

論文の内容の要旨

農業・資源経済学 専攻

平成20年度博士課程 入学

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論文題目

The role of palm oil industry in Indonesian economy and its export competitiveness

(パーム油産業のインドネシア経済における役割とその輸出競争力)

Indonesia has undergone a transformation process from an agricultural based country into an industrialized country. The World Bank classified Indonesia into a transforming country since agriculture is no longer a major source of growth (World Bank, 2008). On the other hand, Indonesia is a country rich of natural resource including in the agriculture sector and the agricultural employment is still high although with declining trend.

Besides the contribution to the GDP and employment, agriculture sector is also an important sector in acquiring foreign currency through export activities. One of the industries which contribute to acquiring foreign currency is the palm oil industry.

The objective of developing the palm oil industry is to increase the welfare of the people involved in the industry especially the rural population. But is the development of palm industry increases the welfare of rural population? Since 70 percent of Indonesia's palm oil is exported, discussing the development of palm oil industry is not complete without discussing palm oil export competitiveness. The main

concern is to how to achieve export competitiveness and what measures have been taken to increase the export competitiveness.

This research has two main objectives and several specific objectives. The first main objective is to analyze the contribution of palm oil industry on the Indonesian economy. Meanwhile the specific objective is to analyze the linkage of the palm oil industry with the other sectors of the economy and the effect of the palm oil industry on the factor of production and households.

The second objective is to analyze the export competitiveness of Indonesia's palm oil product. Furthermore, the specific objective is to analyze the effect of export tax on crude palm oil (CPO) competitiveness compare with Malaysia, analyze the source of Indonesia's palm oil product competitiveness and lastly, analyze the market position of Indonesia's palm oil in three markets.

This dissertation is consists of seven chapters, the first chapter is the introduction followed by a brief overview regarding the palm oil industry in Indonesia. The next four chapters are the main content of the dissertation, the third chapter discuss the contribution of palm oil industry on the Indonesian economy, followed by the determinants of crude palm oil (CPO) export competitiveness. The fifth chapter discusses about the export competitiveness of Indonesia's palm oil product and the sixth chapter discusses about the market position of Indonesia's palm oil in three selected countries. Lastly, conclusion and policy recommendations are presented.

The third chapter analyzed the contribution of the palm oil industry in Indonesia employing the input output and social accounting matrix (SAM) analysis. The industry consists of two sectors, the oil palm sector and the animal and vegetable oil processing sector. The contribution is divided into two types, first the contribution on the economy itself and the second the impact on factor of production and households. The result shows that the animal and vegetable oil processing sector contributes more to the economy in output and value added. Moreover, the animal and vegetable oil processing sector is more linked to the other sectors compare to the palm oil sector. On the other hand, the oil palm sector has more contribution on the employment aspect.

On the impact on the factor of production and households, the result indicates that the oil palm sector mainly benefited the rural agricultural labor and urban non-agricultural labor since the sector is link to the financial sector. Meanwhile, the development of the animal and vegetable oil sector will benefit the rural agricultural and non-agricultural labor since the plant location mainly located in the rural area and it has link with the palm oil sector. For the impact on households, the development of both sectors will have the biggest impact on the agriculture landowner households.

The next chapter is regarding the determinants of CPO export competitiveness. The objective of this chapter is to compare palm oil industry in Indonesia and Malaysia and to analyze the determinants of Indonesia's CPO export competitiveness compare with Malaysia, the main competitor. An export ratio equation between Indonesia and Malaysia is constructed using monthly data. The dependent variable is CPO export of both countries, meanwhile the independent variables includes price ratio, export tax difference, refined palm oil export ratio and exchange rate ratio. The result shows all of the independent variables affected the CPO export competitiveness.

The fifth chapter is regarding Indonesia's palm oil product export competitiveness. This chapter analyzes the export competitiveness of Indonesia's palm oil product compared to Malaysia in three regions: Asia, Africa and Europe. Two palm oil products are analyzed, crude palm oil (CPO) and refined palm oil. Market share is utilized as the measurement of competitiveness. The result indicates that Indonesia's palm oil export has increased significantly over the period of 1999-2001 and 2005-2007.. The reason for the increase is the increase in demand and Indonesia's palm oil product has gain export competitiveness compared to Malaysia's product.

The next chapter regards the market position of Indonesia's palm oil in three selected countries. The objective of this chapter is to analyze the competition between palm oil with its substitute and between Indonesia's and Malaysia's palm oil in three selected countries, which is China, India and Netherlands. Two stage import demand is constructed using the autoregressive distributive lag (ARDL) approach and almost ideal system (AIDS). The result indicates that habit persistence, world palm oil and substitute price are the major determinants of palm oil import in China and Netherlands. Substitute price has the largest effect on the palm oil import in these two countries. Meanwhile in India domestic price and trade liberalization are the main determinants. Palm oil price is an important factor in determining palm oil demand in these three countries. In addition, Indonesia's palm oil is more elastic in China and India. In China, both countries palm oil is complementing each other meanwhile in Netherlands they are competing.

From this research it can be concluded that the development of palm oil industry, which include the on-farm, CPO and refined palm oil industry, will have a huge effect on the Indonesian economy. Since almost 70 percent of the palm oil product is exported, increasing palm oil export competitiveness will be an important factor in the development of Indonesia's palm oil industry.

In developing the palm oil industry, there are two approaches that can be taken; domestic and foreign. The domestic approach includes domestic policy which will have

affects the domestic palm oil industry. Meanwhile the foreign approach includes policy to increase Indonesia's competitiveness.

On the domestic policy, there are four main objectives to focus on. First, to implement policy that can attract business people to invest in the refined palm oil industry which has more value added rather than only investing in on-farm or until crushing FFB into CPO. Second, the policies imposed must be toward more participation of farmers in the on-farm activities of oil palm plantation as landowner not as labor. Based on this research, the largest beneficiary of the palm oil industry is the landowner in rural areas. Lastly, the government must have a clear road map on the palm oil industry. The road map must involve all the stakeholders of the palm oil industry. Lastly, specialization and further cooperation among palm oil producers must be promoted.

Concerning the policy for increasing export competitiveness, there are four activities that can be implemented. First, Indonesia's palm oil must increase its promotion activities in the international market. Second, Indonesian government and private sectors must coordinate its action in order to increase Indonesia's palm oil export. Third, Indonesia and Malaysia as the major producer and exporter of palm oil must cooperate with each other. The cooperation can be in the form of promotion, price stabilization scheme and investment. Fourth, demand for each countries must be identify for references by the palm oil producers.

The domestic and foreign approach policies must be implemented simultaneously since both sectors are linked. In order to develop domestic palm oil industry, demand from international market is essential. Increasing export competitiveness will not be achieved without the well established domestic palm oil industry. Hopefully in the future, the Indonesian people especially the rural population will benefit more with the developed palm oil industry