

(b) The principle followed in such matters is that renewals containing no element of improvement are charged to revenue. In the case of renewals involving improvements, capital is charged to the extent of the betterment involved and the balance is charged to revenue.

HOSTILE FOREIGNERS INTERNED IN INDIA.

616. **Mr. K. G. Bagde:** (a) What was the total number of hostile foreigners with their respective nationalities interned in India since the commencement of the war to the end of the year 1920?

(b) At what places were such hostile foreigners kept and what was their number at each place?

(c) How many hostile foreigners (if any) are interned at present, and at what places?

(d) What is the total amount of expenditure incurred for all hostile foreigners interned in India since the beginning of the war, to the end of the year 1920?

Mr. S. P. O'Donnell: The information asked for by the Honourable Member is being collected and will be supplied to him when obtained.

PANCHAYAT SYSTEM IN INDIA.

617. **Babu A. P. Sinha:** Will the Government be pleased to state whether it has given effect to the recommendations of the Report of the Royal Commission upon Decentralization in India about the introduction of the Panchayat System contained in Volume I, paragraphs 699, 701, 705, 706, 708, 710, 711, 712, 716, 717, 718 and 720; and with what results?

Mr. H. Sharp: The Honourable Member is referred to paragraphs 37—39 and 20—24, respectively, of the Resolutions of the Government of India on Local Self-Government, dated the 28th April 1915 and 16th May 1918. Separate Acts have been passed by the Governments of Madras, Bombay, Bengal, United Provinces and Central Provinces for the introduction of the Panchayat system. The Government of Assam have inserted provisions in the Assam Local Self-Government Act, 1915, for the constitution of village panchayats. The Government of India are not in a position to gauge the results of the legislation which has been passed and it is suggested that the Acts alluded to have not been in operation for a sufficient time to permit of a judgment being formed. As the Honourable Member is aware, Local Self-Government is now a provincial transferred subject.

BILL FOR PROTECTING CATTLE IN INDIA.

618. **Rai Bahadur S. P. Bajpai:** Will Lala Girdhari Lal Agarwala be pleased to lay on the table a copy of the Bill for protecting cattle in India of which notice for introduction was given by him in February last, together with the correspondence which he had with the Government on the subject?

Lala Girdhari Lal Agarwala: The Cattle Protection Bill with Objects and Reasons as well as copies of the following correspondence on the subject is laid on the table:

1. My letter to the Secretary, Legislative Assembly, dated 16th February 1921.

2. Reply by the Secretary, Legislative Assembly, dated 18th February 1921.
3. Letter from the Secretary, Legislative Assembly, dated 24th February 1921.
4. My letter to the Private Secretary to His Excellency the Viceroy, dated 27th February 1921.
5. My letter to the Private Secretary to His Excellency the Viceroy, dated 28th February 1921.
6. My letter dated 1st March 1921.
7. Letter from the Secretary, Legislative Assembly, dated 7th March 1921.
8. My letter dated 12th March 1921.
9. My letter dated 23rd March 1921, supported by a large number of Honourable Members of the Legislative Assembly.

I also lay on the table copy of a memorial dated 25th February 1921 to His Excellency the Viceroy by the All-India Cow Conference Association, Calcutta, as it has a strong bearing on the subject referred to in the question :

A Bill to provide for the protection of milch and agricultural cattle.

WHEREAS it is expedient to prevent the indiscriminate destruction of milch and agricultural cattle in India. It is hereby enacted at follows :

1. This Act may be called, 'The Cattle Protection Act, 1921' and it shall come into force at once.

Interpretation clause.

2. In this Act, unless there is anything repugnant in the context—

Milch cattle means and includes cows and buffaloes which are capable of calving and bulls which are fit for breeding purposes. It also includes their young ones.

Agricultural cattle means and includes such cattle as are generally used in India for purposes of agriculture and includes their young ones.

3. It shall be unlawful to :

- (a) slaughter, kill or otherwise destroy any milch or agricultural cattle for purposes of food, bones or hide,
- (b) directly or indirectly destroy or abandon the young one of any such animal with the intention and knowledge and under the circumstances that the said young one would not live if so abandoned or wilfully neglect any such young one,
- (c) export any such animal out of India except for cross-breeding purposes under special licence,
- (d) engraft or substitute any portion of one animal over another or otherwise maim or disfigure any such animal except for medicinal purpose,
- (e) milch any cattle by any artificial means which is likely to injure the health, strength or future milching possibility of such animals,

(/) or do any other act which has the effect directly or indirectly of materially damaging the animal in health, usefulness, normal life and normal breeding and milching.

The certificate of a qualified medical man as to any of the matters contained in this Act shall be conclusive proof of the matters certified.

Export licences may be granted under this Act on condition that the exporter will import into India within a given time a certain number of cattle which shall not be less than and not less useful than the cattle exported.

Any person found guilty of any offence under this Act or abetment thereof shall, on first conviction, be fined rupees one hundred for each head of cattle in respect of which the offence is committed and on subsequent convictions to imprisonment of either description which may extend to 3 months in addition to the said fine.

STATEMENT OF OBJECTS AND REASONS.

The principles underlying the Bill are given below. India is a country which greatly depends on agriculture. It is necessary to have ample supply of bullocks for purposes of irrigation and ploughing at reasonable rates. The price of bullocks has gone up very much during the past few years and large tracts of land remain uncultivated for want of agriculture cattle. Engine ploughs do not suit Indian conditions.

The Indian population depends to a great deal upon milk and ghee both of which have become dear. Infant mortality in India is daily increasing and I think it is due to low vitality for want of sufficient supply of pure milk.

It is therefore necessary to check indiscriminate slaughter of useful cattle in the country.

In some places, I am told, young ones of milch cattle are destroyed just at the time of birth, to economise milk which may otherwise be required to bring them up. This is a loss to the country and must be prevented.

Further, I am told, that in some parts of the country, especially in Calcutta, there is a system of milching called *Phuka* which brings out milk under very painful circumstances and injures the animal to a great extent particularly as to their future possibilities of breeding and milching.

Certain people transplant some limb of one animal over another for purposes of exhibition and rob the world in the name of Hindu religion. They pretend that the said animal was born like that and deserves special consideration and respect from a Hindu point of view. As a matter of fact, such artificial operations on animals are a sin and Hindus who have come to know of this feel very strongly about it and want the practice to be stopped.

I am encouraged in introducing this Bill on economic grounds alone and I do so with great pleasure and when the Bill is passed into law, I will consider it a proudest day of my life. I am sure that I am truly voicing forth the feelings of Indians in introducing this Bill.

DELHI;

GIRDHARILAL AGARWALA.

The 16th February 1921.

[28TH MARCH 1921.

