

Contribution of Participation Element towards Oil Palm Fresh Fruit Bunch (FFB) Production among Independent Smallholders in Johor

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Abstract

Malaysia is one of the main palm oil producers in the world. Palm oil industry has played a significant role in the Malaysia economic growth. Oil palm planted area in 2016 reached 5.74 million hectares, an increase of 1.77% as against 5.64 million hectares recorded in the previous year. This paper highlights the contribution of participation elements towards the oil palm productivity. There are lots of factors have been reviewed that affecting the productivity, such as agricultural management and unusual weather patterns. Based on FFB production analysis in 2014, there were differences of independent smallholders (ISH) average FFB production in two districts in Johor which is too high and low. Thus, this study was undertaken to investigate the existence of the participatory element and the contribution towards the FFB production among ISH in Johor. Qualitative approached was used for 9 informants with face to face interview. Purposive sampling was used according to preselected criteria that relevant to a particular research question. This study was conducted in two districts in Johor which is Simpang Renggam and Pontian. From the finding of this study, high participation in social activities were effected oil palm production at the study area. ISH who are actively joined in an association which is in Pontian revealed high FFB production while ISH in Simpang Renggam who are less involved in any association shows low FFB production. As for the results of this study, high level of participation was given a positive impact on the FFB production from 2014 to 2016. The FFB production of ISH from Pontian was increased around 30% and 42% while the FFB production for ISH from Simpang Renggam, with lower participation level, was decreased by 2.57% and 23.6% from 2014 to 2016. This is because the informants from Simpang Renggam tend to have very limited input, knowledge, and skills if compared to an informant from Pontian who had actively been a part of community participants and absorbed abundant of knowledge from the association activities. The study indicates that high participation level among the smallholders was given positive impact towards the FFB production.

Keywords: Social capital, oil palm, FFB production, independent smallholders

Introduction

Palm oil is the leading edible oil traded in the world market. Both Malaysia and Indonesia are the world's largest exporters of palm oil. In 2007 Malaysia was contributed 83.5% of the production and 89.6% of the world trade in palm oil (Arif Ms. 2009). There are lots of factors can cause agricultural productivity to increase or decrease. Some factors, like weather, are out of control of the farmer or smallholder. Unusual weather

patterns, such as drought, a prolonged rainy season, and other factors, can ruin crops and bring productivity down. Besides agriculture practices, land and weather factors, social capital also play an important thing where it will contribute to the higher production and income as well. Different levels of human and social capital may interact to produce joint effects on productivity. When social capital interacts with human capital, there is a transfer of knowledge that creates higher productivity.

Smallholders account for 40% of plantation ownership, with many being allocated by the Government for settlement plots (Basiron, 2007 and Teoh, 2010). They have played a significant part in the palm oil industry. Smallholders can be divided into independent smallholders and organized smallholders (Idris Omar, 2009). Independent smallholders always work independently without getting direct assistance from the government and private enterprise (Suleha, 2013). However, Independent smallholder only constitutes 876,252 hectares or 14% of the total area planted with oil palm that was owned by 220,024 independent smallholders in 2015 which represent 14% of total independent smallholders in Malaysia (MPOB, 2015).

The broad objective of this study is to investigate and explore the existence of participatory elements in social capital and its contributions towards the oil palm production among independent smallholders in Johor. The idea is based on Robert Putnam 1993 theory of social capital, where he defined that the efficiency of society can be improved on social capital elements which included trust, norms, participation and networks. It was also defined that social capital is a broad term containing the social networks and norms that generate shared understandings, trust, and reciprocity, which underpin cooperation and collective action for mutual benefits, and creates the basis of economic prosperity. Hence, this research attempts to seek the answers of how participation can contribute to the oil palm productivity among independent smallholders in the study area.

Methodology

The study was carried out in Johor which has the highest number of independent smallholders in Peninsular Malaysia. There were two districts had been selected for this study which is from Simpang Renggam and Pontian. A qualitative approach with the in-depth interview was conducted for this study. There were nine (9) informants were interviewed and purposive sampling was used according to preselected criteria that relevant to a particular research question. The interview consists of social capital elements that seek to answer the set of objectives. The interview was recorded using notes and recorders. The informants including independent smallholders with the farm area less than 40.6 hectares with higher and lower FFB production, authorized persons in the village (JKK) and the extension agents.

