The Competitiveness Crude Palm Oil Product of

West Sumatra in Domestic and World Market

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Abstract

Indonesia should increase its competitiveness to get benefit from ASEAN Economic Community, especially CPO (crude palm oil) which prospective future market is predicted to be still prospective which is marked by world demand for CPO is still high. This study examines the competitiveness of CPO in West Sumatra Province from 2000 to 2016 in Indonesian market (domestic) and the word market from 2000 to 2015 using RCA (Revealed Competitive Advantage) index analysis. The result of the research shows that the CPO of West Sumatra in Indonesia market (domestic) which shows the value of RCA index > 1, its means that the export value of CPO of West Sumatra has competitiveness while the value of Index RCA CPO of West Sumatra in world market is got value of RCA index average equal to 1,2, its mean export of CPO in West Sumatra still have competitiveness average world CPO, although if seen RCA index each year there is a value of RCA<1.

Keywords: competitive, CPO, RCA, West Sumatra

1. Introduction

According to the World Economic Forum said that in 2015 Indonesia competitiveness in ASEAN level 37 and are ranked in the bottom three neighboring

countries, namely Singapore, which is ranked second, Malaysia ranked 18 and Thailand ranked at 32. However, Indonesia still out performed the Philippines, who is ranked 47, ranked 56th in Vietnam, Laos ranked 83, ranked 90 out of Cambodia, and Myanmar in the ranking of 131. Indonesia must improve its competitiveness to be able to benefit from the Asean Economis Community. We know that the ASEAN countries on average producing and consuming agricultural products are almost identical, so that there will be competition between countries of the exporter to supply the importing countries the same one

For West Sumatra province which is still dominated by agriculture, forestry and fishery as field the main effort with contribution to GDP amounted to 23.10% of West Sumatra in 2016 and specialized for plantation sub-sector contributed a total of 6.57% [3]. it can be said that the plantations in West Sumatra has the potential for a sizeable competitiveness and CPO *(crude palm* oil) is one of the final products of processing of fresh fruit bunches (FFB) of palm oil before being exported to the world market. Export of CPO has managed to donate foreign exchange amounted to 33.6% in 2015 with a value of CPO in 2016 amounted to US $ 17.8 billion, up 8 percent compared to the previous year's US $ 16.5 billion. The market outlook is still predicted prospective CPO future characterized by global demand for palm oil is still high enough, it can be used by Indonesia to increase its CPO production supported by the availability of oil palm land continues to increase each year, the availability of relatively cheap human resources and oil maintenance costs are still relatively low.

Several studies on the competitiveness of palm oil commodities have been done, such as [12] which states that the Indonesian and Malaysian palm oil exports is inelastic and slow to respond to changes in prices that occurred *(timelag)* and only influenced by the level of CPO production. [7] states that global CPO prices showed a negative response to the increase in exports and positive impact on imports, further of influence the world price of crude palm oil to export prices, import and domestic prices of each of the main exporters and a major importer in general are also positive and inelastic, [6] stated that Indonesia's CPO exports is inelastic to changes in Indonesia's CPO production in the short term but elastic in the long run. If the CPO production rise 10 percent, the export of CPO rise 7,01 per cent in the short term and 12,44 percent rise in the long term. Lowering the export tax Indonesian CPO exports. The rupiah exchange rate against the USD has positive influence on Indonesia's CPO exports. [1] conducted a study to do research on the competitiveness of Indonesian crude palm oil commodities in 2001-2012 stated that Indonesia's CPO export competitiveness to the Japanese market and Australia. Other research on the analysis of the competitiveness of Indonesian palm oil on the international market in 1999-2014 using RCA index

states that Indonesian CPO has the greatest comparative advantage in the international market compared to Malaysia and Thailand [11].

According [8] determinants of competitiveness of Indonesian CPO exports dam Malaysia is the ratio of the price, the export tax differences, refined palm oil export ratio and the ratio of the exchange rate effect on CPO. Research conducted by [9] RCA of CPO Indonesia to prove the main export destination country Indonesia has a comparative advantage. The purpose of this study was to analyze the CPO export competitiveness of West Sumatra in the domestic market and in international markets in 2000-2016 by using Index RCA *(Revealed Comparative Advantage)*.