Letter from Lala Girdhari Lal Agarwala, M.L.A., to the Honourable Mr. H. Moncrieff Smith, C.I.E., I.C.S., Secretary of the Legislative Assembly, dated Delhi, the 16th February 1921.

If my name comes out in the ballot, I shall beg leave to introduce the Bill regarding protection of cattle at the earliest possible opportunity.

From the Honourable Mr. H. Moncrieff Smith, C.I.E., I.C.S., Secretary of the Legislative Assembly, to Lala Girdhari Lal Agarwala, M.L.A., No. 1109-A. C., dated the 18th February 1921.

With reference to your letter dated the 16th instant, intimating your intention to move for leave to introduce your Bill regarding the protection of cattle at the earliest possible opportunity, I am directed to invite your attention to Rule 19 (4) of the Indian Legislative Rules (See paragraph 64 of the Manual of Business and Procedure) under which one month's notice of a motion for leave to introduce a Bill is required, and to point out that under the rule no motion for leave to introduce your Bill can be made until after the expiry of one month, i.e., not before the 15th March. In these circumstances it will be necessary for you to take a number in the next ballot.

From the Secretary of the Legislative Assembly, to Lala Girdhari Lal Agarwala, M.L.A., No. 1215-A.C., dated Delhi, the 24th February 1921.

I am directed to acknowledge the receipt of your letter dated the 18th instant and enclosures, notifying your intention to move for leave to introduce in the Legislative Assembly a Bill to provide for protection of milch and agricultural cattle.

2. I am to invite your attention to section 67(2)(b) of the Government of India Act and to point out that your Bill requires the previous sanction of the Governor General. I am accordingly to request you to apply for and obtain the previous sanction of the Governor General to the introduction of the Bill as Rule 19 (2) of the Indian Legislative Rules requires that a copy of such sanction shall be annexed to the notice sent by you.

From Lala Girdhari Lal Agarwala, M.L.A., to the Private Secretary to His Excellency the Viceroy and Governor General, dated Delhi, the 27th February 1921.

I desire to have an interview with His Excellency at an early date when it can be suitably arranged.

I have, on 16th February, given notice to the Secretary, Legislative Assembly, of my intention for leave to introduce the Cattle Protection Bill. The Secretary, Legislative Assembly, informs me that under section 67(2)(b) of the Government of India Act, the leave of the Governor General is required before the Bill can be introduced. I therefore request you to get my proposed Bill with Objects and Reasons beforehand from the Legislative Department and lay the same before His Excellency for the necessary sanction if the same be at all deemed necessary, as I maintain, that such sanction is not required inasmuch as the proposed Bill does not affect the religion of

the Muhammadans. It aims at indiscriminate destruction of useful cattle for food, bones and hide. My proposed Bill is in accordance with the policy of the Government declared in answer to Honourable Mr. Khaparde's question No. 18 (Gazette of India, Oct. 2, pages 1201-2). I hope, the passing of this Bill will greatly popularise the Government of His Excellency Lord Chelmsford at the eve of his departure. The matter is very important and urgent and I hope His Excellency will kindly see his way to accord the necessary sanction and allow the matter to be put up just when the period of notice expires. I wish the Bill to be passed into law and sanctioned by Lord Chelmsford himself.

This is the only matter which I want to discuss with His Excellency. But if His Excellency has already seen the papers and can grant my request without interview, I can pay my respects to His Excellency later on.

I shall feel obliged if you will lay this matter before His Excellency as soon as possible.

From Lala Girdhari Lal Agarwala, M.L.A., to the Private Secretary to His Excellency the Governor General, dated Delhi, the 28th February 1921.

I pray that His Excellency the Governor General may be pleased, under Rule 18, section 63, printed at page 22 of the Manual of Business and Procedure in the Legislative Assembly, to order the publication of my Bill to provide for Protection of Cattle together with the Statement of its Objects and Reasons, copy of which I have sent to the Secretary with the usual notice on 16th February 1921, in the Gazette, to save time, so that it may be possible to pass the Bill in both Chambers during the régime of His Excellency Lord Chelmsford.

I also pray for sanction of His Excellency the Governor General in accordance with section 67 (2) (b) of the Government of India Act, to comply with the provisions of Rule 19 (2) of the Indian Legislative Rules as the Secretary of the Legislative Assembly has asked me to obtain the same so that a copy of such sanction may be annexed to my notice. Personally I think, that no such sanction is needed as the proposed Bill does not affect any religion. In any case, there is no harm in obtaining the sanction and approval of His Excellency but all good will come out of it.

Most humbly and respectfully, I beseech His Excellency the Governor General to be pleased to treat this measure with special consideration and be further pleased to pass favourable order to enable the Bill to be passed soon.

I am anxious to pay my respects to His Excellency whenever His Excellency may be able to spare time.

Hoping to be excused.

From Lala Girdhari Lal Agarwala, M.L.A., to the Secretary, of the Legislative Assembly, dated Delhi, the 1st March 1921.

In order to remove your objection, I am willing to add a provision to my Cattle Protection Bill as follows:

‘Nothing is an offence under this Act, which is done for a religious purpose.’

From the Honourable Mr. H. Moncrieff Smith, C.I.E., I.C.S., Secretary of the Legislative Assembly, to Lala Girdhari Lal Agarwala, M.L.A., No. 1454-A.C., dated the 7th March 1921.

I am directed to acknowledge the receipt of your letter dated the 28th February, addressed to the Private Secretary to His Excellency the Viceroy on the subject of your Cattle Protection Bill and your subsequent letter dated the 1st March in which you state that you are willing to add a provision in the Bill in the following terms :

'Nothing is an offence under this Act which is done for a religious purpose.'

2. In reply, I am to state that as the proposed new clause involves a change of substance in the Bill it will be necessary for you to withdraw your original Bill and give notice of the new Bill. In the circumstances, I am to request that I may be informed whether you wish the Government of India to consider your original Bill and the requests made in the letter dated the 28th February or whether it is your intention to give notice of a new Bill with the insertion of the clause proposed by you.

Letter from Lala Girdhari Lal Agarwala, M.L.A., to the Honourable Mr. H. Moncrieff Smith, C.I.E., I.C.S., Secretary of the Legislative Assembly, dated the 12th March 1921.

In reply to your letter No. 1454-A.C., dated 7th March 1921, re my Cattle Protection Bill, I request the Government of India to consider my original Bill, notice of which will expire on 16th instant. I request, in deference to the ruling of the Honourable the Law Member, that permission may be granted to me to introduce the same. If such permission is refused, it will be open to me to give notice of an amended Bill.

I request you to kindly treat this as urgent.

Letter from Lala Girdhari Lal Agarwala, M.L.A., dated the 3rd March 1921.

