



Potential Uses of Sago for Food Diversification and Sustainable Food System

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INTRODUCTION

Sago palm from the genus *Metroxylon*, belongs to the Palmae family is one of the essential non-wood forest products. Sago is grow wildly in the tropical forests. Sago is a staple food for people in eastern part of Indonesia. Several decades ago, the Indonesian government began to introduce rice as a substitute staple food, so that the conversion of land into rice fields often occurs in Eastern Indonesia. However, this policy seems less successful and the Indonesian government is again promoting food diversification and diversification to ensure the availability and food security as well the fulfilment of nutrients for the community. The implementation of special autonomy in the eastern part of Indonesia, in particular the provinces of Papua and West Papua, provides flexibility for the regions to determine policies related to the fulfilment of food and energy for their regions. Comparison of the economic benefits and nutritional value of sago and rice provides information on policy recommendations that are beneficial to the region and the community.

RESULTS AND DISCUSSION

In general, the nutritional composition of rice and sago is comparable

Table 1. Comparison of Rice and Sago

Food Items	Carbohydrate (g)	Energy (kcal)
Rice	80.82	3457.46
Sago	84.62	341.45

Composition in 100 g samples, kcal 0 kilo calorie

Table 2. Composition of Sago Waste as Feed

Parameters	Composition (%)
Total fiber	15.32
a. Neutral Detergent Fiber (NDF)	32.74
b. Acid Detergent Fiber (ADF)	26.22
Lignin acid detergent fiber (ADL)	22.01

METHODOLOGY

Sago starch was analyzed and compared with the rice for nutritional composition. Sago waste (derived from other part of sago tree such as hampas from sago pith and bark, pulp, and fiber from the trunk) were analyzed for the potential use for animal feed, renewable energy sources and fertilizers.

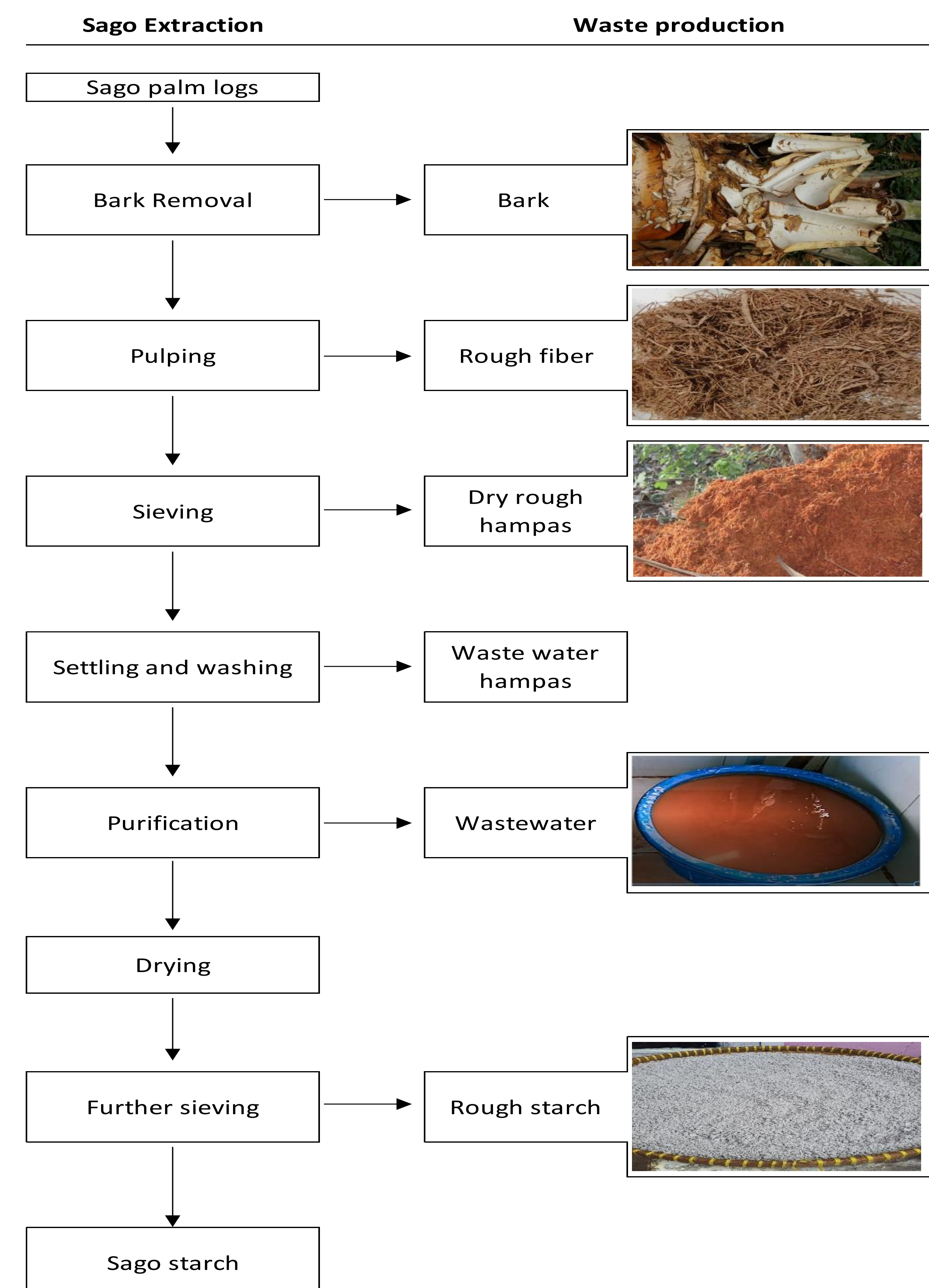


Figure 1. Traditional sago starch production (courtesy of S.M.A. Letsoin)

CONCLUSION

In addition to functioning as food, sago palms can also be used for animal feed, renewable energy sources and fertilizers so as to provide complete and sustainable benefits. Potential sago area in Papua and West Papua province, indicates a great opportunity to be used as a sustainable source of food, animal feed and bioenergy.

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