

## RSPO CERTIFICATION IMPACTS ON OIL PALM SMALLHOLDERS' WELFARE IN JAMBI PROVINCE

### *Dampak Sertifikasi RSPO terhadap Kesejahteraan Petani Kelapa Sawit Skala Kecil di Provinsi Jambi*

Dompak MT Napitupulu<sup>1</sup>, Rosyani<sup>1</sup>, Ernawati HD<sup>1</sup>, Rukaiyah Rafiq<sup>2</sup>

<sup>1</sup>Fakultas Pertanian Universitas Jambi  
Jln. Jambi-Muara Bulian KM.15 Mendalo Darat, Jambi 36361

<sup>2</sup>Program Pascasarjana Universitas Jambi  
Jln. A Manap Telanaipura, Jambi 36124  
E-mail: [dompakn@yahoo.com](mailto:dompakn@yahoo.com)

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#### ABSTRAK

Permintaan Crude Palm Oil (CPO) dunia pada dasarnya mengalami peningkatan secara konsisten, namun pasar CPO cenderung mengalami kelesuan yang diduga sangat berkaitan dengan sertifikasi Roundtable on Sustainable Palm Oil (RSPO). Sistem perdagangan internasional mengharuskan produsen CPO untuk memiliki sertifikat RSPO sebelum memasarkan produk ke luar negeri. Dapat diduga bahwa kewajiban memiliki sertifikat RSPO tidak akan hanya terbatas kepada pengusaha perkebunan besar, namun lambat laun akan juga diwajibkan untuk dimiliki oleh setiap pengusaha kebun kelapa sawit termasuk petani rakyat swadaya. Tulisan ini bertujuan menganalisis manfaat sertifikasi RSPO terhadap peningkatan kesejahteraan petani kelapa sawit swadaya di Provinsi Jambi. Data dalam penelitian ini dianalisis dengan menggunakan metode deskriptif dan statistik nonparametrik. Sertifikasi RSPO dalam beberapa aspek telah dapat dirasakan berkontribusi terhadap peningkatan kesejahteraan petani khususnya dalam hal ketersediaan input produksi secara tepat waktu, peningkatan produktivitas, pengolahan hasil dan pemasaran, serta dukungan dana CSR dari perusahaan inti. Hasil penelitian juga menunjukkan bahwa perusahaan Perkebunan Kelapa Sawit cenderung memberikan kemudahan dalam melakukan transaksi kepada kelompok tani yang sudah memiliki sertifikat RSPO.

**Kata kunci:** *kesejahteraan, minyak sawit, petani swadaya, sertifikat RSPO*

#### ABSTRACT

World demand for Crude Palm Oil (CPO) consistently increases. On the other hand, CPO market moves slowly probably due to Roundtable on Sustainable Palm Oil (RSPO) certification. International trade system requires large CPO producers to have a RSPO Certificate as one of requirements for exporting their product. It is expected that this requirement will also be applied immediately to smallholding oil palm plantations. This paper aims to analyze the benefits of RSPO certification on improving oil-palm smallholders' welfare in Jambi Province. Data collected in this study were analyzed using both descriptive and quantitative methods. Results of the study showed that RSPO certification, in several aspects, significantly improved farmers' wealth, timely availability of input factors, oil palm yield, processing and marketing, and CSR financial support. It also indicates that oil palm plantation companies tend to give preferential treatment in transaction process with farmers having RSPO certificates.

**Keywords:** *palm oil, smallholder, RSPO certification, welfare*

#### INTRODUCTION

Among the commercial vegetable oil crops, oil palm produces the largest quantity, lower cost of edible oil per unit area in the world. Palm oil is a fast growing product such that some competing commodity producers protect their markets using non-tariff barriers. It is claimed that some black campaigns have been addressed toward palm oil based commodity to slow down its mushrooming

growth (Sipayung 2016). Despite those excessive black campaigns promoted against palm oil, data show that the world Crude Palm Oil (CPO) demand consistently increases over time. Roundtable on Sustainable Palm Oil (RSPO) Impact Report (2014) predicted that in Year 2016 there were at least 60 million tons of CPO marketed all over the world. CPO product demand even is predicted to increase significantly at 9,92% per year. This very optimistic prediction was due to the increasing demand factor on traditional Indonesian CPO

consumers. India will become the main palm oil importing country that will consume about 8,08 million tons, China's and Europe's demand will be each of 6,75 million ton and Europe 6,43 million tons (sawitindonesia.com 2014). World's demand for CPO is currently supplied by some countries in Asia, Southern and Central America, as well as Africa.

