,199	26,521	27,421	2,617	117	5,660	972	6,749	12	11,692
207,907	1,111,688	1,144,647	177,812	3,414	188,750	39,781	231,945	32,001	377,560
170,138	994,688	1,026,512	146,530	3,240	172,282	27,295	202,817	23,381	411,021
153,063	903,367	934,795	125,721	4,031	157,967	23,179	185,177	22,716	475,675

TABLE VII.

RETURN OF STUD BULLS FOR THE YEAR 1931-32.

District.	PROPERTY OF LOCAL BODIES.					REMARKS.
	Number on 1st April 1931.	Obtained during the year.		Casualties during the year.	Balance remaining on 31st March 1932.	
		Number.	Average price paid.			
1	2	3	4	5	6	7
			Rs.			
Hissar	281	43	..	22	302	
Rohtak	536	102	..	36	602	
Gurgaon	602	118	..	109	611	
Karnal	249	43	..	8	284	
Ambala	98	15	..	7	106	
Kangra	61	10	..	2	69	
Hoshiarpur	143	15	..	4	154	
Jullundur	92	18	250	3	107	
Ludhiana District Board	133	20	250	9	144	
Ludhiana Municipal Committee .. .. .	..	2	..	..	2	
Ferozepore District Board	124*	30	..	7	147	
Ferozepore Municipal Committee .. .. .	..	2	..	..	2	
Lahore	169	9	250	6	172	
Amritsar District Board	127	8	250	3	132	
Amritsar Municipal Committee	2	3	..	1	4	
Gurdaspur District Board	70	22	250	4	88	
Gurdaspur Municipal Committee .. .. .	..	2	..	..	2	
Batala Municipal Committee .. .. .	..	4	..	..	4	
Sialkot	44	..	..	2	42	
Gujranwala District Board	55	..	..	4	51	
Gujranwala Municipal Committee .. .. .	..	2	..	..	2	
Sheikhupura	119	..	..	2	117	
Gujrat	43	5	..	9	39	
Shahpur	64	23	..	20	67	
Jhelum	41	28	..	10	59	
Rawalpindi	35	39	..	10	64	
Attock	30	31	..	10	51	
Mianwali	55	37	..	32	60	
Montgomery	75	25	..	12	88	
Lyallpur	180	35	..	44	171	
Jhang	16	13	..	4	25	
Multan	32	4	..	4	32	
Muzaffargarh	28	10	..	..	38	
Dera Ghazi Khan	16	3	..	..	19	
Total	3,520	721	..	384	3,857	
Total of 1930-31	3,365	585	..	433	3,517	
Total of 1929-30	3,130	596	..	367	3,359	

*Includes 3 bulls shown less last year.

TABLE VII—CONCLD.

RETURN OF STUD BUFFALO BULLS FOR THE YEAR 1931-32.

District.	PROPERTY OF LOCAL BODIES.					REMARKS.
	Number on 1st April 1931.	Obtained during the year.		Casualties during the year.	Balance remaining on 31st March 1932.	
		Number.	Average price paid.			
1	2	3	4	5	6	7
			Rs.			
Hissar .. ..	..	42	..	..	42	
Rohtak	2	38	..	..	40	
Gurgaon	3	7	..	..	10	
Karnal .. ..	..	11	..	..	11	
Ambala	79	7	..	..	86	
Hoshiarpur	3	..	..	..	3	
Ludhiana .. ..	..	3	..	..	3	
Amritsar District Board	7	..	..	..	7	
Amritsar Municipal Committee	1	..	..	..	1	
Gurdaspur .. ..	..	5	..	..	5	
Sialkot	39	10	..	3	46	
Gujranwala	10	..	..	3	7	
Total	144	123	..	6	261	
Total of 1930-31	11	134	..	1	144	
Total of 1929-30 .. ..	..	..	..	..	..	..

NUMBER OF HORSE AND DONKEY STALLIONS UNDER

District.	NUMBER ON 1ST APRIL 1931.				OBTAINED DURING THE YEAR.				CASUALTIES DURING THE YEAR.				BALANCE MARCH	
	Horses.		Donkeys.		Horses.		Donkeys.		Horses.		Donkeys.		Horses.	
	Provincial.	District Board.	Provincial.	District Board.	Provincial.	District Board.	Provincial.	District Board.	Provincial.	District Board.	Provincial.	District Board.	Provincial.	District Board.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total ..	20	50*	67	17	2	1	6	2	1	2	9	2	21	49
Total of 1930-31	22	42	70	16	3	5	..	1	5	3	3	..	20	44
Total of 1929-30	21	39	68	12	2	4	4	5	1	1	3	1	22	42

* Includes stallions transferred from the control of A. R. D. to C. V. D.

