

Theory and Measures Used in Addressing Agribusiness SMEs' Sustainability: A Mapping Review of Recent Literatures

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DOI: 10.6007/IJARBSS/v7-i7/3161 URL: http://dx.doi.org/10.6007/IJARBSS/v7-i7/3161

Abstract

Small Medium Enterprises (SMEs) contribute much to local job security, agribusiness SMEs are even more important as they are responsible for food security too. Realising the importance of agribusiness SMEs, various entrepreneurial incentives are provided by policy makers. However, due to resource and knowledge constraint, they are facing high failure rate and sustainability issues. Lack of sector and scale specific study about business sustainability was found to be the reason for mishandled policy execution and adoption failure among agribusiness small firms. Thus, this review article has the aim to identify and group theories and measures used to address agribusiness SMEs sustainability in recent literatures. A total of 22 articles were selected upon screening and mapping review was conducted. As a result, theories involved in addressing agribusiness SMEs sustainability were institutional theory, resource based view (RBV), stakeholder theory and other theories. Sustainability measures also varies from brand loyalty, business performance, competitive advantage, corporate social responsibility (CSR), critical success factors, innovation, sustainable development and triple bottom lines (TBL).



Thus, this finding is expected to provide summarised information on theories and measures used to address agribusiness SMEs sustainability in recent literatures to boost more sectors and scale specific studies in future.

Introduction

Small Medium Enterprises (SMEs) are the most in number by business count in both developed and developing nations. As reported by Malaysian SMEs Development Plan (2013), SMEs percentage in the national business count of global nations ranges from 97.2% – 99.9% (Table 1). However, scaling of businesses varies among nations, taking into account the economic conditions. Global nations are heading towards standardisation of SMEs definition, but face many obstacles due to international disparities. Globally agreed indicators of business scale determination are (1) Employers number – as it shows the exact size of the firm and (2) Annual Revenue – as it measures financial magnitude of the business (Malaysian SMEs Development Plan, 2013). The global SMEs definition could be summarised as in Table 1.

Agribusiness on the other hand, is any business incorporated in the food supply chain starting at the farm input level up to distribution of products to consumers' possession. As food is an undeniable need for mankind, agribusiness became the largest sector of the world, comprising half of the global assets, labor force and consumers' expenditures (FAO, 2014^a). Majority of farm owners are smallholders, by which only 1% is considered large corporates (FAO, 2014^a). Despite of their smallness, they are accountable for 80% of our food and provide employment to approximately one billion global citizens (FAO, 2014^b). Of these, 29.75% are located in Southeast Asia, 25.82% in East Asia and 20.24% in Sub-Saharan Africa (FAO, 2014^b). Although financial contribution of this sector is minimal compared to services and manufacturing sectors in developing countries, their role in prospering the local economy in term of both job and food security is incontestable. Their contribution to local job market is an important reason for governments to encourage agro-entrepreneurship among the people (Brien and Hamburg, 2014). Akhar et al (2015) also reported that 60% of total labor force is hired by SMEs in Malaysia. Asa and Prasad (2015), on the other hand, reported that SMEs contribute to 67% employment in Europe and sustained more employees compared to their larger counterparts during European economic crisis. Fewer labors per company and stronger owner-worker interdependency of small firms lead to better job security.



Nations	SMEs	Indicators and maximal limit			Base	
	(%)	People	(US\$ Million)		_	
		Employers	Sales	Asset	Paid Capital	And/or
Australia	99.7	<200	-	-	-	-
China (Taipei)	97.6	<200	≤4	-	≤3	Or
EU & UK	99.8	<250	≤66	≤56	-	And & or
Japan	99.7	≤300	-	-	≤3	Or
Korea	99.9	<300	≤30	-	≤8	Or
Malaysia	97.3	<150	≤8	-	-	Or
New Zealand	97.2	<20	-	-	-	-
RR China	99.0	≤3,000	≤48	≤64	-	Or
Singapore	99.0	<200	≤80	-	-	Or
Thailand	99.8	≤200	-	≤7	-	Or
USA	99.7	≤500	≤22	-	-	Or

Table 1: Summary of Global SMEs definition guide.

Source: Malaysian SMEs Development Plan 2013

Apart from that, small businesses are also more flexible in fulfilling current demands, especially on processed food products (Cesar and Calum, 2006). This is because large firms are less likely to invest in highly specialised products obeying The Production Theory approach of maximising profit (Mudavanthu et al, 2011). However, SMEs are found to be more vulnerable to external economic shocks and majority disappears from the industry within 5 years (Akhtar et al, 2015). The failure rate of small firms within 5 years of establishment is 85% in Zimbabwe (Mudavanhu et al, 2011), 23% in Australia and 60% in Malaysia (Noor and Pi-Shen, 2009). Olabisi and Olagbemi (2011) also had reported that this rate is higher in developing countries.

