21 A.—4.

During the German administration Samoans were required by regulation to plant a certain number of coconut-palms every year. These trees are now in full bearing, and it is estimated that they more than make up for the ravages of the beetle and for the barrenness of trees which have passed their period of productivity. The coconut-palms come into bearing in seven to ten years. They last for thirty or forty years, and thereafter gradually become barren. So that a continuity of the crop may be assured, a certain number of trees should be planted every year.

Cocoa of good quality is being produced in Upolu and Savaii, and exports have grown from 498 tons, valued at £27,753, in 1910 to 820 tons, valued at £81,110, in 1919. High-water mark in this product was reached in 1917, when 1,207 tons were exported, at a value of £69,549. Owing to the rise in the market price, and notwithstanding the shortage in the output, the price obtained last year was £11,570 greater than that obtained in 1917. The falling-off in the total quantity produced last year as compared with 1917 may be put down entirely to the shortage of labour; the labour required for cocoa-production per acre is much greater than that required for copra.

Unfortunately, the cocoa-plant is subject to canker (*Phytophthora faberii*), a pest which has caused enormous damage and consequent loss to planters. It is a fungus growth which, penetrating the stem of the tree, blossoms and spreads infection. Spraying and painting have a good effect; plantations must be kept clean and clear of weeds, and all infected parts must be cut off and burned immediately canker is noticed. By these and similar means the disease may be kept in check, but no absolute remedy has yet been discovered.

In the D.H. & P.G. plantations 478 acres were planted with the Foresterio variety, and 232 acres with the Criollo variety. Owing, however, to the appearance of canker in the Criollo variety the latter have been cut out and replaced by Foresterio.

Labour is the keynote of successful cocoa-growing—without an adequate supply of labour cultivation is impossible.

The demand for cocoa-beans in New Zealand is comparatively small, and Samoan merchants complain that New Zealand buyers purchase their requirements from hand to mouth. They cable their orders for 8 or 10 tons, and are disappointed if it is not shipped by the first steamer. New Zealand users also demand that the cocoa-bean must be washed before shipment. Owing to the shortage of labour in Samoa this is at present difficult to do, and as a consequence shippers prefer to send the unwashed product to Australia, even though the market price is lower than it is in New Zealand.

Rubber.—The product of rubber was started by the export of 2 tons in 1911. The quantity gradually grew until in 1917 70 tons were exported. In 1918 17 tons were exported. Owing to the shortage of labour and a fall in the market price no rubber was exported in 1919. Rubber being, unlike cocoa, a forest-tree, is not particularly affected by a period of neglect, so that when conditions get back to normal the production of rubber should continue to extend. In all probability it will be found that the trees have actually benefited by the enforced rest they have had during the past two years.

Kapok.—This tree grows remarkably well in Samoa, but it is questionable if it is the best variety for the production of marketable kapok. The following letter from the Imperial Institute, which was handed to the Commission by Dr. J. E. McNaughton, sets out the position clearly:—

Imperial Institute of the United Kingdom, the Colonies, and India, South Kensington, London S.W. 7, 16th January, 1920.

In reply to your letter of the 17th October last on the subject of kapok, I now send you the following information regarding the sample which you forwarded to the Imperial Institute.

The sample consisted of floss, 40 per cent.; seeds, 54 per cent.; and inner dissepiment, 6 per cent. The floss was soft and lustrous, and of uneven pale brownish-cream colour. A large amount of short immature fibre was present. The fibres measured from 0.2 in. to 1.1 in., varying mostly from 0.5 in. to 0.75 in., as compared with 0.6 in. to 1.0 in. (mostly 0.65 in. to 0.75 in.) for the fibres of a commercial sample of Java kapok.