Data analysis for qualitative approach consists of data processing which includes listening to the recorded voice interviews with the smallholders transcribing in Microsoft Word, saving in a computer file, reading and re-checking the transcribed verbatim, reading notes from the participant observation done and developing categories and relationships from data gathered.

Literature Review

The concept of social capital has a long history in the social sciences. From the previous study, there are lots of researchers defining and introducing the concept of social capital. Putnam (2000) introduces the idea of social capital in terms of relations or interdependence between individuals: ‘...social capital refers to connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise

from them.’ Participation represents a move from the global, as partial, top-down strategies that dominated early development initiatives to more locally sensitive methodologies (Storey 1999). Midgley et al (1986) suggested that the historical antecedents of community participation include: the legacy of western ideology, the influence of community development and the contribution of social work and community radicalism. According to Holcombe (1995), acknowledgment of the importance of participation grew out of the recognition that the worlds’ poor had actually suffered as a result of development and that everyone needs to be involved in development decisions, implementation, and benefits. Chamala (1995) identified efficiency benefits from participation, stating that ‘involving stakeholders and empowering community participants in programs at all levels, from local to national, provide a more effective path for solving sustainable resource management issues’. Participation enhances project effectiveness through community ownership of development efforts and aids decision-making (Kelly and Van Vlaenderen 1995; Kolavalli and Kerr 2002). However, barriers to participation may include professional elitism, time and financial costs, lack of interest and skills among proponents and planners, and uncertainty about the results of public involvement (Jaffray, 1981: 6 cited in (Sarkissian, Walsh et al. 1997) page 23).

Some people may have less human capital but more social capital, or vice versa. In some problem solving interacting with others can contribute directly to productivity by finding viable solutions.

Result and Discussion

A study conducted by Knack and Keefer (1997), Temple and Johnson (1998) said that trust and engagement / social participation is closely linked to economic development. From the finding of this study, high participation was revealed a positive impact on the FFB production. There is a good relationship between participation and trust elements for this study as said by Putnam (2000) where the percentage of trustees will increase slightly with the level of activity. Based on this study, the participation can be divided into two (2) category which is high participation and low participation. Adeola S. (1994) defined participation as the active involvement of subordinates of followers in the making of decisions that directly affect them in the workplace. Participation in decision-making is generally regarded as a sign of enlightened and democratic management. It may be through of the giving and receiving of information, achievements and suggestion and the sharing of experience among members of an organization.

As said by EA2, there is a lot of information and guidance were given to the smallholders regarding oil palm issues such as pest and disease control, weeding management, manuring technique etc. but, there is not easy to convince the smallholders to apply and adopt the technique as recommended.

“...Yes, it was my responsibility to inform and advise them with the right technique of oil palm manuring, weeding, and how to control the pest and disease problems. But, it depends on individual acceptance regarding this issue. The problems always come when they (smallholders) are assumed that extension agent is too young to guide them regarding the oil palm plantation. That would be one of the issues that we have to face as an extension agent in disseminating the information...” (EA2, March 2016).

“...The biggest challenge is how to influence the smallholders to accept and apply the new technologies released by the oil palm agency...” (EA1, Oct 2015).

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The competency of extension agent should be strong enough to ensure that the information is received by the smallholders without fail. For that reason, Malaysian Palm Oil Board was provided suitable and related courses for all extension agents to confirm that they are very competent in order to disseminate the information.

OPISH1 explained that there is no issue in decision-making or any disorder on the extension agent suggestion and guidance because they are well trained and talented.

“...So far we really need an advice from the extension agent regarding farm issues. We believe that the extension agent and the agency are capable enough. They’re showing their competency through the program that was organized here such as the *seminar*, demonstration plot and the provided seedling through the government scheme that can really help us to increase our palm productivity...” (OPISH1, Oct 2015).

“...Besides giving an information to smallholders, we also had attended certain related courses that organized by Malaysian Palm Oil Board before we are allowed to assist the smallholders in oil palm plantation issues...” (EA2, March 2016).

From this study, it can be assumed that high participation can be defined as an individual who had joined the activities that can be affected and influenced their social life as well as their productivity. The benefit of being participated will generate positive and efficient individual behavior that contributed to the best resulted in living and economic impact. Lundgren (1984) says that the intent of participation as with many leadership approaches is to inspire high productivity and maintain a satisfied workforce. This concept is contingent on the presumption that participation will increase satisfaction, stimulate interest and thus provoke high productivity.

