### **EXTRACTS**

# Cattle Breeding and Dairy Industry in India. Activities of the Government Agricultural Department.

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Departments of Agriculture in India realise that the condition of the cattle in this country is one of the most potent factors affecting the development of agriculture. With the great increase in population which has taken place within the last 50 years the pressure on the land has also increased, and much land, previously available for grazing, has been brought under the plough. Large areas of culturable waste which once supported breeding are now producing aricultural crops some of which provide nothing in the way of food for cattle. The cattle in their dumb contentment have fared rather badly; their claims have found but few sound advocates. In the past, cattle owners relied on Nature to produce sufficient grazing for their herds; grazing areas, however, are being greatly reduced in size and no serious attempt has yet been made to provide a substitute by growing fodder crops. Until the cattle owner learns to readjust his farming policy to the new economic conditions which have arisen, the tendency will be for his draught and milch cattle to deteriorate owing to lack of sufficient food. Poor cattle result in a low standard of tillage; a low standard of tillage results in poor yields of such fooder crops as are grown, and a low yield of fodder in turn results in cattle being under-fed and in there being less cattle manure available for fertilizing the land. Agriculture in this country is thus moving in a vicious circle which makes rapid progress both in cattlebreeding and crop production impossible.

In the matter of cattle improvement India is passing through a phase similar to that which prevailed in England about the middle of the 18th century but with this difference; in England the improvement of cattle by selective breeding was initiated at that time by "gentlemen" farmers, while in India it is being done by Government

## "GENTLEMEN" FARMERS IN ENGLAND.

In England these "gentlemen" farmers were the first to rise to the occasion and to read just their system of farming to the needs of the country. The Industrial revolution of the 18th century and the great increase in the urban population resulting from that revolution necessitated such a readjustment. The ever increasing demand of the growing population for more food was at least partly met by the improved system of agriculture which these "gentlement" farmers devised. Holdings were consolidated; the rotation of crops was practised, fodder crops such as roots, grasses and clovers introduced, better varieties of the staple crops were evolved by selections; labour saving mechines were invented and used and the cattle of the country improved by selection; cross-breeding, better-feeding and housing. All this was done by these leading farmers themselves and on their own initiative for their government had not as yet realised the importance of scientific agriculture and of providing for scientific research and experiment. By their efforts breeds of cattle, sheep and herds were evolved which gained world-wide fame; England in course of time became the stud farm of the rest of the world.

But in India the problem of cattle improvement is infinitely more difficult than it was in England in those days. In India the holdings in the 700,000, odd villages are mostly very small and consolidation is an almost impossible problem. The number of cattle including buffaloes in these 700,000 odd villages is about 179,170,000. They graze on grazing grounds common to the whole village and promiscuous breeding is the order of the day. The landed aristocracy in India, moreover have not as yet taken a lead in developing animal husbandry. Such work as has been accomplished in this direction up-to-date has been done by Government working through the officers attached to Military Dairy Farms and Departments of Agriculture controlled by the Imperial and Provincial Governments and by Indian States. The work done on Military Dairy farms has been particularly valuable though it has not perhaps struck the imagination of the public for the reason that no attempt has been made to advertise the results obtained.

#### APATHY OF THE INDIAN LAND-OWNERS.

The subject of cattle breeding and dairying was discussed by the Board of Agriculture in 1913, 1916, 1922, 1924 and again at the meeting of the Board held at Pusa last month. A perusal of the proceedings of the Board for these years will show that a definite policy has been laid down for the guidance of the Imperial and Provincial Departments of Agriculture and for Indian States which have their own

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Gaolie's best cows bring him a gross income of about Rs. 200 per head per annum, whereas cows of some of selected country breeds reared on Government farms have given yields worth Rs. 600 per annum and cross-breed cows have given yields worth Rs. 1,000 or even more.

Government cattle-breeding farms are sometimes thoughtlessly condemned because they are not self-supporting. Our critics forget, however, that until and unless our breeds of cattle are improved cattle rearing and dairying in this country will never pay as it ought to do. The task of remedying the defects of centuries must needs cost money and this money Government as well as enterprising land owners who take up this branch of animal husbandry must be prepared to sink in the industry in order to get more out of it. For a bull of a good milch pedigree they may not be able to get more than three or four hundred rupees, though the animal may be worth as many thousands. The people of this country do not as yet realise in short the value of pedigree and are not prepared to pay for in-bred qualities the value of which they do not realise. For these qualities cattle-breeders in more advanced countries pay large sums; pedigreed bulls have fetched over a lakh of rupees in England. Purchasers pay such prices and get full value for their money. As the building up of pedigree is a slow and somewhat expensive process, the question of initial costs should under the circumstances be a secondary consideration seeing that the value of the improvement is insignificant as compared with the cost of effecting it.

(To be continued.)

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# Large Estate Farming in the Punjab.

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The writer having had an opportunity of visiting two of the large estates in the Punjab, was much impressed with the value of the work done on them, both for the Agricultural department and for the cultivators not only on the actual estates, but in the whole irrigated area of the Punjab. In the short time available it was not possible to acquire more than a general knowledge of conditions and this paper has no pretension to be an exact and critical examination