VIII.

LOCAL BODIES, THEIR SERVICES AND PRODUCE DURING 1931-32.

ON 31ST 1932.		STALLIONS ACTUALLY EM- PLOYED AT STUD.				NUMBER OF MARES COVERED.				AVERAGE NUMBER OF MARES COVERED PER STALLION.			
<i>Donkeys.</i>		<i>Horses.</i>		<i>Donkeys.</i>		<i>Horses.</i>		<i>Donkeys.</i>		<i>Horses.</i>		<i>Donkeys.</i>	
Provincial.	District Board.	Year under report.	Previous year.	Year under report.	Previous year.	Year under report.	Previous year.	Year under report.	Previous year.	Year under report.	Previous year.	Year under report.	Previous year.
16	17	18	19	20	21	22	23	24	25	26	27	28	29
64	17	72	67	82	86	3,754	3,113	4,058	3,593	52	47	49	42
67	17	66	65	86	83	3,113	3,041	3,593	3,377	47·1	47	41·8	39
70	16	65	65	83	81	3,041	3,600	3,377	3,473	47	60	39	43

towards the end of the year 1930-31.

ABSTRACT OF PARTICULARS REGARDING CATTLE

Name of District.	Number of Cattle Fairs and Shows held.	TOTAL NUMBER OF STOCK PRESENT.						
		Bulls.	Ballocks.	Cows.	Young stock.	Buffaloes.	Camels.	Others.
1	2	3	4	5	6	7	8	9
Hissar	9	..	81 622	1,030	..	4 637	4,277	1,609
Rohtak	15	..	36,991	2,125	1,148	16 219	342	4,091
Gurgaon	2	..	9,426	634	6,653	560	142	272
Hoshiarpur	4	5	1,096	796	237	1,190	53	1,176
Jullundur District Board	3	6	1,138	880	993	3,900	104	1,373
Jullundur Municipal Committee.	1	..	1,744	1,799	1,719	5,680	32	3,791
Ludhiana	11	1	4,484	3,495	2,389	5,910	425	1,009
Ferozepore	24	17	5,517	4,316	9,169	11,729	2,506	3,270
Muktsar Municipal Committee.	1	..	500	450	300	1,800	5,000	2,700
Abohar Municipal Committee.	1	148	3,480	756	2,485	1 187	3,572	1,342
Zira Municipal Committee.	1	14	496	362	278	1,482	292	597
Jalalabad Mamdot Estate	1	8	300	240	..	400	80	101
Lahore District Board ..	4	106	1,632	1,426	1,611	4,901	185	3,424
Baghbanpura Municipal Committee.	1	No separate record is kept.						
Amritsar District Board	3	265	2,138	4,606	4,360	8,878	210	..
Amritsar Municipal Committee.	2	No record is kept now.						
Gurdaspur	1	..	1,168	1,364	781	2,865	..	56
Dera Baba Nanak Municipal Committee.	1	Accurate record not available.						
Sialkot	9	For the sake of economy no staff was employed to take this record.						
Gujranwala	3	20	7,800	8,200	6,200	13,800	50	1,830
Pindi Bhattian Small Town Committee.	1	..	1	..	..	..	..	..
Ramnagar Small Town Committee.	1	No admission rolls were issued.						
Sheikhpura	2	..	474	494	140	721	1	314
Sangla Small Town Committee.	2	2	246	284	12	1,097	3	469
Shahpur	1	142	168	143	180	61	3	..
Jhelum	3	385	67	476	388	30	..	94
Rawalpindi	2	173	3,189	1,728	517	324	..	317
Attock	2	245	72	440	312	55	50	454
Gujrat	2	246	372	453	474	316	35	85
Lyallpur	1	127	4,244	8,931	6,492	12,168	5,104	112
Jhang	1	21	144	57	112	35	172	28
Multan	1	16	32	31	65	..	..	..
Dera Ghazi Khan ..	8	202	718	471	672	16	198	125
Total	124	2,149	169,259	45,996	47,687	99,961	22,831	28,639
Total of 1930-31 ..	129	2,069	236,855	41,333	40,515	82,373	21,777	18,377
Total of 1929-30 ..	139	2,882	285,637	51,796	61,938	110,800	35,503	31,787

*Three

†Two medals

FAIRS AND SHOWS HELD DURING THE YEAR 1931-32.

