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Farmers' and academia's views"

Potential uses of sago for food diverification and sustainable food system

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Abstract

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.

In general, the nutritional composition of rice and sago is comparable, the composition of carbohydrates is 80.82 and 84.62 % with a total energy of about 357.46 and 341.45 kcal, respectively. In addition to functioning as food, sago palms can also be used for animal feed, renewable energy sources and fertilisers so as to provide complete and sustainable benefits. As a feed source, sago waste contains a total fiber of about 15.32 % which includes 32.74 % NDF (neutral detergent fiber), 26.22 ADF (acid detergent fiber) and 22.01 ADL (lignin acid detergent fiber). Data of land use that was collected in 2020 shows an estimated area of sago (a combination of natural growing and plantations) is around 5 million Ha (in the 2 provinces of Papua and West Papua), which indicates a great opportunity to be used as a sustainable source of food, animal feed and bioenergy.

Keywords: Bioenergy, feed, food, sago, sago waste, sustainable sources

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