

much used in feeding draught bullocks, but in the vicinity of towns rice straw has a certain demand, and hence many a cultivator instead of using it for his own stock converts it into money. In any case, rice straw is a very inferior article of diet.

The following is the average of chemical analyses of rice straw according to a report of the Department of Agriculture, Madras:—Moisture 8.122; Ash 16.873; Woody fibre 30.025; Fat 2.187; Albuminoids 1.750; Non-albuminoid Nitrogen .362; other nutritive matter 40.648.

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(To be continued.)

CHINESE AGRICULTURE.

Liebig and Eckeberg long before him, have drawn the attention of western farmers to the astonishing industry of the Chinese as cultivators of the soil. An account, which appeared a few months ago, on Chinese Agriculture (based upon a report by the Secretary to the American Legation) would tend to show that the people still maintain their character as industrious agriculturists, who, with many difficulties to face, and under particularly trying circumstances, make the most of their small opportunities. In some respects there is a similarity between the conditions, (for instance as regards implements and crops) between the natives of China and Ceylon, but there are many lessons which the latter can learn from the former race. It is, for this reason, that we would draw attention to the account (or rather certain parts of it which are of particular interest) referred to above.

The agricultural implements used by the Chinese are, we are told, very simple, and this is shown from the fact that a complete farm outfit can be purchased for from £5 to £6. This would consist of a plough with two plough-shares, two harrows, wooden pump or water-wheel, donkey, threshing-flail or roller, hoes, sickles, baskets, and a few smaller tools. The size of farms varies. In the south, two acres are sufficient to maintain a family of five or six persons, while seven or eight acres mean great wealth. In the north five acres mean comfort, while ten to thirty acres are owned by wealthy families. In some provinces, however, there are exceptions to these rules, and in Manchouria 500-acre farms are not uncommon.

The use of manure and the systems of irrigation are the two most characteristic features of Chinese farming. Manure is gathered from all conceivable sources. In the cities the night soil deposited on the sides of streets and alleys is gathered by men and boys in buckets, mixed with clay and dried in the sun, and sold to farmers on country roads. Boys, and often girls and women, are seen at places where large numbers of pack horses, camels, and mules pass, gathering the manure into baskets, which is sold to farmers and spread on the fields. Earth from the canals, rivers, and city streets is also carted for the same purpose. The quantity of these fertilisers used and the importance the Chinese attach to them are proved by the immense number of people whose livelihood is gained in their collection. For irrigation, numerous devices are used, more or less rude, and adapted

to the locality. When running water is at hand, the farmer turns it to advantage by directing it over his land in large channels banked in with clay, and sub-divided into smaller and smaller streamlets, until every part of the ground has been reached. If no running water is found, wells are dug and water drawn up by hand and poured into the main ditches, which are sub-divided into numerous smaller ones.

The wages of hired farm-labourers vary considerably in different provinces. In the south, £2 5s. to £3 per annum, with food and lodging, is the rule; but in one or two favoured districts in the north they go as high as £6 a year, also with food and lodging. These amounts are very small, but so are the needs of a Chinese agricultural labourer. Nearly all his garments are home-made by the women from home spun cotton. In each case the labourer also receives straw shoes and free shaving—the latter being an important item in a country where heads must be shaved three or four times a month! The profits of Chinese farmers are, as a rule, small, and are said to be generally only sufficient to enable them to live in greater or less comfort, and keep their families.

In spite of all drawbacks, the Chinese peasantry are happy and contented.

And by this method of cultivation, no less than 450,000,000 human beings in China depend for their daily sustenance!

STOCK ITEMS.

Dr. T. W. Leather, Agricultural Chemist to the Government of India, in his first annual report, makes the following reference to two Government dairies visited by him in the course of the year:—Of the dairies which have been started within recent years under Government auspices, I visited those at Aligarh and Pooná. That the value of these dairies is appreciated is, I believe, well recognized by both the Governments of Bombay and the North-Western Provinces and Oudh. The butter there made is of excellent quality, and keeps so well that its sale extends to very long distances. Aligarh supplies butter, for instance, to the Central Provinces. The question of the introduction of European dairy appliances into India has been considered by Dr. Voelcker in chapter II, paragraphs 262 to 268, of his Report on the Improvement of Indian Agriculture, and whilst he expresses the opinion, in paragraph 266, that such improved machinery for butter-making is hardly likely to replace that with which the people make ghee, he points out in the following paragraph the advisability of introducing improvements in the milk-supply. This naturally includes better fodder for the cattle, good supplies of water for them, and above all cleanliness in the dairy surroundings and in the methods of milking. That there is room for such improvements no one will deny. Moreover, it seems to me that a well-conducted dairy forms as excellent an object lesson in cleanliness as could well be devised, and indirectly improved dairying will doubtless prove an aid in the direction of sanitary improvement. Several samples of the butter made at Aligarh, Lucknow, and the Military Grass Farm, Allahabad, have been analysed. Those from Aligarh and Lucknow were all that