Following the fast grow in palm oil based commodity demand side, some main producing countries, such as Indonesia and Malaysia, keep expanding their palm oil plantation areas. Palm Oil data showed that in 2014, Indonesia contributed to 56,25% of world palm oil supply (Gapki 2015). In Indonesia, oil palm plantation could be found in at least 25 out of 35 provinces where 692.967 hectares are planted in Jambi Province (Ditjenbun 2016).

It could be seen in Figure 1 that both oil palm area and production in Jambi Province kept growing for the period of 2009 to 2014. Statistically, oil palm plantation area and oil palm bunches in Jambi grew at the rates of 7,35% and 4,47%, respectively. Good growth of oil palm plantation is claimed due to good economic growth indicator signaled to smallholders as well as private firm new investors. In short, oil palm plantation is prosperous business.

On the other hand, good performance of palm oil supply was not in accordance with that of the demand. CPO market grows slowly and CPO producing countries need to seek new market due to RSPO Certification issue as such as argued by Dradjat (2009) and Sipayung (2016). For some palm oil producing countries, RSPO

Certification is considered as black campaign to restrain the fast-growing business using palm oil as raw material. International trade system slowly requires CPO producers to have RSPO certificates not limited to large companies but it will sooner or later become a requirement to all oil palm producers including those smallholders in marketing CPO.

In addition to some minor perception to oil palm producer's side, in global view, RSPO Certification is aimed to conduct sustainable oil palm plantation. RSPO certification is issued to respond to societal concerns mainly on the long term social and environmental impacts of fast expansion oil palm particularly in term of rain forest sustainability. Concerns on social and environmental impacts of palm oil as well as biofuel rapid growth drives producers to adopt better management practices. Biofuel particularly palm oil producer is offered RSPO schemes with its Principles and Criteria (P&C) Guidance. Following the P&C Guidance consistently will bring the palm oil as well as other biofuel commodity farming towards sustainable farming and fit the societal and environmental concerns. Both smallholders as producers and consumers will then be better off (van Opijnen et al. 2013).

However, the existing RSPO together with its P&C Guidance looks are more suitable to large estate crop plantation due to high cost to meet sustainability and certification objectives. Particularly to oil palm smallholders, costs to acquire the certificate could consist of various payments required during certification process in addition to costs incurred from missed

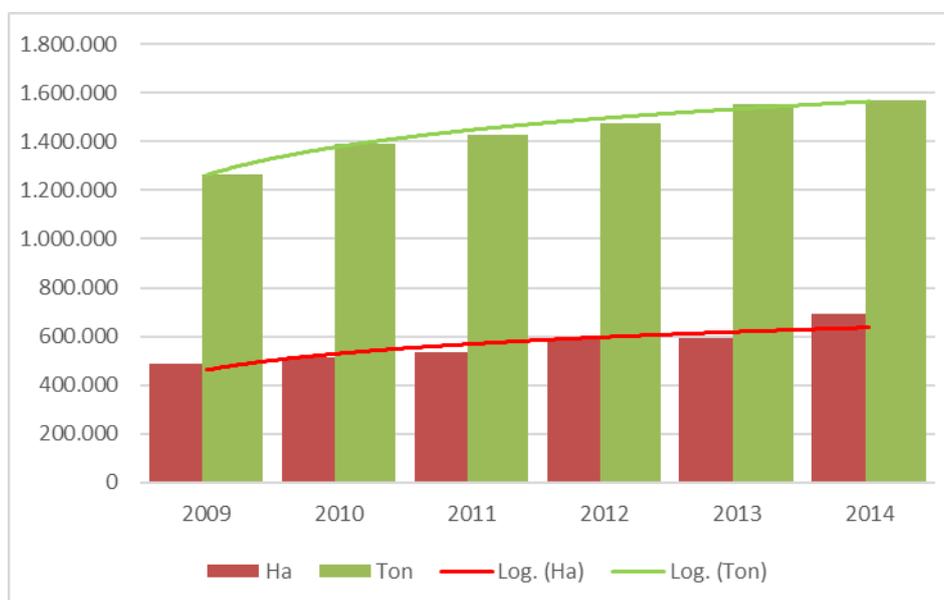


Figure 1 . Oil palm plantation area and production in Jambi Province, 2009 – 2014