I pray that His Excellency the Governor General be pleased to grant me leave to move for introduction of my Cattle Protection Bill under section 67(b) of the Government of India Act, and I might be permitted to move for its introduction on any day in this session of the Legislative Assembly, or in the alternative, publication of the Bill in the Gazette be ordered under section 63 of the Legislative Assembly Manual.

Support introduction of the Bill—[(Sd.) B. Venkatapatiraju, P. V. Srinivasa Rao, M. K. Reddiyar, Baha Ujagar Singh Bedi, K. G. Bagde, A. B. Latthe, K. C. Neogy, P. Lal, P. L. Misra, B. H. Jatkar, Mahadeo Prasad, Man Singh, Radha Kishan Das, Nand Lal, B. P. Singh, J. L. Bhargava, N. C. Sircar, Jamnadas Dwarkadas, T. V. Seshagiri Ayyar, G. C. Nag, T. P. Mukherjee, J. N. Majumdar, J. N. Mukherjee, B. S. Das, Gajjan Singh, Gulab Singh, S. C. Sen, Syed Nabi Hadi.]

To

HIS EXCELLENCY THE RIGHT HONOURABLE FREDERICK JOHN
NAPIER THESIGER BARON CHELMSFORD, P.C., G.C.M.G.,
G.M.S.I., G.M.I.E., G.B.E., VICEROY AND GOVERNOR GENERAL OF
INDIA.

MAY IT PLEASE YOUR EXCELLENCY.

The humble memorial of the President,
Vice-Presidents and Members of the
All-India Cow Conference Association,
Calcutta,

MOST RESPECTFULLY SHEWETH :

1. That India is pre-eminently an agricultural country in which about three-fourths of the population depend for their living upon agriculture (Appendix A), but the cattle of the country which form the life and soul of agriculture, are deficient both in number and in quality.

2. That the number of cattle in the country is inadequate, as is evident from a comparison of the proportion of cattle to population in India with that in other agricultural countries of the world : thus while the number of cattle per 100 of population in India is only 59, it is 74 in Denmark, 79 in the United States of America, 80 in Canada, 120 in Cape Colony, 150 in New Zealand, 259 in Australia, 323 in the Argentine Republic and 500 in Uruguay (*vide* Appendix B). And in this connection Your Excellency's memorialists beg to point out that the recent communiqué issued by the Director of Informations, Bengal, is misleading, as it deals only with the number of cattle of India and other countries and does not take into account the proportion of cattle either to the population or to the acreage under cultivation.

3. That the number of bulls and bullocks is not sufficient to bring properly under cultivation the arable land of the country. The maximum area which a pair of Indian plough-cattle can till during a season is 5 acres ; the cultivated area in British India is about 228 million acres, and the total number of plough-cattle is about 49 millions (Appendix C) ; deducting 25 per cent. for draught and other like purposes, and 25 per cent. as old, infirm, sick and immature, there remain only about 24 millions of cattle available for cultivating about 228 million acres, that is to say, a pair of cattle has to till about 19 acres, whereas this would require in the ordinary course 4 pairs of cattle. This in a large measure accounts for the poor outturn of crops in India as compared with that of other countries (*vide* Appendix D).

4. That the number of milch-cattle is also scarcely enough to supply one-eighth of the present population of India with a fair quantity of milk ; taking the average yield of milk of the Indian cow to be 2 pints per head per day for 7 months, the milk that is produced by 50 millions of milch-cattle per day for the 254 million people comes to about 60 million pints per day, that is to say, each individual gets less than $\frac{1}{4}$ of a pint whereas the need per individual is reckoned at 2 pints a day (*vide* Appendix C).

5. That the quality of all kinds of cattle has very much deteriorated and is still deteriorating ; Indian milch-cattle in Akbar's time (as described in the *Ain-i-Akbari*) 'used to give 20 quarts of milk a day and draught-cattle could walk faster than horses.' Only 25 years ago, as older inhabitants of India

can testify, country cows used to give about 5 seers of milk per head per day on an average, while they now give only 1 seer; bullocks also could do about double the work that they do now.

6. That this unsatisfactory state of things both as regards the number and quality of cattle has led to an abnormal rise in the price of cattle, crops, milk and milk-products on the one hand, and on the other to the poor physique of many of the population, prevalence of disease and an abnormal death-rate among the people, especially amongst women and children.

7. That the rise in the price of milk and milk-products has been out of all proportions to the current tendency to an all-round rise in the price of commodities; for while in the course of the last 60 years the price of food-grains has risen 5 to 7 times, that of milk has risen more than 40 times (Appendix E), further while the price of most other commodities in England and in the United States of America is double and sometimes even 4 times that of the same in India, milk sells there at the same price as here and sometimes at a cheaper rate. In addition, there has been an abnormal rise in the price of cattle as well. In Akbar's time 'cows giving 20 quarts of milk a day used to sell at Rs. 10', fifteen to twenty years ago such cows could be had for about Rs. 150 whereas they are hardly available now for Rs. 400; and similar has been the rise in the price of bulls and bullocks as well.

8. That the mortality amongst infants in India is appalling, being nearly double that of the United Kingdom, Denmark and Japan, about 3 times that of Norway, and Sweden, about 5 times that of Holland and the United States of America, and nearly 9 times that of New Zealand (Appendix F). Of the 26 per cent. of deaths of infants under one year which take place in India, most are from preventible causes, especially from malnutrition, and it is evident that by 'cheapening the price of milk so as to bring it within the reach of the poorer classes more would be effected'; as Colonel Mactaggart, Sanitary Commissioner of the United Provinces, points out 'towards reducing infantile mortality than the presence of any number of trained *dhais* would accomplish'. There can be little doubt that the want of a pure and abundant supply of milk is the primary cause of the heavy infant mortality prevalent in India.

9. That the death-rate amongst Indians is on the whole very much higher than that of any other civilised country, but that of females between the ages of 15 and 30, that is to say, during their child-bearing period, is still higher (Appendix G)—appreciably higher than the death-rate of men in the corresponding ages, and this is doubtless due mainly to the want of nourishing foods, such as milk and ghee, which they most require at this period of their life.

10. That the Indians are practically vegetarians; the quantity of fish and flesh consumed by them being considerably small, and milk and milk-products, therefore, form their chief sources of nutrition. The growing shortage in the supply of milk and the consequent abnormal rise in its price and other concomitant evils have helped to undermine the health of the people. Not only has the death-rate increased to a great extent, but there has been also a growing prevalence of such wasting diseases as tuberculosis and the like among the people; for instance, the statistics published by the Government of India shows that the number of reported tubercular cases among human beings in 1902 was only 38,435, while by the year 1919 the number had risen to 1,00,192, thus indicating an increase of about 200 per cent. (*vide* Appendix H).