Being participating in any association will actually have a positive and negative impact depends on the activity goal and individual intention behavioral. In this study, the beneficial impact and the objectives of the participants need to be considered in line with the main target of independent smallholders which is to gain higher and better FFB production. Gurin, Veroff and Feld (1979) stated that participation is a middle-class value, and grows out of the prior expectations of those being supervised. However, an extra alternative needs to perform to achieve the target goal. Vroom (1964) said that there are two (2) differences in participation definition. First, he calls “psychological” (you think you are participating in the decision that affects you), and second is objective” (you actually participate strongly in the decisions that affect you whether you know it or not).

Based on the finding, it clearly showed that informant for a high level of participation revealed better production performance compared to informants with a low level of participation as mentioned by most of the previous study regarding the correlation between participation level towards the productivity and economic impact. As for the results of this study, high level of participation was given a positive impact on the production of oil palm smallholders in Pontian compared to the independent smallholders in Simpang Renggam. Table 1 showed the percentage of programs that was joined between the high participation informants (OPISH1 and OPISH2) and low participation informants (OPISH3 and OPISH4). Based on the table, the FFB production of independent smallholders from Pontian was increased around 30% and 42% in 2016 while the FFB production for independent smallholders from Simpang Renggam, with lower participation level, was decreased by 2.57% and 23.6%. The result also showed that the informants from Pontian are very active in social or community programs such as *gotong-royong* and political activities. Approximately 90% of the program is more emphasis on

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general issues rather than farm management issues (only 10%). They are preferred to discuss and talk about social issues, community welfare, the village etc. Even though the FFB production for OPISH 1 is lower than the FFB production from OPISH3 and OPISH4, but based on the estimated yield profile (Table 2), it showed that the FFB production potential for 5 years palm is higher at 22 tonnes/ha/year and lower at 13 tonnes/ha/year. Based on the interview, EA 1 had mentioned that OPISH 1 did a replanting in 2013.

“...She also was applied an assistance scheme and start to replant in 2013.”(EA1, Oct 2015).

An oil palm with aged 25 years and above are reluctances to replant to avoid short-term losses of income due to unproductive palm (NKEA, 2010). The average FFB yield for palm tree will increase rapidly from 2 to 8 years and will be at its maximum about 19 tonnes/ha/year at the age of 13 years (Figure 1). Thereafter, the FFB yield will decrease gradually to below 15 tonnes/ha/year at the age of 25 years and continue to decrease after that. It can be concluded that oil palm trees exceeding 25 years of age have a low productivity (Mohd Noor Mamat, 2008). Oil palm tree is not economical to be retained and maintained as the cost of FFB production will increase in terms of harvesting and collection (Ayat et al, 2008). So, with the information and awareness that OPISH 1 received through the social participation, she was chosen a right decision to do replanting to maintain and increase the palm production. Replant a low production palm can help to increase the average production to 26 tonnes per hectare per year by 2020 (NKEA, 2010).

While the informants from Simpang Renggam only spends about 10% in social activities and the rest of 90% was allocated for monitoring and managing the farm. Even though farming is their main priority compare to others activities, but the FFB production still showed a slight decrease from the year 2014 to 2016. The target of Malaysia independent smallholder FFB production by 2020 is 22 tonnes /ha/year (NKEA, 2010). Even though the productions from Simpang Renggam are close to the Malaysia target by 2020, but based on estimated oil palm yield profile as showed in Table 2, there are still not represented a higher productivity level (OPISH3 and OPISH4). While informants from Pontian (OPISH 1 and OPISH2) showed an improvement from low to high yield profile in 2016.

From this study, it can be assumed that informants who had low participation level of being participated in social programs, political or agricultural programs tend to be an ample time to manage their farm and supposed to gain better productivity compared to informants with a high level of participation. However, OPISH3 and OPISH4 are still incapable to achieve good FFB production compared to informants from Pontian even though they had spent more time on the farm. This clearly showed that to gain good FFB production, smallholders should have a very good skill, technique, knowledge, and experiences. All of this element can't be achieved without being participating in any knowledge platform as mentioned by Adeola S. (1994) where community or organizational program is a very good platform for everyone to gain an extra knowledge and skills. So, from here we can see that the FFB production performance for OPISH3 and OPISH4 was decreased from 2014 to 2016 because they are less guidance and unconscious regarding the best agricultural practices that was recommended.