opportunities by the farmers during the valuation periods (Lee et al. 2011). The smallholders with insufficient institutional capacity, inadequate financial and social incentives, poor group organization, and lack of external support will get difficulty in order to acquire the RSPO certificate. Most smallholders need some accountable information about cost expensed and profit to gain to decide whether they will apply for RSPO certification evaluation or not (Lee et al. 2011; van Opijnen et al. 2013; Laurance 2010). This paper aims to analyze the effects of RSPO certification on oil palm smallholders' welfare improvement in Jambi Province.

## METHODOLOGY

### Conceptual Framework

RSPO is a forum intended to bring CPO commodity being produced in environmentally sound. RSPO certificate is issued only to corporation who already produce CPO in 8 Principles and 43 Criteria (www.rspo.org). The RSPO Certificate becomes important since the principles and criteria are built to produce CPO in good practice and sustainable manner (Catrien, 2014). More than that, the future market of CPO very much depends on the certificate. Growth Interpretation Narrative said that in 2020, Europe will only consume palm oil already produced in P&C criteria. Furthermore, Wigena (2009) has predicted that to guarantee our palm oil sustainability, both firms and smallholders must apply all 8 principles and 39 criteria seriously.

The key factor to implement P&C RSPO for smallholders' welfare enhancement is through organization transparency improvement by empowering *Gapoktan* (association of farmers' groups). Equipping the *Gapoktan's* with legal rules such as Statute and Bylaw documents, SOP (Standard Operating Procedure) on some business activities, and other business documents will guarantee the rights of the farmers' groups (Rosyani 2015; RSPO Executive Board 2013).

### Scope of the Study

This study is intended to analyze effects of RSPO certification on oil palm smallholders' welfare improvement in Jambi Province. It includes aspects of the RSPO certificate and its impact on the oil palm smallholders' income. Primary data were collected from *Gapoktan* members already awarded the RSPO certificate and the smallholders who were not awarded the RSPO certificate.

Some variables observed in this study were chosen based on economic theory and selected purposively (Rianse 2012). The variables estimated were production input availability, farm yield, processing procedure and marketing channel, operational cost, empowerment, capacity improvement, transparency, innovation or technology support, and CSR fund.

### Study Schedule and Location

This study was carried out in in Jambi Municipality and Merangin Regency in 2015.

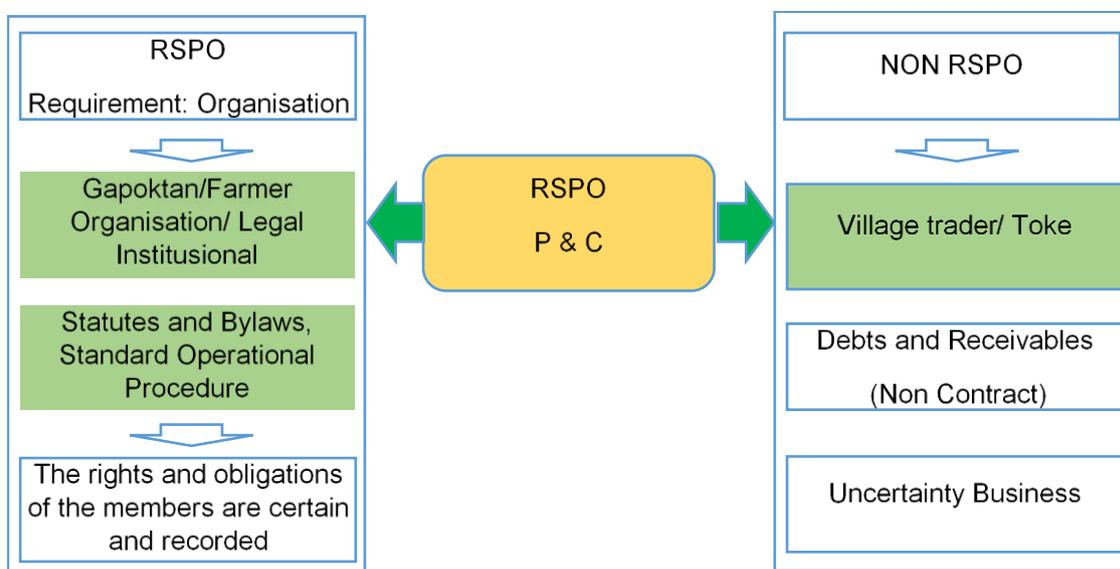


Figure 2. The impact of rspo on smallholder group's welfare frame work

Some farmers' groups in those regions were awarded the RSPO Certificate.