11. That the above outline of facts and figures necessitate an early inquiry into the whole question of the cattle and milk-supply in India with a view to place them on an improved and satisfactory basis.

12. That during the last year and the year before last the All-India Cow Conference Association have been seeking information from District Boards, Municipalities and Agricultural Associations throughout India as to the number and state of cattle, pasturage and milk-supply. As a result of these inquiries and from a perusal of the published reports on the subject in official and non-official publications the following facts have been gathered, viz:

(a) A lack of pasture and of fodder: the pasture-lands are already inadequate, and they are being yearly encroached upon; and the growing of fodder-crops is also inadequate.

(b) A lack of good bulls for breeding purposes in the country; the diversion of Brahmuni bulls to other purposes encouraged by judicial decisions of some of the Indian High Courts; and the general indifference of the well-to-do classes towards cattle-keeping and breeding.

(c) The indiscriminate slaughter of milch-cows and other cattle for the purposes of food, the meat-trade and the trade in hides, and the uncontrolled export of the best breeds of cattle out of India as also from one Province to another.

(d) The want of proper treatment of cattle in disease or in health and the heavy mortality from outbreaks of infectious diseases, chiefly rinderpest, and the gross neglect of cattle-owners and such cruel practices as *phooka*, etc. resulting especially in the high death-rate among calves and the sterility of prime cows.

13. That in a country like India where many people have difficulty in getting a sufficiency of food, the practice of leaving a certain proportion of open lands for pasturage was very beneficial; and this practice has been in vogue from the time of Manu and Yajnavalkya who advocated the laying aside of a tenth part of each village for the purpose. Unfortunately with the lapse of time the Zamindar as well as the ryot have slowly encroached upon these useful areas until at the present day one finds that in India the proportion of grazing grounds to the total area is the smallest of all countries (Appendix I). In the United States of America, the proportion is 1 to 16, in Germany and Japan it is 1 to 6, in England, in the United Kingdom and in New Zealand, it is 1 to 3, while in India, it is 1 to 27. Again, if we consider the average quantity of grazing land that is available for each head of cattle, we find that in the United States, the average is about 13 acres per head of cattle as against 1.3 acres in Bombay and 1.7 acre in Bengal. It is hardly necessary to point out then, that the pasturage in India is extremely inadequate and this has led in no small degree to the deterioration of Indian cattle. The official and non-official accounts both go to show that wherever there is good pasturage the breeds of cattle have much improved, whereas a deficiency in pasture is invariably followed by a marked inferiority in the number and quality of cattle. About 70 per cent. of the replies to the queries sent out by the All-India Cow Conference Association and almost all the district Gazetteers and Provincial Cattle Census reports complain of the inadequacy of pasturage and of the growing

tendency to encroach upon it. Although there is some divergence of opinion as to the necessity of reclaiming pasture-lands already converted into agricultural holdings, there appears to be complete unanimity on the question of retaining the existing grazing-lands as such and preventing further encroachment on the same by legislation, if necessary.

14. That if it be advanced that economic causes have led to the conversion of pasture grounds into cultivated areas and that this process should not be interfered with, because it is one that serves a more useful purpose of raising crops for human consumption, the argument is refuted by a perusal of Appendix J which goes to show that an increase in the area under cultivation generally leads to a diminution in the rate of outturn of crops, and this is due to the fact as stated in paragraph 3 that the plough-cattle ordinarily available are insufficient for the area already under cultivation, become more so if the area be extended, with the result that the increase in cultivated lands instead of yielding an increased outturn, shows an appreciable diminution. To obtain then an increase in the outturn would depend not on increasing the area under cultivation such as by the encroachment on pasturelands but by the adoption of intensive methods of cultivation such as are employed in most civilised countries. In fact the tendency in high congested countries like Great Britain, where the price of land is very high, 'is gradually to throw more and more cultivated land into pasture,' whereas in India where land is cheap, the very opposite tendency is manifested. It may bring some immediate gain, but it proves a severe loss in the end, for as the available figures show (Appendix J), not only with the increase in the cultivated area, the rate of outturn of crops falls off, but it appreciably undermines the health of the cattle and permanently impairs their breed. In view of all the above, it would appear that Government interference is needed to check further encroachment upon grazing grounds and to provide for the gradual reclamation of pasture lands by authorising Municipalities, District Boards and other such bodies to spend a portion of their funds for this and other cognate purposes, and further by the acquisition and proper maintenance of grazing lands by Provincial Governments where necessary.

15. That the position as regards fodder crops in India appears to be even worse than that, as regards pasturage. The total area of British India is 617 million acres, the total cropped area is 261 million acres and the area under fodder crops is 6.4 million acres. In other words, fodder crops occupy very little over one per cent. of the country and support 22 head of cattle to the acre. In the United States of America, fodder crops are grown on 3.5 per cent. of the total area and give an average of 1.16 acres per head of cattle (Appendix K). The cultivation of fodder crops is thus very scanty and as such it should be encouraged by arranging the supply of seeds of fodder crops at a nominal charge through the Government Agricultural Departments, Municipalities and District Boards, by an abatement of revenue with respect to lands where fodder crops are cultivated, and by arranging for successful experiments in fodder growing in the Model Agricultural Farms with a view to induce cattle-owners and cultivators to grow more fodder crops.

16. That the breed of Indian cows, as has been already submitted, is on the whole deteriorating, with the result that the average daily yield of milk per cow in India is at present only one quart or 2 lbs., while the daily yield of milk per cow is 20 lbs. in England and Denmark, and 10.2 lbs. in

the United States of America (*vide* Appendix L). The want of good breeding bulls and the apathy and negligence of public bodies as well as of private individuals toward cattle-breeding are directly responsible for the present inferiority of Indian breeds of cattle. Breeders, who according to the last census form only 2 out of every 1,000 of the population, consist mainly of certain aboriginal tribes and of ignorant and poverty-stricken cultivators, and as such little improvement can be expected of them. The statistical returns published by the Government of India show, that out of the 147 millions of cattle that we have in India,—and milch-cattle form about half of this number—we have only 75 Government bulls and 973 District Board bulls and 6 Cattle Farms with which to carry on breeding operations on improved lines. The proportion is ridiculously small and their number should be very largely multiplied to produce any appreciable effect on the country. Every District Board should have a Model Breeding Stud, and every Municipality and Village Union should be made to keep an adequate number of high class breeding bulls which could be utilised by the people free or on payment of a nominal charge.