AVERAGE PRICE OF ANIMALS SOLD.					Amount realized in fees.	Total number of animals that competed for prizes.	PRIZE-MONEY PROVIDED.					Number of medals awarded.
Bulls.	Finlocks.	Cows.	Buffaloes.	Camels.			From Provincial Funds.	From Local Fund.	From other sources.	Total.	Amount actually awarded.	
10	11	12	13	14	15	16	17	18	19	20	21	22
..	..	..	..	..	20,524	1,327	..	..	..	..	..	..
..	48	28	44	39	10,722	3,285	..	3,201	..	3,201	3,201	..
..	70	29	66	101	1,507	171	..	155	..	155	155	..
..	20	21	61	..	1,158	416	..	1,266	..	1,266	698	..
..	67	56	124	86	3,498	317	936	..	..	936	614	..
..	12	15	37	48	6,255	141	..	366	..	366	366	..
..	494	29	541	501	5,663	27	..	50	..	50	50	..
..	28	26	35	50	20,506	169	..	366	..	366	366	1
..	24	..	46	75	5,896	264	..	500	..	500	387	..
..	37	20	20	57	3,788	150	..	492	..	492	492	1
..	39	28	45	67	3,047	31	..	29	..	29	29	..
..	20	20	30	60	472	468	..	..	1,000	1,000	1,000	1
..	..	..	..	..	4,951	675	..	660	155	1,015	1,015	2
..	..	..	..	..	345	120	..	350	..	350	195	..
..	..	..	..	..	2,785	261	..	300	..	300	145	1
..	..	..	..	..	30,025	739	..	2,504	..	2,504	2,057	4
..	..	..	..	..	2,187	77	..	146	..	146	146	..
..	..	..	..	..	460	102	..	102	50	152	152	..
..	33	18	35	84	30,511	297	..	998	..	998	551	..
..	26	17	29	41	9,273	287	..	713	..	713	822	..
..	240	..	..	..	8	..	..	..	..	..	..	..
..	16	20	20	15	544	16	..	30	..	30	30	..
..	68	52	140	90	2,868	261	..	360	..	360	355	1
..	70	50	90	..	1,809	100	..	181	..	181	181	..
..	..	..	..	..	49	691	..	750	..	750	728	2
..	..	..	..	..	9	865	..	1,421	450	1,871	1,871	2
..	..	..	..	..	313	1,314	..	700	..	700	700	1
..	..	..	..	..	61	1,421	..	1,100	49	1,149	992	4
..	..	..	..	..	435	678	..	1,500	..	1,500	1,500	1
..	47	42	37	82	20,307	764	..	1,690	..	1,690	1,690	1
..	..	..	..	..	1	419	..	760	..	760	760	1
..	..	..	..	..	50	144	..	150	..	150	150	..
..	..	..	..	..	..	2,397	..	1,023	15	1,038	999	2
..	1,359	471	1,398	1,446	1,89,937	18,336	936	22,063	1,719	24,718	22,397	35
..	..	..	..	..	2,32,948	34,290	..	26,764	120	26,874	22,615	38
..	351	241	3,967	550	3,31,899	17,515	30	36,218	894	37,142	33,952	43

Cups.

from private gentleman.

TABLE X.

STATEMENT SHOWING COST OF THE CIVIL VETERINARY DEPARTMENT DURING THE OFFICIAL YEAR 1931-32 IN THE PROVINCE OF THE PUNJAB.

Major Heads.	AMOUNT.			
	Imperial.	Provincial.	Local.	Total.
	1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Direction	79,390	..	79,390
Superintendence	2,49,797	..	2,49,797
Veterinary Instruction	1,43,270	4,139	1,47,409
Subordinate Establishment	3,95,572	..	3,95,572
Hospitals and Dispensaries	27,981	3,77,560	4,05,541
Breeding Operations	3,63,639	2,45,395	6,09,034
Prizes	5,000	..	5,000
Fairs and Shows	98,245	98,245
Total	12,64,649	7,25,339	19,89,988
Total of 1930-31	12,46,893	8,21,680	20,68,573
Total of 1929-30	14,09,912	9,77,814	23,87,726