2.   Methodology

The approach used in this study is a qualitative and quantitative approach to the data source in the form of primary and secondary data. The primary data obtained through interviews with the Indonesian Palm Oil Association, secondary data obtained from relevant government agencies, such as West Sumatra Plantation Office, Department of Food and Horticulture resistance, Department of Industry, Trade and cooperative West Sumatra Province, Central Bereau of Statistic, Ministry of Industry and also through the review of the literature. This Research using RCA analysis. Sample in this study using time series data starting in 2000-2016 to study variables that comprise: CPO export value of West Sumatra (US $), the value of total exports of western Sumatra (US $), Indonesia's CPO export value (US $), value Indonesia's total exports (US $), the world's CPO export value (US $) and the total value of world exports (US $).

The analysis calculation used is the analysis of *Revealed Comparative Advantage* (RCA). RCA is used for measuring the export competitiveness of a region / country so it can know the comparative advantages of a commodity in a region / country. Competitiveness analysis itself has been formulated by [2] in the RCA method. Index RCA calculated in the formulation:

$$RCA = \frac{X_{ij}/X_j}{X_{iw}/X_w} \tag{1}$$

where X_{ij} indicates the value of exports of commodity i by country j, X_j indicates the value of total exports by country j, X_{iw} shows the value of total exports of commodity i world and X_W show the value of exports the world's total. If the value of index RCA> 1 then export commodity is said to have a competitive edge over the competitiveness of the world average, while if the RCA index <1 then an export commodity is said to have a competitive edge competitiveness below the world average.

3.   Results and Discussion

Competitiveness is the ability of companies, industries, regions, countries, or

regions to generate revenue factors and factors of relatively high employment and sustainable to face international competition. Export competitiveness is a picture of the level of competitiveness of industrial exports in the world market by looking at the magnitude of the market share in the world.

A country or region will have a competitive edge in the form of comparative advantage if the state or the region capable of producing and exporting goods or services at a cost which is relatively cheaper than the country or the region to import goods and services from other countries. West Sumatra province will have a competitive advantage if the comparison between the export value of *crude palm oil (CPO)* and the total export value in the region is greater than the domestic market and international market. To determine whether the province of West Sumatra has a comparative advantage represented by RCA index. See Table 1.

Table 1. RCA Index of CPO In West Sumatra In The Domestic Market

years	Value of West Sumatra CPO Export (USD)	Value of West Sumatra Export (USD)	Value Of Indonesia CPO Export (USD)	Value of Indonesia Export (000 USD)	RCA
2000	26.770.199	229.630.107	1.326.398.000	62.124.000	5,46
2001	26.026.130	208.180.000	1.227.165.000	56.320.900	5,74
2002	86.611.008	307.849.000	2.348.638.000	57.158.800	6,85
2003	130.213.755	377.277.000	2.719.304.000	61.058.200	7,75
2004	219.559.755	594.956.000	3.944.457.000	71.584.600	6,70
2005	278.074.610	731.189.000	4.344.303.000	85.660.000	7,50
2006	345.204.890	1.074.134.000	4.139.286.000	100.798.600	7,83
2007	622.691.326	1.512.799.000	8.866.445.000	114.100.900	5,30
2008	1.068.800.714	2384.568.000	14.110.229.000	137.020.400	4,35
2009	648.400.180	1.344.257.000	11.605.431.000	116.510.000	4,84
2010	1.024.675.222	2.214.774.000	15.413.639.000	157.779.100	4,74
2011	1.204.095.951	303.181.5000	19.753.190.000	203.496.600	4,09
2012	903.179.353	2.363.583.000	22.451.089.000	190.020.300	3,23
2013	654.718.937	2.209.012.000	17.667.471.000	182551800	3,06
2014	696.414.714	2.105.610.000	19.555.633.000	175980000	2,98
2015	678.810.248	1.748.010.000	17.360.395.000	150366300	3,36
2016	571.498.745	1.708.280.000	18.100.000.000	145186200	2,68
Total	9.185.745.737	24.145.923.107	184.933.073.000	2.067.716.700	
Mean	540.337.985	1.420.348.418	10.878.416.059	121.630.394	5

Source :Central Bereau of Statistic and data Processed (2017)

Competitive advantage is achieved when a company Region implement low cost strategy, which makes it able to offer a product that has the same quality with

similar products but with a lower price than its competitors. From Table. 1 obtained index value RCA CPO West Sumatra in Indonesia market (domestic) every year from 2000 to 2016 were on average the value of index RCA> 1 means that the value of exports of CPO West Sumatra province has high competitiveness in the domestic market, where the value of the highest RCA in 2006 with a value of 7.83 and the lowest in 2016 with a value of 2.68. So it can be said that the province of West Sumatra has a comparative advantage to compete in the domestic market.

