

since the beginning of this wheat trade, and has watched its growth with the keenest interest, but he has never been able to form, nor has he met with any serious Indian publicist who has yet presumed to form, a decided opinion as to its future. Eighteen months ago Sir Evelyn Baring, then the Indian Finance Minister, confessed, in the course of his annual financial statement, that on this subject he could offer no opinion which was better than mere conjecture. Readers of Canadian newspapers may have observed that Sir Richard Temple, who has at different times governed three of the Indian provinces, who has seen with his own eyes more of India than perhaps any other man ever did, and who is, moreover, the most omniscient of Anglo-Indian authorities—even Sir Richard Temple, when asked what he thought of the future of the Indian wheat trade, had practically no opinion at all on the question. We know that the acreage on which wheat is actually grown in India is about twenty-five or twenty-six millions, that the average yield is only nine and a-third bushels, and that of the annual out-turn, averaging thirty and a-half million quarters, about one-seventh part is certainly available for exportation. The actual export amounted in 1882 to fifteen million hundred-weight, and in 1883 to twenty-two and a-half millions, and it is stated that this large outflow had no effect on prices in the wheat districts. But when we enquire whether the demand for Indian wheat is likely to lead to increased production and a much larger exportation, the best authorities declare themselves, as we have seen, unable to offer us any answer but a conjecture; and even of conjectures prudent Indian statesmen are chary.

Before passing on to the region of conjecture, we may say a word as to the quality of Indian wheat. A very large part of the wheat production of India is unfit for exportation even were it not required for home consumption. The defect does not lie in soil or climate, for it has been satisfactorily proved that the country can and does produce wheat of the very highest qualities. But the Indian farmer has hitherto exercised little or no care in the choice of his seed, and is singularly indifferent as to the cleanliness of the grain which he sends to the market. And there is one peculiarity in his method of cultivation which stands much in his way as an exporter. The vicissitudes of the climate compel him to calculate on frequent failures of his crop, and wheat is so liable to suffer from drought that it has become a common practice with the farmer to sow a mixture of wheat and one of the hardier grains of the country, so that if the wheat perish, the other grain may produce a crop which will at least be better than nothing. Consequently Indian wheat is not only dirty in the ordinary sense, but is generally adulterated with coarser grain. We believe it has been found necessary for the merchant at the seaport to subject the wheat bought in the native market to an elaborate process of cleansing, and this of course adds to its cost in two ways. The labour costs something, and the result is an appreciable diminution in bulk. Since the export trade grew into importance Government officials in the wheat tracts have made strenuous efforts to inculcate among farmers the importance of carefully cultivating a pure grain of high quality, and already there has probably been some improvement. But the best spur to improvement is in this case a somewhat blunt instrument, because, of all the parties concerned, it is the Indian cultivator who derives the least profit from the export trade. We shall have occasion to refer again to this matter. Here we may add, that Indian flour is certainly growing in favour with the English baker, owing, we believe, to its taking up more water than American flour; and that in 1879 Dr. Forbes Watson, an expert, in a report to the Houses of Parliament, stated that from almost every wheat-growing district in India he had obtained samples of wheat equal to the finest Colonial wheat, which showed that, in spite of all that was said as to their "careless and shiftless modes of cultivation," there were to be found in every district Indian farmers "as keenly alive to the advantages of selection of seed and of careful cultivation as the most intelligent English farmers." Our own opinion is that such farmers are far more rare in India than Dr. Watson, judging from carefully selected samples, was inclined to infer. But it appears safe to conclude that, if the other conditions needful to the further growth of the Indian wheat trade can be established, its increase will not long be retarded by inferiority of quality.