### Data Collection

Primary data were collected using a survey method. The sample respondents were randomly chosen from a farmers' group awarded the RSPO certificate and a farmers' group not awarded the certificate with each of 36 farmers or total samples of 72 farmers.

### Data Analysis

Descriptive data analysis were performed through tabulation and scoring. Some data were also presented in graphs to expose the differences of those two data groups, i.e. before and after RSPO Certificate awarded.

In addition to the descriptive data analysis, a sign-test of non-parametric statistic method was also applied to draw conclusion of this study. This method was applied to know whether the probability of oil palm smallholder welfare is better after receiving the RSPO Certificate than before. The statistical hypothesis built was:

$$H_0 : P = 0,5$$

$$H_1 : P \neq 0,5$$

To test whether to reject or not to reject the Hypothesis ( $H_0$ ) is decided by using normal ( $Z$ ) test with the formula:

$$Z_h = \frac{(x \pm 0,5) - np}{\sqrt{np(1-p)}}$$

Where  $(x + 0,5)$  is used if the number of + (positive sign) smaller than  $\frac{1}{2} n$ ; otherwise  $(x - 0,5)$  is used. The decision is

$H_0$  is rejected if  $Z_h > Z_{\alpha=0,05} = 1,645$  (Djarwanto, 1983).

## RESULTS AND DISCUSSION

Conceptually, oil palm smallholders could be categorized as independent enterprises depend on most of their own resources. Smallholders differ with enterprises because the latter built in an integrated system consisting of plantation, product downstream processing, and marketing as well as exporting subsystems. To be more specific, smallholders with their limited resources are free to choose how to use their lands, which crop to grow plant, and how to manage them (Brandi et al. 2013; RSPO 2014). In relation to RSPO certificate, smallholders tend to be free to choose either to join the RSPO certificate or not. In their decision, smallholders of course put into account what benefit they will gain by paying additional cost for the certificate.

The most interesting fact for farmers to adopt innovation is higher income they will get. RSPO certificate enabled the smallholders to get higher revenue through better selling price of fresh fruit bunches (FFB) they produce, i.e. Rp1.780/kg, or higher than that received non-RSPO certificate farmers Rp1.380/kg in the middle of March 2015. Such as informed by Lee et al. (2011), oil palm smallholders in this study also received better income through better selling price of FFB purchased by the firms. As many as 71,4% of the respondents could gain higher selling price after their farmers' group receive the RSPO Certificate. The higher revenue was gained from both the nucleus firm, as the bunches buyer, and PT Unilever which promoted the farmers' group to gain the certification before. Real net income received by the smallholders was higher after

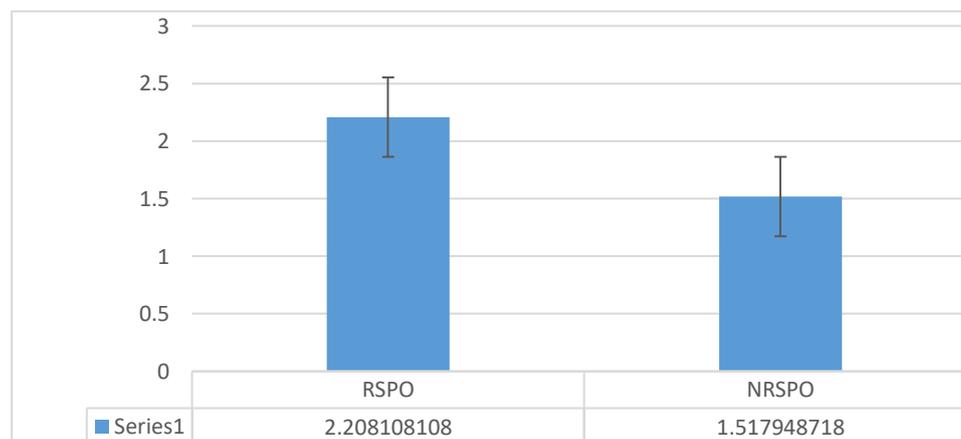


Figure 3. Farmers' perception on production input provided by the nucleus firm

they got the certificate. It encourages other farmers through their farmers' groups to apply for RSPO certificate (Lee et al. 2011; van Opijnen et al. 2013; Harianja 2014).

