AN ECONOMIC STUDY OF THE SAGO PALM INDUSTRY IN MALAYSIA

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Introduction

Sago (Metroxylon sagu) has been described as the wonder crop of the 21st century for the production of starch. Sago thrives in heavy peat soils where few other crops survive. Once planted, a sago plant can virtually grow forever, because suckers are continually produced. The main aims of this project were:- (a) Review of the literature on the economics of the sago palm industry; (b) Visits to sago areas to collect data on costings and prices for various production units; (c) Visits to various units involved in postharvest activities to collect data on costs and prices; (d) To compute various efficiency and viability measures in the sago industry; and (e) To draw policy conclusions from the results generated.

Materials and Methods

Materials: Primary data from field surveys; Secondary data from published data; Personal communications with sago experts in Sarawak. Methods: IRR and NPV to compute viability of various sago enterprises.

Regression and correlation analyses were performed to determine the price trends of sago and competing starches; and Granger tests to determine causality.

Results and Discussion

Sago, at its present stage of development in Malaysia, is essentially a smallholder's crop. The Sarawak government, through its statutory body, PELITA, is pioneering the cultivation of sago on a plantation scale in Dalat and Mukah Districts. The success of these plantations is still to be proven. In contrast to the production of sago at the farm level, which has remained at a primitive stage, there has been a series of technological innovations in the last 10 years in the sago processing or sago extraction industry. The result has been the evolution of the world's most efficient sago extraction industry in Sarawak. So efficient is this industry that there is now the problem of insufficient sago logs to feed the industry. In terms of financial profitability, the superiority of oil palm over the sago palm is very clear. The financial IRR of oil palm is easily over 22% while that for sago lies between 0.9% and 8.06%. If we take into account the environmentally friendly properties of sago and compute the economic IRR, we obtain figures of 17% to 19%, assuming the social cost of fixation of one carbon tonne to be RM14.00. For comparison, the economic IRR of growing oil palm lies between 14.03% and 22.57%. From a correlation analysis of the prices of starches, it was found that the closest substitute for sago starch is tapioca starch. There are a large variety of products that can be made from sago starch, including biodegradable plastics. The possible end-uses of sago appear limitless. In theory, the future for sago in Sarawak appears to be very bright. Current estimate of area under sago is only 19,720 hectares. There are about 1.9 million hectares of peat area in Sarawak that can be cultivated with sago. Further, it is said that the potential yield of sago is 37 tonnes/ha/year, the highest for starch-producing crops in the world. In reality, sago palm cannot compete with oil palm in terms of financial profitability. The sago industry in Peninsular Malaysia was virtually wiped out by the competing demands for land and capital required for oil palm cultivation. If drastic measures are not taken, the sago industry in Sarawak may well follow the path to extinction of the sago industry in Peninsular Malaysia. To increase the profitability of sago cultivation, plant selection and breeding work must be carried out to reduce the gestation period of sago from its present 10 to 12 years to less than 5 years. A deliberate policy of cheap land alienation for the cultivation of sago.must be implemented to lure private sector participation into sago cultivation. In other words, the oil palm success story, a saga that has few parallels, must be replicated for the case of sago palm.

Conclusions

(i) Private sector interests must be lured into the sago palm industry through tax incentives and a policy of cheap land alienation. (ii) A massive effort in plant selection and breeding work for sago palm is required to increase the profitability of sago cultivation vis-a-vis oil palm cultivation. For this, private sector participation is needed. (iii) Some form of monetary compensation from developed countries to developing countries should be instituted to encourage the cultivation of sago in developing countries because of the superior environmentally friendly properties of sago. Developing countries can be encouraged to grow crops that are superior in terms of carbon fixation through monetary incentives. The result will be a cleaner world.

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