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Table 1: Programmed joined by the independent smallholders with high and low participation category

OIL PALM SMALLHOLDER	CATEGORY	AGE OF PALM	FFB PRODUCTION (tonne/ha/year)		PROGRAMMED			FARMING
			2014	2016	Community programme	Political activity	Farm Management (Fertilizing, Weeding, Harvesting, Assistonsesce Scheme for Smallholders etc.)	
OPISH1	High participation	5	15.5	22.0	60%	25%	5%	10%
OPISH2		5	20.0	26.0	50%	20%	5%	25%
OPISH3	Low participation	15	28.71	27.99	10%	-	-	90%
OPISH4		11	28.99	22.14	10%	-	-	90%

Table 2
Estimated Oil Palm Yield Profile

Age of palm	FFB yield profile (t ha ⁻¹ yr ⁻¹)		
	Low	Medium	High
3	4.6	8.0	10.5
4	8.8	12.0	15.5
5	13.1	18.0	22.0
6	17.1	22.0	26.0
7	20.4	26.0	31.0
8	21.4	27.0	32.5
9	22.4	28.0	33.5
10	22.4	28.0	32.5
11	21.4	27.0	31.0
12-15	19.5	25.0	31.0
16-20	18.5	23.0	28.0
21 -25	16.0	21.0	25.5
Average	17.5	22.4	27.3

(Source: Kushairi A et al., 2011)

Impact of Association Activities towards FFB Production

Involve in any association program or social activity can be categorized as a part of participatory manner. Association can be defined as a joint of an action organization. Any business, professional, and community leaders recognize that many of their common goals can be achieved more quickly and economically through joint action than through individual action. Associations would provide members with tools to more effectively conduct their businesses or practice their professions. The association is also known as a non-profit organization where there are neither government nor business sector. It also derived a variety of names including the not-for-profit sector, the third sector, the independent sector, the voluntary sector, or the social sector. Instead, these groups are dedicated to a specific mission.

This study was discussed regarding the participation impact towards independent smallholders FFB production. From the finding of this study, high participation was revealed a positive impact on the FFB production. There is a significant relationship between participation and trust elements as said by Putnam (2000) where the percentage of trustees will increase slightly with the level of activity. The more people trust each other the highest participation level will achieve. The interaction between the participant was given a good benefit in terms of knowledge and experience through the changing of new ideas and work as problems solving platforms. Time provision for being a part of participation is not a barrier, not even a constraint for smallholders in monitoring and managing farm because they are only allocated about two to four hours' time for the social or community activity and the rest left time for managing their farm.

The common activities that were developed in the village are like *gotong-royong*, political, the welfare, the competition etc. They have to plan the collective time between managing the farm and other activities and lots of benefits have been gained from the participation. Even though the activities are focused on social issues, the knowledge, perception, and ideas from a different point of view revealed good impact to the individual. Interchange ideas and opinion were being good practices to increase smallholders skills

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and knowledge. Furthermore, participation also will enhance job effectiveness through community ownership of development efforts and aids decision-making (Kelly and Van Vlaenderen 1995; Kolavalli and Kerr 2002). Problems can be solved easily by providing an option or right solution for any issues from many aspects of brilliant ideas. There are lots of best solutions will be highlighted from the impact of participation.

“...It was good to meet with people that come from a different job profession. The ideas from them sometimes are beyond of our thinking and realistic to be used. Their experiences and background were convincing me to accept the idea or suggestion...”(OPISH2, Oct 2015).

The knowledge or input would be very limited if we are less joint any social programs. There are a few statements from OPISH1 and OPISH2 regarding their activities or program that they have participated besides doing oil palm plantation.

"... I had joined many activities....Some of them are like a security committee and political members. I also had been a kindergarten teacher in 2008 and members of *Persatuan Peladang*. If there is a chance, I want to get involved in all suitable posts and activities in this village...hahaha (laughing)...like *Marhaban*, *Yasin* and all religion classes. I am happy to be apart of them. Normally the Quran classes will be held in 4 times day per week from Monday to Thursday at our *surau*. While for the village committee meeting, it will be held quarterly. "(OPISH1, March 29, 2016).