In addition to better price accepted by farmers, there were also eight variables estimated to measure farmers' satisfaction. The farmers with RSPO certificate satisfied more than those without the certificate.

The first variable observed related with the impact of RSPO certificate on benefit accepted by farmers in term of production inputs provided by the nucleus firm for their farms. Using the scale of the Farmers' perception of 1 (not satisfy), 2 (satisfy) and 3 (very-satisfy), it was found that the farmers with RSPO certificate satisfied with nucleus firm's commitment (2.21). On the other hand, the farmers without the certificate did not satisfy with the nucleus firm (1.51). Good commitment of the nucleus firm was indicated by fertilizer provision on time also shown by paying more attention in supplying input of production such as fertilizer on time. Given timely production inputs availability to farmers, they could practice farming better off and get higher yield.

One of principles in encouraging oil palm growers to be certified by RSPO scheme is to ensure more effective and efficient fertilizer management in the plantations. Oil palm is one of the most efficient oil crops in the world that enables growers to increase production through applying more fertilizer and other chemical inputs (Goh et al. 2009; Paoli et al. 2010). Even though applying less fertilizer is one of the objectives of RSPO Certificate, the farmers concerned that the nucleus firm care more about them through fertilizer and other chemicals provision.

The second variable observed was the impact of RSPO Certificate on oil palm bunches produced by the farmers. Most of the farmers with RSPO certificate (86,5%) after intensively applying the 8 principles and 139 criteria the number and quality of oil palm bunches they produced were better off than before. Such as shown in Figure 4, on general the farmers satisfied with RSPO's P&C implementation (2,44) as it increased oil palm yield. Referring to the Criteria 6.10 and 6.11 the nucleus firm as bunches buyer produced by the farmers should practice honest and transparent business (P&C RSPO 2013). Investment expansion for oil palm plantation may continue for many years to come even after application the RSPO's P&C due to higher profit and growing global demand for edible oil, biofuel, and feed (William et al. 2010; Lee et al. 2011; van Opijnen et al. 2013).

Farmers' welfare improvement after implementing RSPO's P&C could also be attained through better processing and marketing of bunches they produced. As it is depicted in Figure 5, most RSPO farmers (90,5%) satisfied with the nucleus firm (2.45) in term of its conduct of bunches processing and marketing. Well-arranged farmers' bunches to the processing plant was appreciated by nucleus firm through higher buying price. FFB price is one of the most important determinants of oil palm smallholders' incomes (Glenday 2015). Nucleus firm treated the RSPO farmers differently from those Non-RSPO. It was in accordance with the reason of RSPO certification. The price set by the government tending to be pre-transaction costs not in favor with the farmers. Most of the farmers, i.e. independent smallholders, not selling bunches directly to the processing plants,

