

for one whole year's consumption, and that it requires from two to three years' accumulated surplus to make up such reserve. The famine question in India is one which it seems to me must necessarily make that country an unreliable source of supply for England to depend upon for broadstuffs.

A very important feature in the production of wheat in India is the necessity for irrigation. The crop requires a great deal of moisture, hence irrigation is of special importance, and various methods are employed for that purpose. The one destined to become a leading factor in the production of wheat is that of canal irrigation, which is now receiving the special attention of the general and local governments, and important works are being carried out and projected for an extensive system of canal irrigation. Thus, of the sum of £2,500,000 authorised to be annually borrowed, the Government of India have ordinarily applied £700,000 each year to irrigation. To give some idea of the extent of some of the irrigation canals in India, I may mention that the Sirhind Canal in the Punjab, which was built mainly by prison labour, is 502 miles long, and will irrigate 780,000 acres through 2,500 miles of minor channels. The cost of irrigation will always be a heavy drag on the production of Indian wheat, and is one of the points in which the Canadian prairies will always have an advantage over India.

It is estimated that the *agricultural* population of India numbers about 260,000,000. The Indian agriculturist—the ryot—is merely a tenant holding a small patch of land, say from 5 to 15 acres, which he cultivates on shares for the landed proprietor or zemindar, who in turn holds the land on rental from the Government. The mode of cultivating the soil is of the rudest description. The land is ploughed by means of a crooked stick, iron pointed, and the harrowing done by an implement resembling a common ladder laid flat on the ground, and dragged by the small bullocks peculiar to the country crossways over the field. The seed is sown by hand, and reaped with a rude sickle. The sheaves are frequently carried home on the back of the farmer, and threshed out with a wooden club, the grain being cleaned by hand winnowing. The use of farm machinery is unknown, and is not likely to be adopted for many years to come, for not only will the system of small farms prevailing in India prevent the introduction of expensive appliances, but the *ryot*, clinging as he does with religious veneration to the old methods used by his forefathers, is very unlikely to change them for new and more improved systems:

This state of things must constitute a serious drawback to the production of wheat in that country, because, under such treatment as I have described, grain cannot possibly be either well cleaned or preserved, and the general complaint which is now made against Indian wheat in regard to its dirty condition is not likely to be removed. In this respect Canadian wheat, owing to the improved methods in force, will always compete favourably with its Indian rival.