17. That formerly Brahmini bulls or bulls dedicated by the Hindus during the funeral ceremonies of their relatives were permitted to roam at large and served the purpose of good breeding bulls, but their number is steadily on the decline, mainly as the result of certain High Court judgments (*vide* Indian Law Reports—Calcutta Series, Volume 17, page 852; Allahabad, Volume 8, page 51, Volume 9, page 348; Madras XI, 145), which declare Brahmini bulls as *res nullius*, so that anybody may take and kill them or put them to any form of work. The time appears to have come when the evil effects of these rulings should be counteracted by some direct legislation for protection of Brahmini bulls, which would at the same time vest these bulls in certain public or semi-public bodies who should be responsible for their proper upkeep and use.

18. That the unrestricted slaughter and export of cattle have perhaps done more harm to the development of the cattle resources of the country than all the other causes put together. It has already been pointed out in paragraph 3, that there is not a sufficient number of agricultural cattle to cultivate a fourth part of the arable land of the country, and in paragraph 4 that the present strength of milch cattle is hardly sufficient to provide an eighth part of our population with an adequate quantity of milk. The continual slaughter and export of the higher breeds of cattle have deprived the country of its best breeds and there being no adequate process of good breeding to produce cattle which can take the place of those killed and exported, the drain is felt all the more keenly and has been telling heavily on the vitality of the people, especially on that of the children. Cattle are killed mainly for the following purposes, *viz.*:—(a) for food, (b) for the export of dried meat and (c) for trade in hides. The figures that are available go to show that the number under all the three heads has been steadily on the increase. The income of Municipalities in British India from octroi on animals taken for slaughter as also from slaughter-houses has increased about 70 per cent. in the course of the last 10 years (Appendix M) while the increase in the export of hides has been 20 times more in the course of the last 50 years. The figures of slaughter that have been collected by the all-India Cow Conference Association indicate that the number of cattle annually slaughtered for food within British India would amount to a figure between 2 to

6 millions. With regard to the slaughter of cattle killed for the purpose of the dried meat trade (locally known as '*biltong*') it is difficult to obtain correct figures. The Honourable Lala Sukhbir Sinha of Muzaffarnagar, United Provinces, has collected figures from a number of districts in the United Provinces (Appendix N) and these alone amount to 1½ lacs a year. The Association has collected figures of dried meat exported *viâ* Howrah from the Agent, East Indian Railway, and this shows that about two lacs of mannds of dried meat are annually exported *viâ* Howrah (*vide* Appendix O). The trade is largely carried on in other Provinces as well, such as the Central Provinces, Bihar, Berar and Bombay, and there is every reason to think that the total figures amount to over 5 lacs. It is noteworthy to find, that the provinces where the dry meat trade is carried on and from which cattle are exported, the number of cattle is on the decline. Thus Bombay, Cutch and the United Provinces show a decline of 2 to 10 per cent. in the course of the 20 years—1890 to 1910 (*vide* Appendix P).

19. That it is not only the number of animals slaughtered and exported but their excellence in quality that injuriously affects the resources of the country. The manner in which this process of unrestricted slaughter has been going on is aptly described by the Honourable Mr. C. F. Payne, I.C.S., formerly Chairman of the Calcutta Corporation: 'The *goala* usually buys his cows at the beginning of their second lactation period. He then sells away the calf and begins to practise the abominable *phooka* on the cows and obtain milk from 6 to 8 months at the most. By the end of that time, the cow ceases to give milk and becomes unfit for breeding purposes for at least 2 or 3 years. The butcher is in waiting and however fine the animal may be, she is sold away for slaughter without scruple for a small sum. 'This is a process which is constantly going on with the best cows in the country. The cruelty of it will probably appeal strongly to my hearers, but what appeals to me even more strongly is the *abominable wastefulness* of the system'. The result is, that good cows are harder to procure every year, and the price of cattle as well as of milk is steadily going up.

20. That at the suggestion of the All-India Cow Conference Association, the Calcutta Corporation and several other municipalities and cantonments in British India have resolved to stop the slaughter of calves and some even of cows also; and Your Excellency's memorialists would beg leave to suggest that the slaughter of such useful cattle as prime cows, calves and breeding bulls may be prevented by legislation; in this connection, Your Excellency's memorialists would point out, that cattle slaughter is already prohibited in the following among other States, *viz.*, Afghanistan, Baroda, Jammu, Kashmir, Gondal, Barwani, Dharampur, Bansda, Cooch Behar, Sirmur, Cambay, Khilchipur, Jama Khandi, Akalkot, Sarila, Vadia, Sayla, Khania-Dhana, Chud Amrethiraj.

21. That the question of export of cattle is one of considerable importance. The cattle of India were formerly one of the best breeds of cattle in the world and they were requisitioned by almost all other countries. Their export though it had been going on, on a very small scale for over a century never assumed such proportions as now. There appears to be a scarcity of cattle in many parts of the world, due mainly to the war and economic causes, and it is also keenly felt in India. The result of the

increase of export from India has been in the words of the Board of Agriculture in India, that the 'best breeds of cattle have been considerably depleted. In the case of the Ongole breed the export has taken place mainly to Java, and it is understood that the Java Government contemplate a continuance and increase of this export. The animals exported are young bulls and female stock and the breed is exported to Java for breeding for meat' (*vide* Proceedings of the Board of Agriculture in India, 1916). Although the figures of export are not complete, still those available (Appendix Q) show that it was on the increase until the outbreak of the war, when there was an appreciable falling off. Present inquiries by some of Your Excellency's memorialists go to show, that the export is again on the rise. Ten dealers from Brazil are reported to be exporting Kankreji and other good breeds of cattle from the Bombay Presidency, each exporting about 1,500, several veterinary officers of the Dutch Colonial Service export Ongole breeds from the Madras Presidency about 800 in each consignment, while in the course of the last few months two dealers from Java have sent two batches of excellent Punjab cattle about 500 in each batch *via* Calcutta to Java. Such export would have given a stimulus to good breeding if there were proper breeding farms and the number of cattle were more than was needed for the country, but in view of the existing deficiency of cattle in the country, and in the absence of proper and adequate breeding facilities for producing good breeds of cattle in sufficient numbers and also 'as the Indian cattle-owners have not become sufficiently aware of the true value of well-bred cattle and usually part with them at a price which represents hardly half their value,' and further, in view of the fact, that cattle owners are often obliged to part with their best milch cattle or agricultural cattle on the temptation of getting ready money, which they are always in need of, even if it be to their future detriment, the indiscriminate export from the country of the best breeding bulls and milch-cattle without any prospect of replenishment is against the highest economic interests of the country. Your Excellency's memorialists would therefore venture to submit, that Your Excellency's Government, should in the words of Mr. Coventry, President of the Board of Agriculture in India, 'carefully look into the matter and exercise control and discrimination in the working of the trade'. Many Indian States, the States of Bansda, Barwani, Chumba, Sarila, Sayla (*vide Indian Humanitarian*, November 1919, page 8) have already taken the lead in this direction and there is every reason to expect that the British Government will take similar action as well.