Three ways are suggested in which the exportation of Indian wheat may be greatly increased, and there are sanguine writers who do not hesitate to predict that India will before long be able to monopolize the whole of the English wheat trade. One of these suggestions is practical and is being acted upon; the others are at present in the purely visionary stage. The first is that new railways should with all speed be pushed into the heart of every wheat-growing tract where this means of transport does not already exist. The others are, (1) that improved methods of cultivation should be introduced; and (2) that the area under wheat should be largely increased. We shall begin with the last. "At the present mo-

ment," says a recent writer, whose pamphlet produced a great effect in England, "in the Punjab alone, independent of the area now under cultivation, there are 9,182,000 acres of cultivable waste, the property of Government, not to mention enormous tracts in Central India and Burmah, all admirably suited for wheat cultivation, and all needing *only irrigation and population* to bring them under the plough." The few words we have italicised, and especially the little word "only," will serve to indicate the character of much of the writing current on this subject. Schemes for the irrigation and colonizing of these waste tracts are often propounded by ardent (and generally youthful) officers of the Indian Government, and one or two disastrous attempts have been made to carry out such a scheme. But it may be safely predicted that the whole of the Canadian North-West will wave with wheat before a tithe of the cultivable waste of India is brought under the plough. No one will deny that it may be possible to increase, in the course of time, the wheat-growing area of India, but there is no present probability of the Indian Government engaging in the costly enterprise of irrigating vast unpeopled tracts in the hope that the least migratory people in the world may be induced to colonize them.

But we are assured by such writers as the pamphleteer whom we have quoted that even without adding an acre to the present wheat-growing area the produce may easily be doubled, if not trebled. The average yield is, as we have said, only 9½ bushels per acre, and one naturally supposes that this is much less than the land would produce under a proper system of farming. "Experiments," we read, "carried on in the Government farms have proved that *irrigation, with a proper system of manuring*, more than trebles the average Indian yield; and there can hardly be a doubt that farming in India would improve all along the line directly it became the interest of the Indian peasant to materially increase his production." Here again we have italicised a few significant words. Give Archimedes his lever and fulcrum and he will move the world. Transform the whole wheat area of India into model farms and you will treble the yield. Well irrigated and well manured, the soil of many parts of India would undoubtedly produce wheat harvests which no country could surpass. But it must be both irrigated and manured, and, while irrigation is in most parts practicable, adequate manuring is not practicable. We have so completely denuded India of its forests that the peasants in most parts are absolutely unable to procure any other fuel than that which is dropped by their cattle. This they carefully collect and dry in the sun, and it is the only fuel with which they cook their victuals. They have nothing to spare for manure, and their extreme poverty precludes the possibility of their purchasing either manure or fuel. In these circumstances, if the Government were to carry out costly systems of irrigation, charging a water rate on the cultivator for the supposed benefit he would derive, the consequence would be that irrigation without manuring would force a crop or two of wheat which would quickly exhaust the fertility of the soil. But the truth is that the whole annual yield of the soil is already less contemptible than it is made to appear by the simple statement that the wheat crop is only nine and one-third bushels an acre. In all the best parts of the country the farmer sows two and often three crops a year. He grows his wheat in the cool season, and at other seasons the same fields yield other harvests. This fact is not considered by many who talk glibly of the ease with which the produce might be increased. Still it is possible that the Indian peasant, who is quite as wide awake to the value of money as any other, might find means to increase his production of wheat if, as our author observes, it became his interest to do so. But, as we have already remarked, it is not the cultivator who is deeply interested in the growth of this trade. The system of *petite culture* prevails in India, the average size of farms being about eight acres. Families are large, and it is a religious duty in India to support one's poor relations. The farmer of seven or eight acres, who has five of a family and one or two poor relatives to provide for, has not a large exportable surplus. He is generally behind with his rent and deeply in the books of the money-lender of the village. When the rent becomes due, he applies to the money-lender, who advances it on the security of his crop. If he can feed his family and satisfy the usurer he is happy, and it is not he but the money-lender (who is also the local grain-dealer) who derives advantage from the increased demand for wheat. In fact the farmer is lucky if a rise in prices at the central marts do not prove a loss to him. For at stated periods round comes the Government revenue officer to re-assess the rents. The reputation of this officer depends too much on his ability to increase revenue, and if he finds that from any cause the price of farm produce in his district has increased, he feels himself justified in raising rents all round. Thus it too often happens in India that an apparent gain to the cultivator entails on him a real loss. A few figures will show that, even if we do not consider his peculiar relations with the money-lender, the Indian farmer does not share largely