Furthermore, if you want to know the CPO export competitiveness of West Sumatra province on the world market can be done by calculating the value of RCA index CPO West Sumatra province on the world market (see Table.2). The index value RCA annually during the 2000 to 2015 obtained by RCA varied, but on average RCA> 1 means that the export of CPO in the province of West Sumatra still have a competitive edge over the average CPO world, even if on the index RCA respectively each year there are worth RCA <1. In 2000-2002 resulted in RCA <1 means that in that year the export of CPO West Sumatra province have low competitiveness in the world's CPO export market, but in 2000 -2015 generate RCA> 1, it means that in that the export of CPO West Sumatra began to show competitiveness in global CPO export market. So in general it can be said that the export of CPO West Sumatra province already has a comparative advantage in the export market CPO world, only to be enhanced competitiveness so that in the next few years the export of CPO In West Sumatra has index value of RCA that every year more than one.

Table 2. RCA Index of CPO in West Sumatra in the Word Market

years	Value of West Sumatra CPO Export (USD)	Value of West Sumatra Export (USD)	Value of Word CPO Export (000 USD)	Value of word Export (000 USD)	RCA
2000	26.770.199	229.630.107	14.063.000	48.017.790	0,40
2001	26.026.130	208.180.000	16.793.000	47.355.807	0,35
2002	86.611.008	307.849.000	18.438.000	49.382.508	0,75
2003	130.213.755	377.277.000	19.910.000	59.401.306	1,03
2004	219.559.755	594.956.000	22.201.000	75.849.333	1,26
2005	278.074.610	731.189.000	24.545.000	87.090.000	1,35
2006	345.204.890	1.074.134.000	29.000.000	101.310.000	1,12
2007	622.691.326	1.512.799.000	30.048.000	120.230.000	1,65
2008	1.068.800.714	2384.568.000	37.143.000	131.600.000	1,59
2009	648.400.180	1.344.257.000	38.243.000	105.550.000	1,33
2010	1.024.675.222	2.214.774.000	38.854.000	123.010.000	1,46

Table 2. (Continued): RCA Index of CPO in West Sumatra in the Word
Market

2011	1.204.095.951	303.181.5000	39.024.000	143.380.000	1,46
2012	903.179.353	2.363.583.000	45.530.000	144.960.000	1,22
2013	654.718.937	2.209.012.000	43.269.000	149.480.000	1,02
2014	696.414.714	2.105.610.000	46.569.000	149.950.000	1,06
2015	678.810.248	1.748.010.000	47.616.000	134.820.000	1,10
Total	8.614.246.992	22.437.643.107	511.246.000	1.671.386.744	
Mean	538.390.437	1.402.352.694	31.952.875	104.461.672	1,13

The value of RCA CPO West Sumatra in the Indonesian market (domestic) and the world market show that export CPO West Sumatra average price competitive high enough each year, until now Indonesia respectively ranked first world as the largest producer of CPO and country CPO export the most widely abroad.

4.   Conclusion

Power CPO export competitiveness in West Sumatra can be seen from the RCA index value is generated. CPO market of West Sumatra in Indonesia (domestic) every year from 2000 to 2016 shows the index value RCA> 1 means that the value of exports of CPO West Sumatra have competitiveness on the export competitiveness of the average Indonesian. While the value of RCA index CPO West Sumatra in world markets RCA index values obtained annually during the 2000 to 2015 average of 1.2 which indicates RCA> 1 means that the export of CPO in the province of West Sumatra still have a competitive edge above the mean the world CPO price, even if on the RCA index each year there are valuable RCA <1. Although the results of the analysis of RCA of CPO in West Sumatra who stated that CPO exports in West Sumatra has a fairly high competitiveness in both the domestic market and in international markets, but utilization is still not optimal. Therefore, proposed several attempts to optimize CPO production in the province of West Sumatra thus better able to compete with other provinces in Indonesia and also in the world.

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