(EXPENDITURE BY LOCAL BODIES) AS

District.	HOSPITAL CHARGES.								
	Stipends.	Pay of compounders and mobilis.	Cost of medicines and instruments.	Expenditure on buildings and repairs.	Furniture.	Contingencies.	Total.	Bolis.	
								Purchase.	Up-keep.
1	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Misrar		5,785	5,149	5,815	..	..	16,749	8,000	136
Rohtak	172	7,720	6,230	909	..	1,942	16,801	17,785	807
Gurgaon	88	5,003	4,284	642	165	1,788	14,832	19,052	1,051
Karnal	300	5,571	4,781	4,496	325	1,419	16,592	4,100	526
Ambala		5,225	3,420	979	163	829	10,616	3,700	293
Sirna Municipal Committee.	803	..	989	724	164	5,163	7,040	..	..
Sirna District Board		1,372	445	320	5	136	2,278	..	..
Kangra		5,942	..	277	..	4,599	10,818	..	157
Hoeliharpur	53	4,833	3,484	2,587	289	416	11,614	3,000	286
Jullundur District Board.	400	5,865	5,110	762	..	743	12,480	3,849	275
Jullundur Municipal Committee.	..	..	..	..	..	..	..	..	..
Ludhiana		4,362	2,463	577	217	412	8,031	5,000	487
Ferozepore		6,505	..	1,386	..	5,868	13,759	3,702	..
Abohar Municipal Committee.	..	..	..	..	..	..	..	..	..
Zira Municipal Committee.	..	..	..	..	..	..	..	..	..
Muktsar Municipal Committee.	..	..	..	..	..	..	..	..	..
Lahore	60	7,597	5,274	1,460	(included in column 4).	..	14,331	2,290	..
Shalamar Committee.	..	..	..	..	..	..	..	..	..
Amritsar District Board.	255	6,796	5,094	623	314	358	13,185	2,000	535
Amritsar Municipal Committee.	..	..	..	..	..	..	..	..	..
Gurdaspur	240	5,411	3,717	1,213	..	461	10,802	3,500	403
Dera Baba Nanak Committee.	..	..	..	..	..	..	..	..	..
Dalhouse Municipal Committee.	..	258	142	17	..	15	432	..	..
Sialkot	225	6,212	3,983	1,207	300	641	12,343	1,272	2
Gujranwala	52	4,867	2,504	1,073	..	838	9,282	..	..
Ram Nagar Municipal Committee.	..	..	..	..	..	..	..	..	..
Ebelkhpura	168	6,397	3,531	..	(included in column 3).	..	9,928	..	..
Sangla Small Town Committee.	..	..	..	..	..	..	..	..	..
Mamdote Estate Jalalabad.	..	..	..	..	..	..	..	..	..
Gujrat		4,645	1,970	7,445	71	749	14,880	750	1,753
Shahpur	590	5,898	5,629	1,765	..	..	13,292	1,545	3,342
Jhelum		5,543	2,448	1,689	..	344	10,035	2,500	8,246
Rawalpindi		5,548	..	962	6	..	9,695	3,290	7,357
Attock		4,123	3,387	5,124	..	3,195	14,709	..	6,836
Mitauwall		6,382	3,270	359	200	771	10,982	..	9,243
Montgomery		5,642	2,405	797	720	898	10,462	1,500	..
Lyalpur	140	11,175	5,665	693	672	2,825	20,730	3,500	1,001
Jhang		5,349	3,035	934	336	381	10,085	640	1,415
Multan		7,512	..	3,893	..	..	20,421	..	3
Muzaffargarh	540	5,025	..	10,447	..	3,142	18,614	..	3,479
Dera Ghazi Khan	53	3,445	2,054	5,194	123	936	11,692	..	2,672
Total 1931-22	4,139	1,69,018	90,463	64,349	4,070	49,660	3,77,560	90,975	50,304
Total 1930 31	5,778	1,60,585	97,851	96,843	5,416	50,326	4,11,021	80,021	65,078
Total 1929-30	6,404	1,50,232	86,304	1,84,537	4,447	50,155	4,75,675	1,04,999	77,710

XI.

SUPPLIED BY DISTRICTS FOR THE YEAR 1931-32.