22. That the export of cattle from one Province to another also produces baneful results; for such cattle take a long time to acclimatise, the yield of milk and the capacity for labour visibly diminish, their calves seldom survive and in the course of a year or two their existence is brought to a close while yet in their prime in the slaughter-house. People are thus deprived of their useful services which would have been otherwise available for a term of 10 or 12 years and the cattle resources of the country are being wastefully exhausted. Good cattle are thus becoming more scarce every year, and their prices are rising abnormally in consequence. Having regard to the manner in which the transport of cattle from province to province is prejudicially affecting the economic situation of the country, there is a need for early inquiry into the matter and for the passing of some measures of control.

23. That as India has been the home of cattle diseases, it has also been the home of veterinary science. From the time of the Atharva Veda down to that of Chakrapani Dutt of Asokan times, the indigenous system of cattle treatment appears to have reached a high stage of perfection, and that knowledge has been preserved to some extent by the *go-baids* (cattle surgeons) of the country. The present Government veterinary colleges are limited in number and the graduates turned out by them are too few to deal with any outbreak of disease. The statistics collected for the Parliamentary Report (Appendix R) though not complete indicates to some extent the high death-rate among cattle and the proportion of deaths from rinderpest to those from other diseases. It appears that proper and timely segregation is not resorted to and that there is no opportunity of treating a major portion of the cattle affected. The indigenous system of treatment which was inexpensive and which was suited to the constitution and conditions of the Indian cattle, was of considerable help in checking and curing cattle-diseases. The system has practically died out owing to neglect and want of patronage. In view of the comparative inadequacy of doctors versed in the modern system of veterinary science, it would seem to be necessary to revive in some way the indigenous system by some form of State patronage.

24. That in consideration of the above facts and circumstances Your Excellency's memorialists respectfully submit that Your Excellency's Government will be pleased to appoint a Commission to make a thorough inquiry into:

- (1) the proper means of improving the number and quality of cattle in British India;
 - (2) the adequacy of pasture lands;
 - (3) the adequacy of fodder-crops;
 - (4) the adequacy of milk-supply and milk-products;
 - (5) the desirability of stopping or restricting the export of cattle abroad; and also of the export of oil-cakes and cotton-seeds which form the chief food of the cattle of India;
 - (6) the desirability of controlling the transport of cattle from province to province;
 - (7) the desirability of stopping the slaughter of calves, milch and agricultural cattle, breeding bulls, cattle for the purposes of the Burma meat trade and other kindred trades and, if possible, of cattle generally;
 - (8) the provision of bulls for breeding purposes including the protection and maintenance of Brahmini bulls;
 - (9) the desirability of encouraging indigenous systems of cattle-treatment;
 - (10) the desirability of providing facilities for the transport of dry cattle to and their return from grazing areas;
- with a view to introducing suitable measures for the amelioration and improvement of the condition of Indian cattle.

And Your Excellency's memorialists as in duty bound shall ever pray.

10, OLD POST OFFICE STREET,
CALCUTTA;
The 25th February 1921.

J. G. WOODROFFE, Kt., M.A., B.C.L.,
BAR.-AT-LAW,
1 resident

APPENDIX A.

Agricultural population in India.

(From the Census Report of India, 1911, Volume I, Part I, pages 406, 412, 433.)

British India.		Indian States.	
Assam	85 per cent.	Baroda	63·3 per cent.
Baluchistan	67·5 "	Central India	60·7 "
Be. gul	75·4 "	Cochin	50·4 "
Bihar and Orissa	78·3 "	Hyderabad	57 "
Bombay	64·3 "	Kashmir	78·5 "
Burma	70 "	Mysore	72·4 "
Central Provinces	76 "	Rajputana	62·5 "
Coorg	81·6 "	Sikkim	94·4 "
Madras	68·7 "	Travancore	53 "
Punjab	58 "		
United Provinces	72 "		
Total India	72 "		

APPENDIX B.

Proportion of cattle to population in various countries.

(From Livestock Statistics, India, 1919-20; Dictionary of Statistics by Mulhall; New Dictionary of Statistics by Webb; New Hazel Annual and Almanac, 1920; Whittaker's Almanac, 1920.)

Name of country.	No. of cattle.	Population.	No. of cattle per 100 population.
India	145,922,000	244,267,542	59
Denmark	1,840,500	2,500,000	74
United States	72,534,000	92,000,000	79
Canada	5,576,500	7,250,000	80
Cape Colony	1,270,000	1,100,000	120
New Zealand	1,816,300	1,200,000	150
Australia	11,956,024	5,500,000	259
Argentina	25,844,800	8,000,000	323
Uruguay	6,830,000	1,400,000	500

APPENDIX C.

Ratio of plough-cattle to cultivated area and milch-cattle to population.

[From Agricultural Statistics of India, Volumes I and II (1914-15).]

1	2	3	4	5	6	7	8
Place and year.	Culti- vated area in 1,000 acres.	Plough cattle in 1,000.	Quantity (in acres) of culti- vated area per plough cattle.	Popula- tion in 1,000.	No. of milch- cattle in 1,000.	Average yield of milk per day in 1,000 pints (at 2 pints per cattle for 7 months).	Quantity of milk in pints available per man per day.
British India, 1914-15.	227,611	48,645	5	244,267	50,946	59,437	1
Indian States 1914-15 (so far as obtainable).	31,935	4,002	8	70,865	5,838	6,811	1.5
Total or average	259,546	52,647	5	315,132	56,784	66,248	1

APPENDIX D.

World's Crops in 1917.

[From 'The New Hazel Annual and Almanac, 1920' and Agricultural Statistics of India, Volume I, page ii (1916-17).]

Name of country.	Area in acres under wheat cultivation.	Wheat produce in bushels.	Rate of outturn in bushels per acre.
British India	33,067,000	381,268,250	11.5
Denmark	181,000	4,286,466	33
Spain	10,336,000	142,376,740	14
France	10,313,000	134,293,756	13.5
Great Britain	2,103,000	59,623,650	29.8
Italy	10,433,000	137,324,000	13.7
Norway	19,000	429,484	23
Netherland	122,000	3,699,718	30
Sweden	329,000	6,849,663	23
Switzerland	131,000	4,545,666	32.5
Canada	14,795,000	233,256,994	17
United States	45,922,000	635,314,011	14
Japan	1,457,000	32,658,622	32
Egypt	1,116,000	29,772,285	29

APPENDIX E.

Price of Food-stuffs 1857—1918.

[From the Honourable Lala Sukhbir Sinha's address at the Second Sessions of the All-India Cow Conference, Delhi, 1918.]

