Opening of Rubber Processing Factory at Kubuna

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Shareholders of the Ibulo Society celebrated the opening of their rubber processing factory at Kubuna, in the Central District, last May. The factory has been built by the members of the Society with the help of Development Bank funds, and represents an important achievement for the area. It is the first rubber processing factory to be opened in the Kubuna area. Rubber currently is the only cash crop available to the area, so the opening of the factory signals the first opportunity many families have had of earning a cash income.

Seventeen settlers from the Kubuna area took up blocks and planted rubber about 5 years ago. Loans were granted to each settler by the Development Bank, ranging from $90 to $135, according to the number of trees planted. The Ibulo Society was established, with each settler contributing $65, of which $45 was drawn from his Development Bank loan. The remainder of the loan was used by the settler to buy equipment needed for tapping—knives, cups, buckets, etc.

The factory was built with the funds of the Society. Originally budgeted for at $1,100, the factory was completed, including all equipment, for only $800. This considerable saving in cost was achieved by the use of local materials wherever possible, and much of the equipment was made locally at the Bereina Vocational School.

The Regional Rural Development Officer, Mr Fred Kleckham, officially opened the factory. He praised the members of the society for

Plate I.—Opening ceremony at the factory Photo: D.I.E.S.

the hard work and effort which had been needed to build the factory. He told the shareholders that their achievements would provide an example for many other people in Papua who were thinking about starting a rubber project.

Rubber Production

Rubber production at the factory has already begun. In April, there were 2 days of tapping, and seven bales of rubber were produced. In May about 20 bales were produced. Production is expected to settle down to a rate of about one bale of rubber each day.

The rubber tappers are divided into two groups, each group working every second day. Trees are being tapped three times a week at present, using $\frac{1}{2}$ spiral cuts. A trial is being carried out to determine whether this method is superior to the more common full spiral cuts, tapped twice a week.

Trees are tapped early in the morning, and by mid-morning all the latex has been collected and brought into the factory. Cup lump and ground scrap which has collected between tappings is also brought in and processed.

The latex is brought in by the tappers, measured with the metrolac and the volume and density recorded, and then poured into the latex coagulating tank. The latex is mixed with water in the tank, then a quantity of acid is added, according to the depth of latex in the tank. The acid causes the rubber to coagulate, and this rubber is processed the next day.

The strips of coagulated rubber are passed through a series of rollers to form the thin ribbed sheets ready for smoking. Water needed to irrigate the rubber as it is rolled is supplied from a small dam on a nearby creek.

The Kubuna smokehouse is built of local materials, using bark slabs for walls and roof. A tunnel under one of the walls conducts smoke into the smokehouse from a fire built outside the building. The strips of new rubber are hung in the smokehouse to cure before being baled and sold.

At the end of each month, processed rubber is bought by DASF, and payments are made to each settler according to the proportion of the monthly total of latex which he has produced.

Plate II.—Smallholders bring in their latex for processing Photo: D.I.E.S.

Women in the Workforce

The tappers do the work in the factory themselves each day when they bring in the latex. Women take their turn with the work of the factory as well as with the tapping.

Much of the work of tapping on this project is done by women. Figures collected by the Rural Development Officer assisting the project, Mr Matt Teffer, show that female tappers may well prove superior to male tappers. In one family there are two women tapping 300 to 400 trees, and producing about 75 lb of latex between them, while two men tapping 300 trees on another block, are only producing about 40 lb. One block of about 700 trees was formerly being tapped by an old man at the rate of 15 to 20 lb of latex per day; now his daughter has taken over the tappings and brings in 40 lb of latex. A similar production rate is being achieved on another block of 700 trees where four women and one boy are bringing in 160 lb of latex.

This is the first rubber project in Papua New Guinea where female tappers form an important part of the workforce. The women's success at tapping may be due to a superior tapping technique, or a greater number of trees tapped per day. In other countries, notably Malaysia, female tappers make up a major part of the workforce, and their work is generally considered to be better than that of the men. The experience at Kubuna indicates that women may well play an important part in the future of the rubber industry in Papua New Guinea.

Smallholders' Prospects

Projects like that at Kubuna have been established at Lake Murray, and Kiunga in the Western District, and Murua in the Gulf District.

The village rubber project, although generally on a small scale compared with the larger expatriate-owned plantations, has some advantages that larger plantations do not have. The

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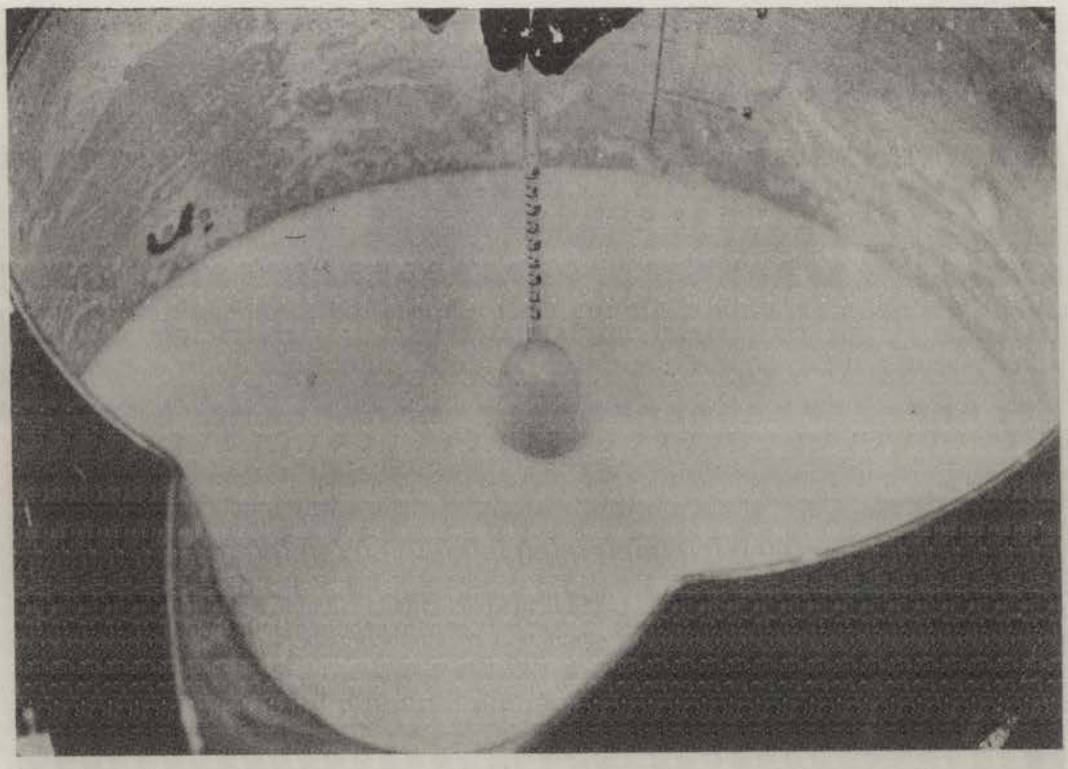

Plate III.—The metrolac is a hydrometer which measures the density of the latex, and hence the proportion of rubber which will be produced (dry rubber content). The metrolac has a weighted base so that when it is released from the hand it floats upright in the latex. If the latex is watery it will go down a long way; only the tip of the stem will be showing. The numbers on the vertical stem give a fairly accurate reading of the dry rubber content.