"...There are a lot of activities that I had participated such as village committee members, mosques committee members, Healthy Kitchen association and so on... " (OPISH2, March 29, 2016).

OPISH2 also was informed that too much involvement in social activities will affect the best quality time with friends and neighbors as well. This is supported by the JKK and EA1 statement by saying that,

“.....Yes....it is true. There were a few times I have came, but your son always informed that you are not around and attending a meeting or outside programmed....” (EA1, March 2016).

“....I really appreciated the commitment given by these two (2) persons. Even though they are very busy managing their farm, but they still allocated their free time to join the programme that proposed by the committee” (JKK1, March 2016)

From the above statements, we can say that OPISH1 and OPISH2 is a very active informant based on their participation performance at their village. This is agreed and supported by the head of the villagers (JKK) and extension agent (EA1) from that area. As mentioned by Knack and Keefer (1997), Temple and Johnson (1998) and Lundgren (1984) stated about the linked between social capital and the economic impact, the individual with high level of participation will contribute to the high level of social capital that lead to a good economic impact on the good performance of job effectiveness. However, the informants from Simpang Renggam who are more focused on their farm activities and have a low participation level shows different concern where they are not really interested to involve neither social programmed nor farm programmed. Farm program is the program that organized by a third-party body, such as plantation agency that related to their farm purpose. Based on the interview with informants from Simpang Renggam, they have said

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that there are no any related programmed regarding farm management issues were organized at their village.

‘...I’ve preferred to spend my time managing the farm rather than joining the unrelated programmed that proposed by the community. If possible, I want to join a program like an oil palm *seminar* or the farm management technique...’ (OPISH3, Oct2016).

‘..... Association??? Not so many.. I am busy managing my farm ... it was the only source of our income, so I must be liable towards my farm condition....’.(OPISH3, Oct 2016).

‘...I’ve just do my farm activities like manuring, weeding, and harvesting. I don’t have so much time to get involved with my society like the others...if I busy attending social activists who want to monitor my farm??? You have to be good to your farm, then you will get your gain....hahaha’ (OPISH4, Oct 2016)

‘...I’ve preferred to spend my time in my farm rather than being participated in any social activity.....’ (OPISH3, Oct 2016).

And this is supported by the extension agent (EA2) and the head of villagers (JKK) by saying that;

‘...Actually, so far we don’t have any programmed or seminar that related to oil palm management for Simpang Renggam yet. But we have planned to organize *One Day Course* program for them by next year.....’ (EA2, Oct 2016)

‘...There is no oil palm seminar had done before here. (JKK 3, Oct 2016)

This kind of barrier or situation will cause a limitation effect towards the opportunity among the smallholders to learn and absorb the input or new ideas from the oil palm front-line expert. The control body, especially the extension agent has to be alert about this issue and take the corrective action to ensure all the technologies and technique regarding an oil palm plantation received by the smallholders. From the finding, it can say that the informants from Simpang Renggam tend to have very limited knowledge and input, especially in plantation management compared to an informant from Pontian who had actively been a part of community participants. They only based on their traditional knowledge and skill because they have never attended any related farm program such as the seminar about the oil palm plantation and guidance or farm practices. Adeola S. (1994) mentioned that participation also is referring to receiving and information, knowledge, changing ideas or opinion and sharing of experiences among the participants. Besides, the impact of participation will affect the level of productivity as well. So, low participation tends to cause low information and low productivity. Furthermore, Powell and Schlacter (1971) suggested that the principal reason for the lack of increase in productivity was that many of the workers were not ready to participate. This is strongly highlighted that there is a significant relationship between participation and productivity.

To extend the understanding of participation, Maslow (1943) said that the organizational environment has been very important in which the individual can achieve maximum self-actualization. It was represented in hierarchical levels of human needs through participation practices. Participation plays a role to complete the level to achieve the target. In this study, if the smallholders or individual feel that the requirement is higher, they will definitely be participating and attending the program especially in terms of farm and oil palm management issue. They will look into the base needs regarding the farm and oil palm issues such as the land and the agricultural input. When all the needs are

satisfied, then the participation elements will strongly appear from the developing relationship in a group or community.