BREEDING OPERATIONS.					FAIRS AND SHOWS.					Grand total of columns 8, 15 and 20.
Horses and ponies.		Donkeys.		Total.	Horse fair.		Cattle fair.		Total.	
Purchase.	Up-keep.	Purchase.	Up-keep.		Prizes.	Contingencies.	Prizes.	Contingencies.		
11	12	13	14	15	16	17	18	19	20	21
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	3,096	..	1,549	12,781	550	5,159	..	..	5,709	35,239
..	3,093	..	1,659	23,344	..	..	3,201	2,753	5,954	40,271
..	2,297	..	1,488	23,888	..	..	155	821	976	39,834
..	3,243	..	1,622	9,491	..	..	..	..	..	26,383
..	2,404	..	1,393	7,790	..	..	..	..	..	18,406
..	..	..	..	..	..	..	..	..	..	7,843
..	..	..	..	..	..	..	..	..	..	2,278
..	455	..	1,096	1,708	..	..	..	..	..	12,526
..	699	..	876	4,861	125	669	698	669	2,161	18,689
..	142	..	407	4,673	..	..	614	962	1,576	19,129
..	..	..	..	..	163	1,900	366	1,900	4,329	4,329
..	2,160	..	2,671	10,318	..	..	50	3,163	3,213	21,562
..	3,005	..	..	6,707	..	..	366	6,639	7,005	27,471
..	..	..	..	..	..	..	492	849	1,341	1,341
..	..	..	..	..	..	..	29	210	239	239
..	..	..	..	..	379	546	387	851	2,163	2,163
..	6,715	..	..	9,905	..	..	1,015	5,489	6,495	29,891
..	..	..	..	..	95	..	195	..	290	290
..	2,950	..	..	5,485	68	866	145	866	1,945	20,870
..	..	..	..	..	..	..	2,057	..	2,057	2,057
..	3,310	..	2,125	9,338	..	..	146	793	939	21,319
..	..	..	..	..	..	..	152	321	473	473
..	..	..	..	..	..	..	..	..	..	432
..	1,815	..	846	3,935	..	..	551	9,819	10,370	26,873
..	1,768	500	876	3,144	..	..	822	..	822	13,300
..	..	..	..	..	..	..	30	..	30	30
..	..	..	..	..	..	..	..	..	..	10,096
..	..	..	..	..	..	..	181	..	181	181
..	..	..	..	..	414	..	1,000	..	1,414	1,414
200	1,180	..	..	3,883	160	714	1,500	715	3,089	21,852
..	5,390	..	936	11,213	243	4,005	728	..	4,976	30,071
..	1,108	..	805	12,659	..	..	1,871	227	2,098	24,792
1,000	3,295	..	..	14,942	400	3,527	700	500	5,127	29,764
..	2,587	..	874	10,296	58	..	943	..	1,091	26,006
..	2,276	..	1,719	13,238	..	..	..	..	..	24,220
..	4,754	..	1,008	7,262	..	..	..	..	..	18,260
..	7,660	..	..	12,161	509	3,000	1,690	9,072	14,262	47,293
..	3,454	..	467	5,976	372	1,505	700	753	3,390	19,451
..	4,059	..	450	4,512	..	1,248	159	..	1,398	26,331
..	3,283	..	..	6,762	..	..	..	..	..	25,918
375	2,157	..	819	6,023	950	737	999	..	2,680	20,454
1,575	78,335	500	23,686	2,45,395	4,477	24,412	21,993	47,363	98,245	7,25,339
9,075	1,02,914	..	29,187	2,86,275	4,814	17,231	23,486	73,075	1,18,600	8,21,680
7,780	1,09,393	2,604	31,704	3,34,190	8,999	22,459	33,902	96,185	1,61,545	9,77,814

TABLE XIII.

BREEDING RESULTS AT THE GOVERNMENT CATTLE FARM, HISSAR, FOR THE YEAR 1931-32.

Class,	Average number of (1) cows, (2) mares, (3) ewes, (4) goats present during the year.	Total number of births.	Percentage.	PREVIOUS TWO YEARS.						REMARKS.
				1930-31.			1929-30.			
				Average number of (1) cows, (2) mares, (3) ewes, (4) goats present during the year.	Total number of births.	Percentage.	Average number of (1) cows, (2) mares, (3) ewes, (4) goats present during the year.	Total number of births.	Percentage.	
1	2	3	4	5	6	7	8	9	10	11
1. Cattle breeding ..	2,110	1,436	(a) 67.91	2,007	1,115	55.55	1,966	957	48.68	(a) 5 cows gave births to a twin during the year and 1 cow calved twice during the year.
2. Mule breeding ..	..	3	..	..	3	..	..	1	..	(b) One donkey mare foaled twice during the year.
3. Donkey breeding ..	58	41	(b) 68.97	66	35	53.03	76	31	40.79	(c) 3 ewes lambed twice during the year. 3 goats gave 3 kids.
4. Sheep breeding ..	632	470	(c) 73.89	558	499	78.85	538	491	78.44	2 goats gave 4 kids. 9 goats kidded twice during the year and gave 3 kids.
5. Arab breeding ..	11	8	72.73	12	5	41.66	13	10	76.92	4 goats kidded twice during the year and gave 5 kids.
6. Goat breeding ..	75	163	(d) 96.00	70	80	65.71	58	100	89.66	4 goats kidded twice during the year and gave 4 kids. 1 goat kidded twice during the year and gave 7 kids.