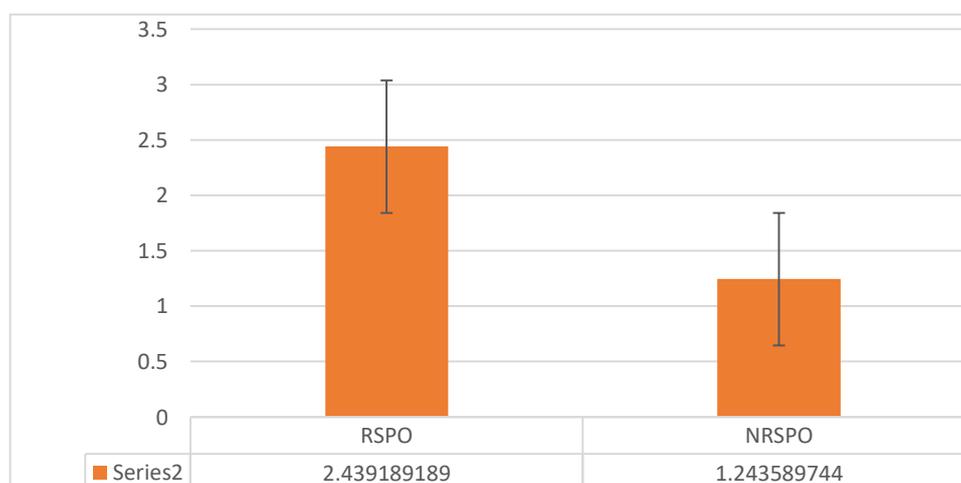


Figure 4. Farmers' perception on oil palm production after applying RSPO's P&C

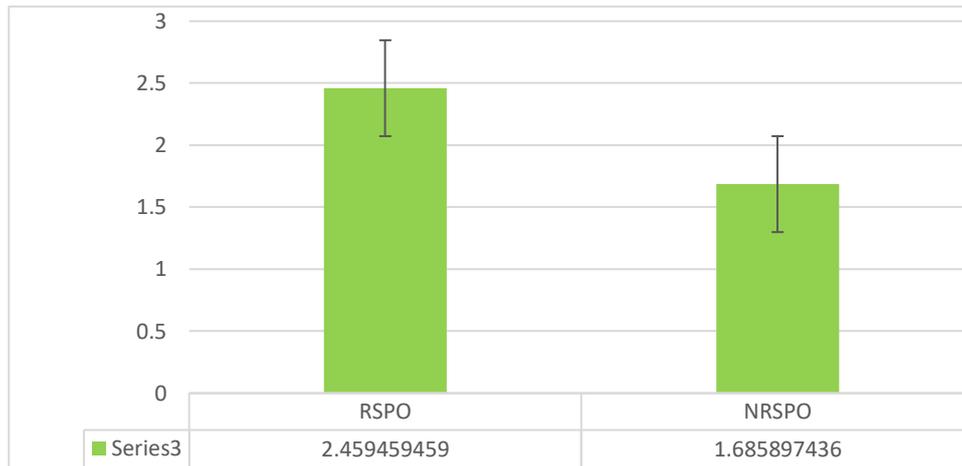


Figure 5. Farmers' Perception on Oil Palm FFB Marketing and Processing after Applying RSPO's P&C

received lower FFB price than that of price set by the government.

Positive impacts of implementing RSPO's P&C on farmers' oil palm practice were observed in term of capacity building and empowerment implemented by the nucleus firm and it was in accordance with the study of van der Eenden (2013). There was a significant different commitment paid by firm in developing farmers' capacity building to RSPO and Non-RSPO groups such as shown in Figure 6.

The nucleus firm implemented training on oil palm farming regularly and frequently to RSPO farmers who already practiced P&C. Topics of the training included good farm management consisting of better fertilizer application, good pest and diseases control, better harvesting methods, and health and secure work practices (K3). Conversely, Non-RSPO framers did not get the said training.

Other benefit received by farmers' group after obtaining the RSPO Certificate was better transparency. It was mostly observed in term of fresh oil palm bunches price, payment and transaction methods, communication and production coordination agreement (Memorandum of Understanding/MoU) between farmers' group and nucleus firm (Pacheco et al. 2017). Better transparency between nucleus firm and RSPO farmers' group was due to the Principle number 1 in RSPO's P&C. In addition to the P&C, researchers keep looking for better models to increase the transparency and traceability of the supply chain at the local level in order to access the financial investments needed to increase yields and to prepare enough saving for replanting as well as to meet the internationally recognized sustainability standards.

There was a significant different transparency in term of nucleus firm's bunches payment received by RSPO and Non-RSPO farmers