The slow growth of oil palm production among independent smallholders in Malaysia would give big impact towards the oil palm industry and it was noted by the government. Implementation of EPP 2: Improving Fresh Fruit Bunch Yield to overcome this issue, were focused on how to overcome the very limited farm size (3.9 hectares per family) and the lack of exposure to the best farm practices by recruiting more extension agent. This is will ensure better extension services to the smallholders by extension officers. From this study, the declining of FFB production among the informants from Simpang Renggam showing that they are still not applying the right and recommended farm practices as suggested by the extension agent. This is probably due to less knowledge, especially regarding farm skills management and the idea or experience from others farm colleague or society. Less participating in social activity will lead to having this kind of issue where they are living under a rock and they do not know the latest issue and what had happened beyond their life.

“...As I’ve mentioned just now, the challenge as an extension agent is to convince the smallholders to make a transformation from their own farm style practices to the right way practices that were recommended by the MPOB such as MPOB GAP (Good Agriculture Practices). Some of them are very hard to negotiate and always arguing on new oil palm technology and technique that we introduced to them...”(EA2, March 2016).

Good Agriculture Practices (GAP) is one of the good and standard guidelines for oil palm smallholders in managing their farm. Smallholders who are not relying on this good practices will tend to have low FFB production because they did not base on the true oil palm management guideline standard. This is one of an extra knowledge that only can be learned from the specific seminar or programmed organized by the right organization such as Malaysia Oil Palm Board or *Pertubuhan Peladang Kawasan*. This knowledge is very important to be learned because, besides social capital, the farm productivity is also affected by several factors such as agriculture extension, farming practice, financial, soil type, climate factors and etc. There is a standard provided by Food and Agriculture Organization (FAO) of the United Nations where GAP is a collection of principles to apply for on-farm production and post-production processes that resulting safe and healthy food and non-food agricultural products. The adoption of the new appropriate technology of planting oil palm has been documented through this standard to be followed by smallholders to ensure high productivity of oil palm could be sustained in coming years. MPOB GAP certification will ensure all smallholders to adopt a basic minimum of 23 practices out of 27 practices required comprising of farm record keeping, adoption of suitable crop and livestock integration, maintaining soft weeds and construct silt pits.

Factors that influence individual participation level

The major factors that influenced the level of participation was clearly stated by Burt (1980) as an employee’s involvement, management commitment and the willingness of the organization to invest their time, effort and money because any changes from an old style of management to a new way that involves employee opinion will take time and money. The economic, social and psychological facts of life have dictated the unassuming factors that influence the practice of participative management in the different organizational setting. It also requires a great deal of commitment from management and the employees, these are the major factors that influence participation. So, based on the above statements, besides smallholder’s role and responsibility, extension agent and the

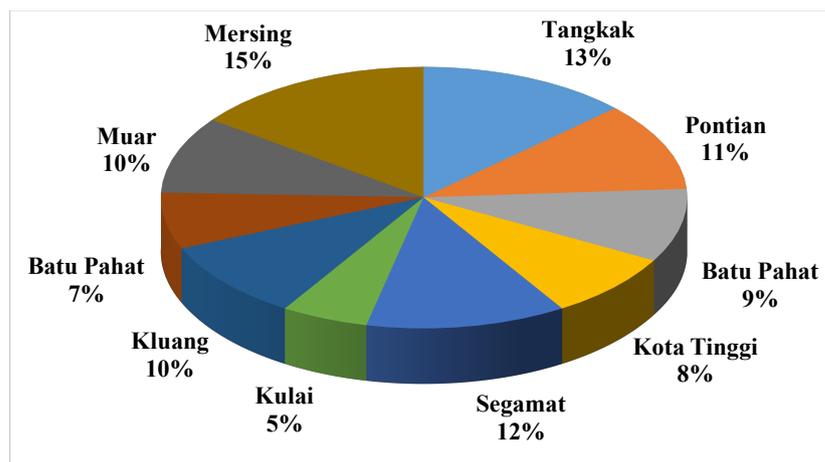
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head of villagers play an important role to help the smallholders improving their FFB production by considering the mentioned factors.

Extension agent should provide very precise and efficient farm management guidance to all oil palm smallholders through technical lectures, demonstration plot, one day course and seminars organized by the Malaysian Palm Oil Board (MPOB). Based on innovation adoption diffusion model, extension plays an important role to facilitate the adoption of new ideas and practices or to influence the rate of diffusion and adoption of innovation of their clients. Adoption of the new ideas is very important in order to ensure the client or target group used and applied the technology to gain better productivity and impact. The adoption of new ideas and practices is affected by several factors. 1) Type of decision involved in adoption; 2) perceived attribute of the innovation; 3) communication channel use; 4) nature of the client system; the extent of the practitioner's effort (Lamble, 1984). As an effort, extension agent was organized a few programmed for independent smallholders like a one-day course for smallholders, seminar and one day course for 30 Tonner Club Members in Johor with different and various types of topics that related to the smallholders. However, as of 2016, the programme doesn't cover the area in Simpang Renggam yet as mentioned by AE2.