TABLE XIV.

SHOWING MAIN RESULTS OF THE WORKING OF THE HISSAR CATTLE
FARM DURING 1931-32.

Particulars.	Amount.			Previous year's figures.		
	Rs.	A.	P.	Rs.	A.	P.
A.						
<i>Receipts.</i>						
Sale of animals (exclusive of concessions to local bodies)	1,05,112	11	0	1,06,952	0	0
Miscellaneous receipts	29,190	12	6	33,712	14	0
Receipts on account of house rent	—	—	—	1,200	0	0
Deduct—Refund	1	0	0	—	—	—
Total ..	(a) 1,34,302	7	6	1,41,864	14	9
B.						
<i>Concessions allowed to local bodies.</i>						
Hills	1,14,250	0	0	79,050	0	0
Donkeys	4,100	0	0	..	..	..
Sheep	975	0	0	805	0	0
Arab stallion	600	0	0	4,000	0	0
Goats (to Punjab Veterinary College) .. ..	..	..	..	50	0	0
Arab mare and hacks (to Punjab Veterinary College) .. ..	..	..	..	1,000	0	0
Total ..	1,19,925	0	0	84,905	0	0
Total A and B ..	2,54,227	7	6	2,26,769	14	9

(a) Excludes Rs. 5-14-0 on account of recoveries for service payments.

TABLE XIV—CONCLUDED.

Particulars.	Amount.			Previous year's figures.		
	Rs.	A.	P.	Rs.	A.	P.
<i>Expenditure.</i>						
Salary of officers	(b)	29,374	7 0	32,907	14	0
Salary of subordinate staff	(c)	1,01,501	5 0	99,996	5	0
Travelling and conveyance allowance	(d)	3,582	8 0	4,915	0	0
<i>Contingencies and Supplies and Services.</i>						
A. Feed of animals (inclusive of reserve fodder)		26,972	6 6	52,970	0	0
B. Purchase of animals		1,865	0 0	6,391	0	0
C. Other heads	(e)	1,26,786	12 9	90,901	9	9
Stationery and printing		248	10 6	534	15	4
Expenditure on buildings through the Public Works Department		7,214	0 0	28,231	0	0
Total		2,97,545	1 9	3,16,847	12	0
Capital on 1st day of the year		22,16,609	15 6	21,41,640	9	5
Capital on last day of the year		22,25,911	13 9	22,16,609	15	6
1. Value of animals		8,92,362	4 0	9,15,012	0	0
2. Value of grain		8,389	0 0	34,264	9	6
3. Value of fodder		1,07,098	1 0	1,04,946	13	11
4. Value of machinery, medicines, deadstock articles and stationery, etc.		1,89,901	14 3	1,87,942	13	5
5. Value of buildings		5,89,644	0 0	5,64,472	0	0
6. Value of land		4,13,230	0 0	4,13,230	0	0

(b) Does not include Rs. 2,992-10-0 on account of leave salary drawn by the Superintendent in England.

(c) Includes Rs. 293 on account of compensatory and local allowance to Bir Patwari and Veterinary Assistants and Rs. 15-13-0 on account of house-rent allowance paid to a Veterinary Assistant.

(d) Includes Rs. 1,118-4-0 on account of motor car allowance paid to the Assistant Superintendents at Rs. 50 per mensem each.

(e) Includes Rs. 52,227-8-0 paid for rent of buildings for the year 1930-31 and 1931-32, but excludes expenditure on stores purchased from foreign countries and met out of the allotment placed at the disposal of the High Commissioner for India.

The expenditure on the following is also excluded—

Rs. 59-12-0 on account of travelling allowance for anti-rabic treatment under 47—Miscellaneous.

Rs. 18-2-0 on account of cost of books and publications under 47—Miscellaneous—Reserved.