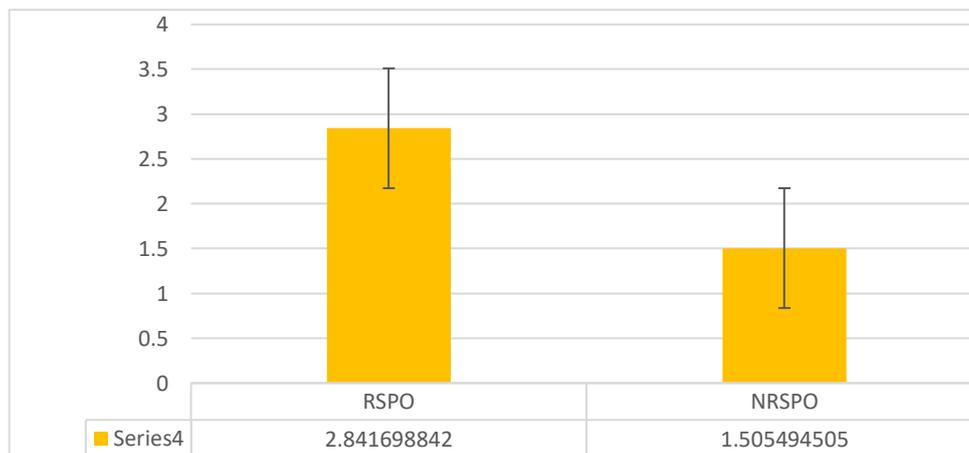


Figure 6. Farmers' perception on smallholders' capacity building after applying RSPO's P&C

(Figure 7). To ensure the sustainability of partnership between nucleus firm and smallholder oil palm, transparency should expose legal risks associated with insecure land tenure and incomplete licensing (Pacheco et al. 2017).

RSPO Certificate improves welfare of the farmers' group through innovation or technology support they got from the nucleus firm. Innovation or new technology is among the factors affecting smallholders' capacity for better farming. Selected environmental new technology could support sustainable oil palm plantation with concern to social and environmental need (van der Enden 2013; Ramirez et al. 2014; Cattau et al. 2016). Introducing new technology to the smallholders with all their constraints should be carried out using a series of training as well as preparing inputs for the new technology introduced. Beside periodic training and input provision, the nucleus firm also provided the

RSPO farmers group special trainers and empowerment assistants visiting them periodically and assisting them to maintain the RSPO's P&C intensively (van der Enden 2013; Ramirez et al. 2014; Cattau et al. 2016).

It was found that there was a significant perception difference between RSPO smallholders and Non-RSPO smallholders on technology support offered by the nucleus firm (Figure 8). Both firm and palm oil processing plant officials were very helpful to the SSPO farmers in term of innovation introduced.

RSPO farmers were transparently informed that the nucleus firm donated fund to farmers' group to support the mini banking (Debt and Lending Unit) run by the group. Fund donated by the nucleus firm was in fact very helpful to support their daily live need (Anugrah 2012). Most RSPO farmers were satisfied with benefit of Corporate Social Responsibility fund to meet their