Sustainability Issues among Agribusiness SMEs

From previous studies by Musa et al (2016), Ramukumba (2013), and Yusi and Idris (2016), financial capital constraint causes small agribusiness failure. Various financial initiatives are available for business start-up, including loans. However, fluctuating raw material cost and income, as a result of economic uncertainties, would in turn hinder business expansion and innovation (Musa et al, 2016). However, Halme and Karpela (2014) reported that firms with good human capital could survive from financial uncertainties with good human capital. The experience and capability of both owners and employees in adapting to market changes would lead to both product and process innovation of a small business (Brien and Hamburg, 2014). Noor and Pi-Shen (2009), on the other hand, agreed that knowledge effects managerial decision and relational success among stakeholders within a business. For instance, salespersons with higher education were found to attract and engage with more customers (Musa et al, 2016).

As agribusinesses are increasingly exposed to public eye (Friedrich, Heyder and Theuvsen, 2013), apart from human resource utilization within a firm, relationship of the firm with its customers and society is equally important. As evidence, Akhtar, Ismail and Hussain (2015) found that lack of personal contact and close relationship with customers are the reason for



small agribusiness failure. Societal conflict also could lead to agribusiness SMEs failure (Heineman et al, 2013). Societal conflicts were found to give huge impact on agribusiness sustainability, especially on palm oil smallholders in Malaysia (Nurliza and Dolorosa, 2017; Martin et al, 2015) and Indonesia (Yusi and Idris, 2016). In addition, Musa et al (2016) agreed that social perception and family support effects decision making skill execution of the owner. In other words, even if a firm is financially stable and possesses good human capital, it might fail due to neglecting social wellbeing of external and distal stakeholders.

Therefore, in order to ensure agribusiness SMEs sustainability, proper understanding and execution of business sustainability measures is crucial to avoid further deviation of government initiatives. According to Wei-Loon, Omar and Sa'ari (2015) agribusiness SMEs owners are less active in sustainable management due to self realisational and motivational challenges which rises from unclear guide regarding business sustainability. Apart from that, most of previous studies addressed the underperformance of SMEs, especially in developing countries though huge investment were spent to support their growth and development (Musa et al, 2016; Nurliza and Dolorosa, 2017; Akhtar et al, 2015; Akhtar, Ismail and Hussain, 2015; Tuan Haasan, Yaacob and Abdullatif, 2014 and Wei-Loon, Omar and Sa'ari, 2015). According to Asa and Prasad (2015), failure of government investment in agribusiness SMEs development could arise from lack of sector-specific studies. Thus, issues and challenges of a sector might be overlooked when small business development plans are conducted in general. Therefore, in order to optimize the role of agribusiness SMEs in prospering domestic economy, sector specific knowledge regarding small business sustainability is important for both policy makers and business owners. Consequently, this article aims to identify and categorise theories and measures used in addressing agribusiness SMEs' sustainability in recent literatures.

Methodology

"Small agribusiness sustainability", "Agriculture SMEs sustainability", and "Sustaining small agribusiness" were used as keywords to search relevant articles in Google Scholar site. Only recent studies (2013 onwards) involving small scale agribusinesses were selected for review. All studies selected are prompt to open access in the web. As a result, 22 articles from various countries, including Malaysia, Namibia, Greek, Ireland, Germany, Nordic countries, United States, Indonesia, South Africa, Pakistan, Sri Lanka, and Thailand were reviewed for the theory and measure used to address business sustainability. As this review article's target is to seek and sort theories and measures, systematic mapping review method was selected. Mapping review is suitable to map out and categorise existing literature and completeness of searching is determined by time/scope constraints (Grant and Booth, 2009). In case of this article, as limited studies are conducted regarding agribusiness SMEs sustainability, only 22 articles are reviewed after screening. The review results were categorized and tabulated as in Table 2. Then, each theories and measures involved were critically discussed.

Findings

The theories and measures used in addressing agribusiness SMEs sustainability in recent literature could be tabulated as follow.



Table 2: Theories and measures used in addressing agribusiness ASMEs sustainability in recent literature.

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		Stakeholder Theory	Sustainable development
		Institutional Theory	Sustainable Development



(2016)		
Nurliza and Dolorosa (2017)	Institutional Theory	Sustainable Development
Wei-Loon, Omar and Sa'ari (2015)	Sustainable entrepreneurship	Triple Bottom Line
Abdul Rashid et al (2017)	Sustainable manufacturing practice	Triple Bottom Line
Akhtar et al (2015)	Resource Based View (RBV)	Triple Bottom Line
Akhtar, Ismail and Hussain (2015)	Null	Triple bottom line
Heinemann et al (2013)	Null	Triple Bottom Line
Martin et al (2015)	(New) Institutional theory	Triple Bottom Line
Wei-Loon and Abdul Majid (2013)	Sustainable entrepreneurship	Triple Bottom Line

Theories Involved in Recent Literatures on Agribusiness SMEs Sustainability Institutional Theory