Figure 1 shows the percentage participants of a one-day course for the smallholders in Johor, 2016. The course covered a talk regarding farm activity issue or management such as fertilizing, weeding and harvesting. From the figure, it shows that 11% participants are from Pontian and there is no participation from Simpang Renggam as of 2016. Normally, the proposed topics were based on the survey done by extension agent regarding the regular problems faced by the smallholders.

Figure 1: One-day courses Participation for Independent Smallholders in Johor 2016



The impact of good relationship among the extension agent, authorized people and oil palm smallholders

To ensure the success of smallholders FFB production performance in line with the national target which is 22 tonnes/ha/year, extension agent and head of the villagers (JKK) must have a good relationship and corporations in order to ensure all the input and knowledge regarding palm oil management can easily distribute to them. The failure relationship and networking among extension agent, smallholders and JKK will cause the target group failed to get the benefit and managing their farm incorrectly. This relationship plays an important role in order to disseminate all the information that related to the smallholders and to increase the FFB production. Head of the villagers needs to be alert

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for all information and news from any agencies or associations regarding oil palm issues and be able to disseminate the information to the smallholders.

The good relation between smallholders and extension agent is very important to be maintained because this is part of the way how social capital react in order to achieve better and good productivity. Sometimes, this corporation is failed to develop among the individual and was caused the FFB production decreased and the farm condition is not in a well-managed. Back to the concept of social capital, where high social capital tends to cause high productivity as mentioned by Putnam (2000), he said that the percentage of trust will influence the level of activity. People who have high levels of trust will have a high level of activity participated as well. So, the more they have been participating, the more information and knowledge they will absorb and vice versa. While low participation people will tend to have a low level of knowledge or experience compared to high-level participation people. So, they wouldn't be able to manage their farm and handling the problems accordingly as best as knowledgeable and updated people. They don't know how to solve the problems and who wants to refer to. And as a result, the technique that they have been practiced is only based on their limited knowledge and experience without any new ideas, guidance or suggestion.

The social system is one of the ways which influences the diffusion process through social structures and communication channels within those structures. Since people tend to associate with people who are in some respects similar to themselves, an innovation is most likely to move within populations in the subsystem. The tighter the bonds of the individual to the social system, the more likely the individual is to associate with those adopting the innovation. As Malaysia Palm Oil Board has lots of oil palm technology, without good bonding among the people in the diffusion process chain, all the technology can't be adopted by the target group and caused low FFB production performance. Triston C, 2004 stated that the level and type of participation, as well as the level and type of existing social capital, are likely to have different impacts on social capital structures. At the upper level of participation, the social capital building is likely to occur as a result of achievement, interaction, membership and group identity. Ineffective participation can also result in social capital benefits through different mechanisms. However, any changes to government policy or the decision that not to go ahead with a planned project will cause social capital lost from a simple action.

There were a few limitation was noted from this study such as informants' education background where the informants are unable to understanding and give accurate answer and informants age that is expected contribute to the difficulties of this study where the older informants with age range between 50-70 years old are difficult to answering the questions compared to young informants. Alternatively, others sources such as extension agents at the study area or top management of the society have needed to accomplish this study. Besides, some of the informants are part timely managing their farm or holding. So, it was hard to set an interview session with them. Informants who were less involved with the society or other associations in the society are not efficiently giving the required answer. So, informant backgrounds and participation in the society as per stated play important things to ensure all the questions are answered as required and meet the objectives. So, purposive sampling method with face to face interview approach was used to reach the required objectives. As a recommendation, additional informants can be considered to get depth information regarding the issues of study and the use of the quantitative approach to define the level of social capital in the study area can be proposed.