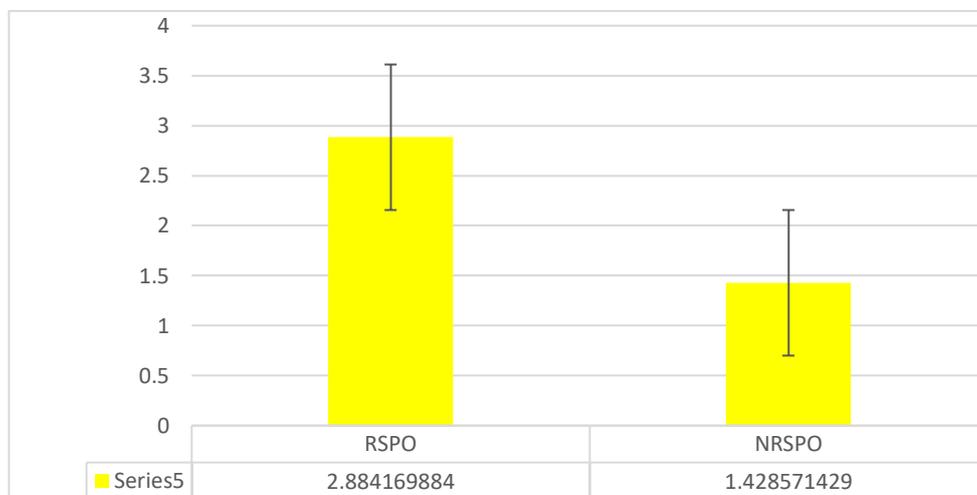


Figure 7. Farmers' perception on business transparency after applying RSPO's P&C

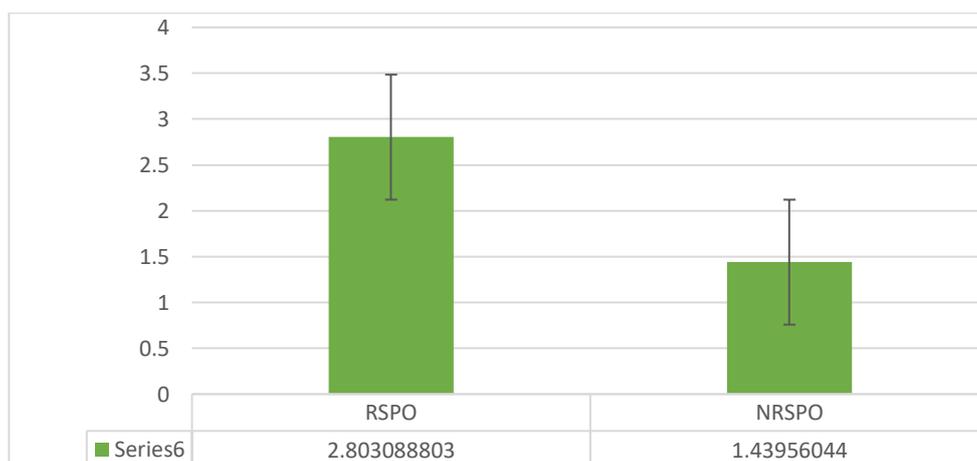


Figure 8. Farmers' perception on technology support after applying RSPO P&C

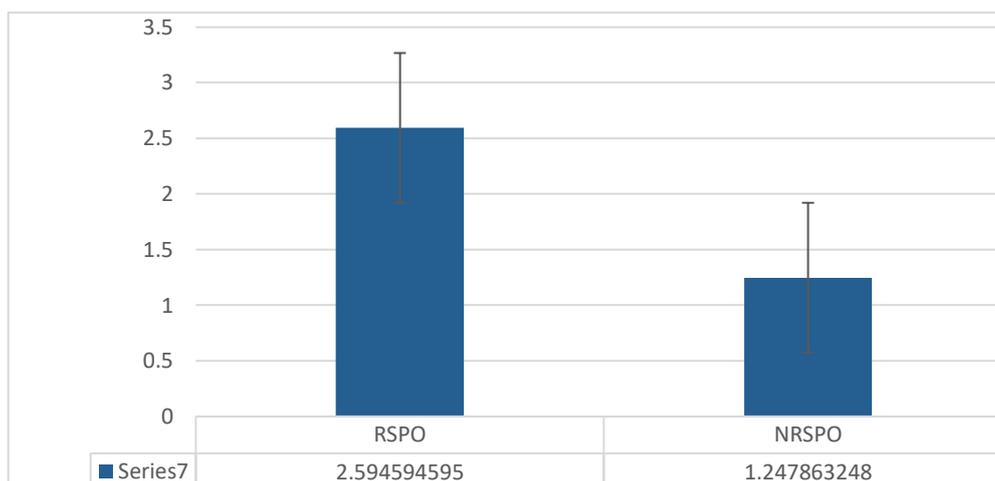


Figure 9. Farmers' perception on corporate social responsibility support after applying RSPO's P&C

daily live (2.59), while those Non-RSPO were not satisfied (1.24). There were only 13,51% RSPO farmers did not borrow the CSR fund from *Gapoktan*. It is argued that most firms uses CSR as a political weapon in doing their business (den Hond et al. 2014; Nikoloyuk 2010). Nevertheless, smallholders still believe that CSR was helpful to them.

The nucleus firm will offer more fund to support Corporate Social Responsibility fund if they could keep practicing all RSPO's P&C every year. It will motivate the farmer to work in their oil palm farms in good manner to maintain their RSPO Certificate.

## CONCLUSION AND POLICY IMPLICATION

There was a special pattern of relationship built by the nucleus firm to the smallholders based on their successfulness to gain the RSPO Certificate. Significant benefits were received by RSPO farmers compared to those Non-RSPO in terms of availability of input production, yield, processing and marketing, empowerment and capacity building, transparency, innovation or technology support, and CSR fund. Some smallholders got difficulty to RSPO Certification schemes due to limited fund they have.

It is necessary to promote wider adoption of RSPO's P&C schemes by oil palm smallholders to gain better farm management, social equity, and environmental protection as well as farmers' welfare. Government and other Supporting Institutions such as Banks and Cooperative should help the smallholders to help smallholders to finance the Certificate. Any promotion, extension, training and other capacity building programs have to avoid too high expectations

about the benefits of RSPO Certification, but it should be focused on knowledge transfer that would empower smallholders to improve the sustainability and profitability of their farm businesses.

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