SAWS FOR SAGO

IN PAPUA NEW GUINEA

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INTRODUCTION

The Bogia district of Madang province is one of the poorer parts of lowland Papua New Guinea. The nutrition of the people is poor, health is bad (with a lot of leprosy) and even primary education reaches only a small proportion of the rural population.

This article looks at the importance of sago *(Metroxylon* spp.) and of a new way of chopping it, in a group of eight villages.

The area under study is just south of Bogia and north of the Tangu area, surrounding a large area of grassland. All the villages are within 10 km of the coast. They include four language groups but have a very similar culture and the people generally call themselves 'Bogia people' even within their own village.

The agricultural system is seasonal and is much the same throughout the area, whether the gardens are in grassland or bush. The two principal food crops are taro *(Colocasia)* and yams *(Dioscorea alata)* and there are still reminders of earlier yam-growing competitions. Sago, bananas and *mami* yams *(Dioscorea esculenta)* are next in importance. Most gardens in the grassland have only a one-year cycle, but bush gardens are more likely to be used for a second year, when sweet potato, edible pitpit *(Saccharum edule)*, sugar cane and pawpaw are likely to be more important.

The agriculture is supplemented by hunting and gathering and by fishing, especially on the coast. Although there is a wide variety of plants in the gardens, peanuts are not grown, and corn and beans are uncommon. These are very good food plants.

The annual rainfall is 220 cm (86 in) and is markedly seasonal with a long dry period between June and October. This means that as well as the overall nutrition being poor, there is often a period after the end of the dry season when there is a shortage of food. As there is very little cash cropping in this area, the people cannot always afford to buy food from the store.

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IMPORTANCE OF SAGO

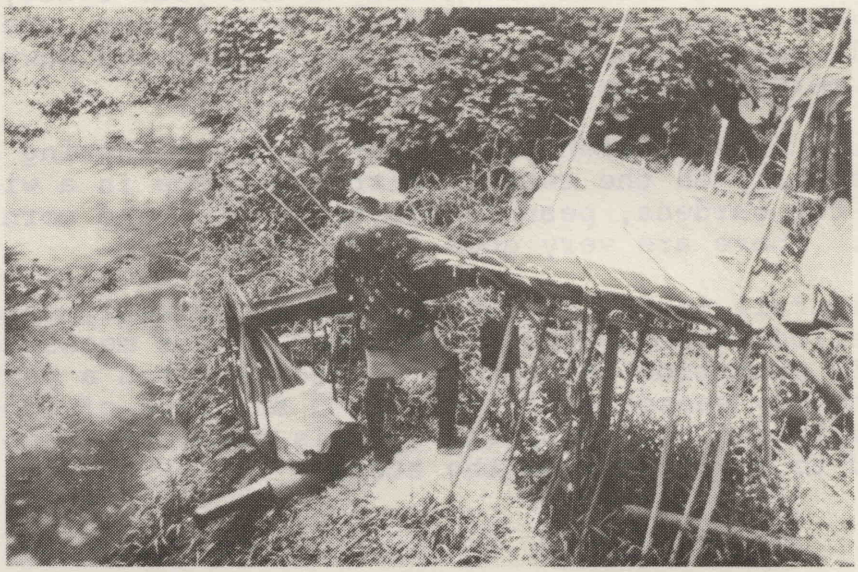
Sago is very important to the Bogia people. It is planted in river valleys and other wet areas and the young palms are looked after carefully. In this area, unlike some other parts of lowland Melanesia such as much of the Sepik, all palms are individually owned. Sago is especially useful because it can be harvested at any time and can be stored. During the period of food shortage between November and February, sago is the most important item in the diet.

Sago can also be prepared, at short notice, for feasts although it is not often used for this in Bogia or in nearby Tangu. Sago is prepared in a variety of ways, including roasting, boiling and smoking, but because it is rarely cooked with other foods, it is of little nutritional value. Sago worms *(Rhyncophorus* spp) hatch in the fallen palms and are highly prized as food throughout the area, although their nutritional value remains unknown. Sago leaves are widely used as roofing thatch.

Sago produced in the Bogia area (and in Tangu) is exchanged within villages, and between households in different villages. It is also sold in the Bogia town market each day and at a small number of fortnightly markets at various coastal plantations. There is also an important trade with Manam Island. Sago is not grown on this island but is bought with cash by Manam islanders or exchanged for dogs or other goods. Sago therefore brings some money into the Bogia area.