Conclusion

In conclusion, this study indicated that high participation in social activities revealed high productivity among smallholders in Pontian and vice versa for Simpang Renggam's smallholders. Lots of input and knowledge can be adopted for those who have actively joined the association's activities. Skill and knowledge are very important, especially in order how to manage the farm among the smallholders. The time spends on the farm can be reduced with right skill and knowledge. People with very limited skills and knowledge will face difficulties in managing their farm and achieve low FFB production.

References

- Adeola S. (1994), Corporate Decision Making, "Must Workers have a Say" Corporat Diary, Financial Guardian, 4th April p. 23.
- Arif, M., Arif, M. K., & Arif, M. S. (2009). An evaluation of renal biopsy in type-II diabetic patients. *J Coll Physicians Surg Pak*, 19(10), 627-31.
- Ayat, k. Ab. Rahman, Ramli Abdullah, Faizah Mohd Shariff and Mohd Arif Simeh (2008). The Malaysian Palm Oil Supply Chain: The Role of the Independent Smallholders. *Oil Palm Industry Economic Journal*, Vol 8 No.2 (2008) p17-27.
- Basiron, 2007. Palm oil production through sustainable plantations. *European Journal of Lipid Science and Technology*, 109 (4) (2007), pp. 289–295
- Buchy M, Ross H, Proctor W (2000). 'Enhancing the information base on participatory approaches in Australian natural resource management: Commissioned research under the Land & Water Australia's Social and Institutional Research Program.' Land & Water Australia, Canberra.
- Burt .N. (1980) *Leaders' New York*, Harper and Row
- Chamala S (1995) Overview of participative action approaches in Australian land and water management. In 'Participative approaches for Landcare'. (Ed. K Keith) pp. 5-42. (Australian Academic Press: Brisbane)
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Holcombe S (1995) 'Managing to Empower: The Grameen Bank's Experience of Poverty Alleviation.' (Zed Books Ltd: New Jersey)
- Idris Omar & Nursuhana Bahari (2009). *Enhancing Oil Palm Productivity Through Participative Technology Transfer: Malaysian Experience*
- Jaffray, B. (1981). *Public involvement in environmental decision making: an annotated bibliography.*[89 references].
- Knack And Keefer, 1997 S. Knack, P. Keefer. Does social capital have an economic payoff? A cross-country investigation. *Quarterly Journal of Economics*, 112 (4) (1997), pp. 1251–128
- Kelly K, Van Vlaenderen H (1995) Evaluating participation processes in community development. *Evaluation and Program Planning* 18, 371-383.
- Kushairi, A., Siti Nurulhidayah, A., Nur Maisarah, J., Nur Zuhaili, H.A.Z.A., Syhanim, S & Ainul Mardziah, M (2011). *Oil Palm Biology Facts & Figures*. Malaysia Palm Oil Board. pp 67-68
- Lamble, W. (1984). Diffusion and adoption of innovations. *Extension Handbook*, DJ Blackburn (ed.), University of Guelph.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological review*, 50(4), 370.
- Mohd Noor Mamat (2008). *Oil Palm Replanting Policy for Malaysian Palm Oil Industry*. Proceedings of the Roundtable Discussion on Oil Palm: Narrowing the Yield Gap towards Vision 35:25. 26-27 November 2007.

CONTRIBUTION OF PARTICIPATION ELEMENT TOWARDS OIL PALM

- Putnam, 1993 R.D. Putnam. Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press (1993)
- Putnam 2000 R. PUTNAM Bowling Alone: The Collapse and Revival of American Community Simon and Schuster, New York (2000)
- Storey D (1999) Issues of Integration, Participation, and Empowerment in Rural Development: The Case of LEADER in the Republic of Ireland. Journal of Rural Studies 15, 307-315
- Sarkissian W, Walsh K, Cook A (1997) 'Community participation in practice: a practical guide.' (Institute for Science and Technology Policy, Murdoch University: Murdoch, W.A.)
- Suleha Abdul Aziz (2013). FFB Production Performance Among Oil Palm Independent Settlers In Pahang – A Case Study. University Teknologi Mara.
- Temple And Johnson, 1998 J. TEMPLE, P.A. JOHNSON Social capability and economic growth Quarterly Journal of Economics, 113 (3) (1998), pp. 965–990
- Teoh, Cheng Hai. 2010. “Key Sustainability Issues in the Palm Oil Sector.” Discussion
- Tristan C, 2004. Designing Social Capital Sensitive Participation Methodologies Vroom, H. (1964) Work and Motivation New York, Wiley and So