Name of food.	1857.	1890.	1918.
	Seers per rupee.	Seers per rupee.	Seers per rupee.
Wheat	39	25	5½
Gram	51½	28	7
Rice	18½	12	
Milk	4 mds. =160 seers.	64	4

APPENDIX F.

Average Annual Death-rate per 1,000 population.

Country and year.	Under 1 year.	1-5 years.	All persons.	Source of information.
India (1908 09)	260·7	67·3	38·2	Statistics of British India (Public Health), Vol. III.
Japan (1908) . . . . .	...	31·99	20·9	Japan Year Book, 1914 to 1916.
England and Wales (average for 1896—1905)	172	22	17	New Dictionary of Statistics by Webb, 1911.
Scotland do.	145	22	17	
Ireland do.	123	17	18	
Denmark do.	136	11	15·5	
Norway do.	102	12	15	
Sweden do.	102	12	16	
Holland do.	50	50	17	Dictionary of Statistics by Mulhall, 1899.
United States (1898)	58·8	58·8	...	
New Zealand (1919)	32	...	9·5	Whittaker's Almanac, 1920.

APPENDIX G.

Deaths according to Age Ratio per 1,000 Population.

[From Statistics of British India, Public Health, Vol. III.]

Year.	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
15—20 years	Male . 15.84	12.72	14.46	14.74	11.98	11.01	11.31	12.45	10.98	12.79
	Female . 17.75	14.66	16.53	17.03	14.05	12.86	13.67	14.97	12.99	14.65
20—30 years.	Male . 18.52	15.91	17.30	15.70	13.34	12.51	12.60	13.72	12.53	14.30
	Female . 19.66	16.96	18.44	18.56	16.00	14.93	15.34	16.41	14.81	16.76

Average Number of Deaths of Females per 1,000 Male Deaths 1905—1919.

(Census Report, Page 234.)

Age.	Bengal.	Bihar and Orissa.	Bombay.	Burma.	C. P. and Berar.	Madras.	Punjab.	U. P.
15—20	1,215	889	1,025	859	1,053	1,234	966	1,056
20—30	1,171	1,213	1,061	865	1,147	1,231	1,055	1,105

APPENDIX H.

Number of Tubercular Diseases of Human Beings treated in British India in 1902—06.

[From Statistics of British India, Public Health, Vol. III.]

Year.	No. treated in State-public local fund, and private-aided hospitals and Dispensaries.	No. treated in State special and Railway hospitals and dispensaries.	No. treated in private and non-aided hospitals and dispensaries.	Total number.
1902	29,318	2,495	6,622	38,435
1907	47,315	2,280	9,707	59,302
1912	72,174	3,565	17,465	93,204
1917	78,669	3,030	18,493	100,192

APPENDIX I.

Pasture lands all over the world.

[From the 'Indian Review' (Madras), May 1919, page 315; 'Cattle, Sheep and Deer' by Macdonald; Standard Cyclopædia of Modern Agriculture; Census and Survey of Cattle of Bengal, Appendix VIII, by J. R. Blackwood, I.C.S.; Statistical Abstract of United States of America, 1915.]

Name of country.	Total area in 1,000,000 acres.	Area of grazing ground in 1,000,000 acres.	Ratio of total area to grazing ground.
Great Britain and Ireland	77.5	23	3 : 1
E. gland	8.5	10	3 : 1
Germany	133	21.4	6 : 1
New Zealand	6.7	2.7	3 : 1
United States	1,403	117	16 : 1
Japan	105.6	17.6	6 : 1
India	1.60	35	27 : 1
Bengal	50.5	3	17 : 1

Proportion of Grazing Area to Cattle.

Name of country.	Area of grazing ground in 1,000 acres.	No. of cattle in Thousands.	Area (in acres) of grazing ground per head of cattle.
United States of America	1,903,000	146,308	13
Bengal	2,929	17,079	17
Bombay (Kaira and Ahmedabad).	406	316	1.3

APPENDIX J.

Table showing Decrease in Outturn of Crops with Increase of Cultivated Area.

[From Season and Crop Reports of the Bombay Presidency, Bengal and North-West Frontier Province.]

BOMBAY PRESIDENCY.			BENGAL.			N.-W. F. PROVINCE.		
Year.	19 0-11.	1913-14.	Year.	1902-03.	1904-05.	Year.	1903-04.	1907-08.
Cropped area in acres.	30,742,000	30,845,000	Cropped area in acres.	59,314,000	61,034,000	Cropped area in acres.	2,466,220	2,657,906
Outturn of crops in lbs. per acre.	540	501	Total out-turn of crops in tons.	26,377,197	4,676,4	Out-turn of crops in lbs. per acre.	658	566

APPENDIX K.

Fodder Crops Statistics.

[From Agricultural Statistics of India, Vol. I, and Statistical Abstract of the United States of America, 1915.]

Names of country.	Total area in 1,000 acres.	Area under Fodder crops in 1,000 acres.	No. of cattle in 1,000.	Ratio of column 3 : 2.	Ratio of column 3 : 4.
1.	2	3	4	5	6
United States of America	1,903,000	54,400	59,600	3.5 p. c.	9 cattle per acre.
British India	616,950	6,363	147,336	1 p. c.	22 cattle per acre.

APPENDIX L.

Milk-yield of Cattle of Different Countries.

Name of country.	Average daily yield of milk per cattle per day in lbs.	Source of Information.
India	2 lbs.	Cattle Census Reports of Bengal and other Provinces.
England	20 "	Farm and live-stock of Great Britain by Robert Wallace.
Denmark	20 "	Agricultural Co-operation in Denmark by Rai Saheb Chandrika Prasad.
United States of America	10.2 "	Statistical Abstract of the United States of America published by the Bureau of Foreign and Domestic Commerce.

APPENDIX M.

Income of Municipalities in British India from Octroi on Animals for Slaughter, etc.

[From Statistical Abstract for British India (Department of Statistics), Vol. IV, 1913-14 ; Statistics of British India, Part VIII, 1906-07, 1908-09.]

Source of Income.	1902-03.	1905-06.	1907-08.	1909-10.	1911-12.	1913-14.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Income from Octroi for slaughter of animals in British Indian Municipalities	4,85,202	5,91,901	6,11,547	6,23,083	6,66,357	6,44,776
Fees, etc. from slaughter-houses	28,15,894	35,64,152	35,18,038	36,48,632	40,66,871	45,35,624

APPENDIX N.

Cattle-Slaughter for Burma Meat Trade in United Provinces, for 1912-13.

[From the Honourable Lala Sukhbir Sinha's Address at the Second All-India Cow Conference, Delhi, 1918.]