SAGO PRODUCTION AND THE SAGO SAW

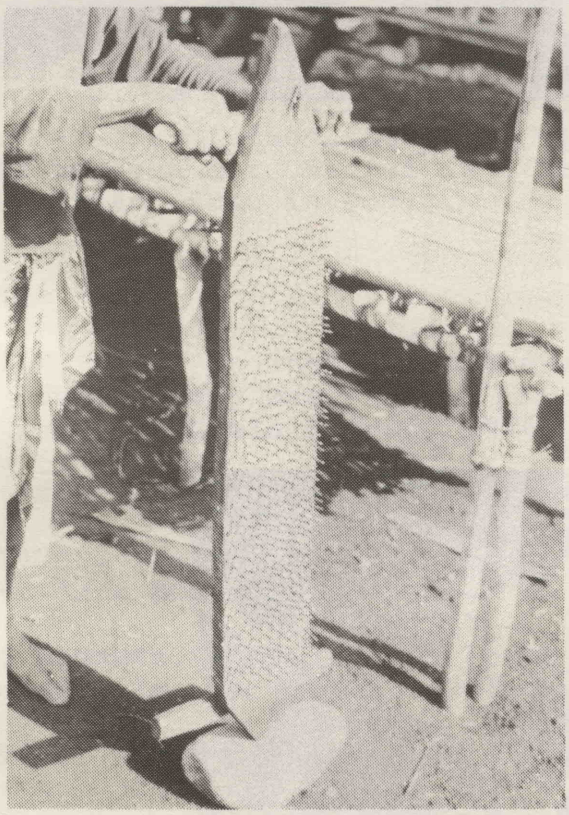
Sago production is mainly a male activity although, in Tangu, and probably also in Bogia, women sometimes help. The sago palms grow for about ten years before coming into production.



Sago making at Wanam Village, Bogia

By watching the shoots and petioles (leaf stems) the people can tell when the sago is ready. The palm is felled and the bark removed. Throughout Melanesia, the pith is then chopped and beaten using an adze-like tool with either a hollowed tip or a rounded stone head. Bogia villagers sometimes use metal-tipped adzes, usually involving short sections of pipe, which have replaced the less efficient bamboo tips.

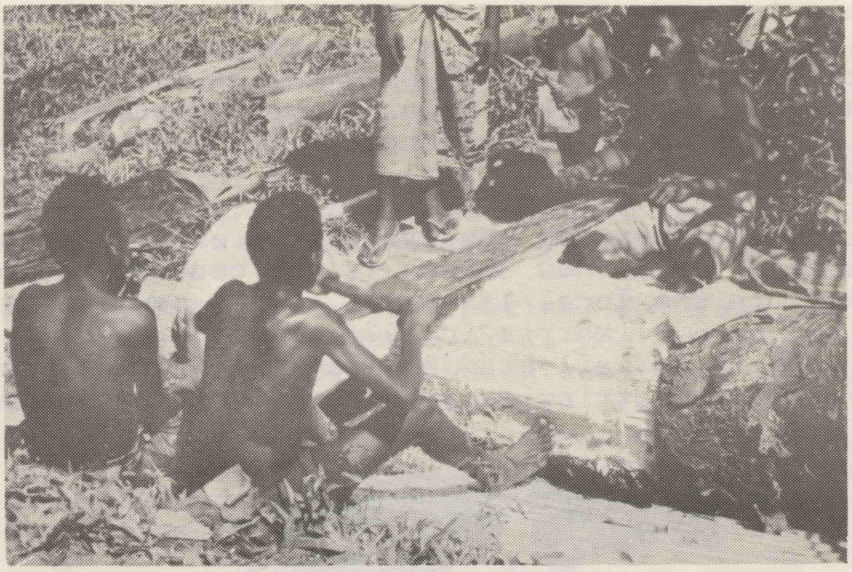
The main difference between the production of sago in Bogia and that in other parts of Papua New Guinea is the general use of a tool called a 'saw' in the local languages. This saw is identical to that described by H.S. Morris in 1974 as being used by the Melanau of Sarawak. It is 'a nail-studded plank used like a saw' and is operated by two men sitting on either side of the fallen sago palm.



A sago saw

This way of chopping sago seems to have started in the area about twenty years ago, and appears to be unknown north of Bogia, east of the grasslands area or even in Tangu to the south. The use of a sago saw has not been recorded anywhere else in Melanesia either, and the saw is not used much in Asia although a rather smaller sago rasp is used in Sumatra.

Despite its similarity to the rasp used in Sumatra, the Bogia people believe that the saw was invented locally (although some suggest a Japanese wartime innovation). It is difficult to explain the saw's extremely isolated distribution in an area with limited external contact if this is not so.



Sawing sago at Wanam Village

Squeezing the pith

As Morris noticed in Sarawak, the saw greatly improves the efficiency of sago production by reducing the labour input into pith-crushing, which is the most demanding activity in the production process, and by producing a finer-grade pith which shortens washing time. The rest of the production process is identical to that of much of the rest of Melanesia. The pith is squeezed and washed in a water trough made from a sago petiole; the fibre is filtered out of the starch which flows in water into further troughs where the starch settles to the bottom and the water flows away. The sago is wrapped in leaves and drained for a day after which it is ready for cooking. There is no evidence that breaking up the pith in this way produces poorer quality sago.

CONCLUSION

In one small, economically unimportant area of Papua New Guinea, a low cost technique has greatly reduced the production time of a crop which, although of low nutritional value, is very important during regular periods of food shortage. It seems likely that this technique would be even more useful in other areas of Melanesia where sago is more important than in Bogia.

FURTHER READING

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