Division.	District.	Place.	No. of cattle slaughtered.
Meerut	Bulandshahr	Mauza Galilpur, Tehsil Anupshahr.	2,000
	Aligarh	Aligarh	39,510
		Sikandra Rao	7,089
	Muttra	Sadabad	1,680
		Muttra	1,750
Agra	Agra	Jharna Nala	26,640
		Ferozabad	600
		Itmadpur	140
		Khanduli	45
		Pahti Dharti	4,015
	Etah	Shajawlpur, Tehsil Aligunj	500
	Bareilly	Bareilly	13,172
		Faridpur	500
	Shajahanpur	Shabaznagar Mauza	5,800
		Jahangunj Rasulpur near Lodhipur.	2,500
Satti Chauri		2,300	
Moradabad		Sambhal	758
		Bhojpur	2,000
Allahabad	Fatehpur	Amroha	1,680
		Fatehpur	300
		Kasba Kamalpur	250
		Jahanabad Town	60
	Aiyaran	500	
	Jhansi	Kochha Bhanwar	10,192
	Lalitpur	7,663	
Jalaun	Kunch	4,353	
Jhansi	Hamirpur	Panwari	800
		Rath	899
		Mandaha	2,032
		Mahoba	4,077
Gorakhpur	Banda	Husenpur	493
	Azamgarh	Azamgarh	60
Total			1,43,358

APPENDIX O.

Statement showing the Quantity of Dry Meat received at Howrah during the period from 1st January 1917 to 30th June 1920.

[As supplied by the Agent, East India Railway.]

Stations from which exported.	1917.	1918.	1919.	1920 January to June.
	Mds.	Mds.	Mds.	Mds.
Jubbulpore	1,161	701	1,711	686
Fatehpur	348	67	234	265
Khaga	56	14	...	...
Cawnpore . . . . .	...	117	...	161
Binjnak	147	...	...	...
Agra C'ty	1,908	...	...	...
Umna Bridge	45,948	39,346	34,866	16,759
Phaphund	940	133	809	779
Bura	132	50	...	...
Aligarh	32,396	21,035	21,478	6,978
Delhi . . . . .	...	60	...	...
Achalda . . . . .	...	292	...	...
Tundla . . . . .	...	1,028	...	...
Kuburpur . . . . .	...	294	...	...
Etawah . . . . .	...	243	143	...
Shikohabad . . . . .	...	...	8	61
Hapur	232	164	323	98
Amgaon	101	...	...	...
Bhatapora . . . . .	...	...	...	...
Khalilabad . . . . .	...	...	...	901
Bholagunge	3,708	1,365	4	2
Bareilly	11,167	6,766	1,479	...
Bahadurgunge	257	677	9,192	2,192
			275	...

APPENDIX O—*contd.*

Stations from which exported.	1917.	1918.	1919.	1920 January to June.
	Mds.	Mda.	Mda.	Mds.
Shahjahanpur	3,020	8,726	10,250	4,789
Chandausi	540	85	...	...
Sambel Hatim Sarai	932	...	...	...
Anjhi	1,507	321	...	...
Pitamberpur	557	530	152	...
Hardwagunge . . . .	...	355	...	...
Moradabad	793	695	...	...
Amroha	622	636	452	...
Kasgunge	182	...	...	...
Pipalsana	723	256	455	...
Shahbaznagore . . . .	...	608	375	277
Carewganj . . . .	...	146	130	...
Shahmatgunge . . . .	...	...	460	3,411
Ruranpur . . . .	...	...	...	225
Patna . . . .	...	...	...	474
Kunch	848	4,557	6,625	687
Gadarwara	220	292	418	301
Hamipur . . . .	...	...	...	81
Gotigaon	84	111	...	...
Madanmohal . . . .	...	...	123	260
Narasingpur . . . .	...	223	...	...
Kharaya	16,335	8,547	24,898	6,871
Lalitpur	391	1,514	1,461	2,530
Saugor	20,714	29,157	30,284	20,391
Ghatera . . . .	...	...	2,820	11,134
Garhman . . . .	...	...	...	215
Domah	5,069	9,427	...	9
Jhansi	1,245	2,491	5,243	8,466
Mohaba	4,640	4,939	5,219	6,621

APPENDIX O—*concl'd.*

Stations from which exported.	1917.	1918.	1919.	1920. January to June.
	Mds.	Mds.	Mds.	Mds.
Orai . . . . .	...	...	...	284
Agra Fort	501	...	...	...
Gunjdanwara	1,193	499	452	593
Gurahajungunge	506	...	...	...
Kasgunge	225	...	325	376
Sikardara Rao	2,373	3,722	2,519	281
Bichpure . . . . .	...	290	...	...
Jullundar Cantonment	3,088	11,082	5,950	2,900
Batala	1,220	970	2,490	368
Tabana . . . . .	...	673	2,542	982
Total	1,66,849	1,58,204	1,74,160	95,347

APPENDIX P.

Decline in the Number of Cattle.

Province.	Year and No. of Cattle.	Year and No. of Cattle.	Source of Information.
Bombay Presidency	(1891) 8,319,000	(1910) 7,530,000	Note on Cattle in the Bombay Presidency by G. F. Keatinge, C.I.E., I.C.S.
United Provinces	(1904) 81,352,000	(1909) 29,36,000°	Cattle Census Report of U. P. 1916- H. R. C. Hailey, I.C.S.
Cutch	(1893-94) 131,000	(1910 11) 91,600	Cutch Gazetteer by G. Hardy, I.C.S.

APPENDIX Q.

Number of Living Animals Exported outside India.

[From the 'Indian Humanitarian,' Feb. 1920.]

Year.	1901.	1906.	1911.	1912.	1916.
Number	8,20,835	3,16,996	5,37,706	5,44,588	3,34,310
Value in £	1,42,634	1,50,878	1,82,787	2,22,200	1,51,287

Table showing Export of Cattle in 1912.

Place to which exported.	No.	Value in	Province from which exported.	No.	Value in
		£			£
Ceylon	23,145	66,666	Bengal	316	1,892
Straits Settlements	5,795	29,997	Bombay	51	160
Federated Malay States	1,183	7,521	Sindh	1,032	3,017
Other British Possessions	59	173	Madras	27,661	97,319
Sumatra (1917)	491	2,928	Burma	1,028	4,386
Java (1917)	431	2,648			
Brazil (1917)	90	1,260			
Other Foreign Countries	6	67			

APPENDIX R.

Number of Deaths of Cattle.

[From 'East India—Progress and Condition'—Parliamentary Report.]

Year.	From Rinder-Pest.	Other Diseases.	Total.
1901-05	92,123	1,18,996	2,11,119
1906-10	1,58,425	1,44,833	3,02,758
1911-15	1,11,629	1,24,731	2,36,360