Martin et al (2015) had applied the Neo-Institutional Theory to analyse the factors that influence the growth, development and stagnation of micro-sized palm oil producers. This theory is an adequate measure to study the influence of historical and socio-political factors on current economic behaviors (Delmestri, 2009; Hodgson, 2006; North, 1994; Powell and DiMaggio, 1991). The behavioral rules can be either formal or informal, but is a norm practiced by actors within the field. An example is the Roundtable for Sustainable Palm Oil (RSPO) guideline, which is obeyed by the participants. Nurliza and Dolorosa also used the similar theory but with a different guideline, the Indonesian Sustainable Palm Oil (ISPO) standard. Owners who obey the guidelines provided by the local authority are admitted to conduct a sustainable business. Meanwhile, Musa et al (2016) used the sustainable livelihood framework (SLF) which was introduced by the Brundtland Commission on Environment and Development to combat rural poverty. SLF is ideal to study the effect of a business on the financial, social and human capital. In order to be sustainable, a firm should balance the development of all these three capitals. Institutional theory based approach in evaluating sustainability of a business is objective and easily judged. However, the scope of interest would be limited and vary according to socio-political environments.



Resource Based View

A resource is anything which could be thought as a strength or weakness of a given firm (Wernerfelt, 1984). Unique, immobile resource of a firm ensures its competitive advantage in creating value and gaining income from it (Raziq and Wiesner, 2016). Resources of a firm could be tangible and intangible. Akhtar et al (2015) treated intellectual capital (IC) as an intangible resource that a sustainable firm should possess to create value within limited resources and minimal impact on the environment. In addition, Sachitra and Sion-Choy (2017) had identified institutional capital (tangible resource) and dynamic capabilities (intangible resource) impact on competitive advantage of a firm. Tuan Hassan, Yaacob and Abdullatif (2014), on the other hand, reported that proper resource management strategy is crucial for agribusiness SMEs in order sustain during tight business environment. Yusi and Idris (2016) had discussed the importance of rural banking implementation on SMEs' financing, management skills and monitoring efforts. Thus, it could be inferred that management of both tangible and intangible resources are interrelated to encourage each other and lead to the sustainability of the firm.

Stakeholder Theory

Among three main theories, stakeholder theory is the most used theory in reviewed articles. Various stakeholders, including regulatory bodies, firm owner and employers, suppliers, customers and society in general are involved in discussion. Friedrich, Heyder and Theuvsen (2013) used the stakeholder theory to explain the social pressure on product and process innovation of a firm through sustainable management. They suggested that the needs of internal (employees), external (suppliers and customers) and distal (society) should be analysed and fulfilled as optimum as possible to ensure firm sustainability. Meanwhile, Brien and Hamburg (2014) also utilized the stakeholder theory in examining the efficiency of different business training models and their appropriateness to different groups of stakeholders. They had concluded that mentoring can support sustainable development of agribusiness SMEs if mentors are from various backgrounds, possessing general business/ management competences. Knowledge sharing between the firm and society is important to achieve current strategies and create long lasting, beneficial relationship.

In addition, Leyden (2016) utilized the National Systems Entrepreneurship (NSE) to develop a theoretical model of the entrepreneurial environment. In the NSE environment, entrepreneurial activities will flourish in a complex economic environment of social networks, incentives, material support and feedback. Sustainability is evaluated by viewing the critical role of the entrepreneur in operating within this social/institutional context. Any firm that is better designed to cope with uncertainties and create betterment to the entrepreneurial environment would mutually co-exist longer, or in other word, sustainable.

Bourlakis et al (2013) had utilized the stakeholders theory to evaluate the sustainability performance of individual members of the Greek dairy supply chain. As Kolk (2004) argued that any critics or appreciation on sustainability performance would be ambiguous without a comparison, Bourlakis et al (2013) had compared the performance of each stakeholders of the Greek dairy supply chain in terms of efficiency, flexibility, responsiveness and product quality. Winit and Kantabutra (2017) had used the stakeholders theory to explain the relationship



between stakeholders' satisfaction and SMEs sustainability. They had concluded that stakeholders' perceived benefits and happiness influence the stakeholder-company relationship quality which in turn affects the corporate reputation and brand equity of a firm.

Meanwhile, Ong, Salleh and Yusoff (2015) used stake holder theory to examine the relationship between brand experience, trust dimensions (intention and reliability), and customer loyalty on sustainable SME brands in Malaysia. Ramukumba (2014), on the other hand, had stressed the role of government and financial institutions as important stakeholders to address the challenges faced by South African agribusiness SMEs.

Others

Apart from these three main theories, other explanations are also used to address the sustainability of small firms. Abdul Rashid et al (2017) had used sustainable manufacturing practices which include product design and development, manufacturing process, supply chain, and end-life management. Besides that, sustainable entrepreneurship theory is utilized by Wei Loon and Abdul Majid (2013) and Wei Loon, Omar and Sa'ari (2015) to find extent of sustainable development in entrepreneurial activities of SMEs in Malaysia. As this is a new concept in evaluating business sustainability, further clarification on the model is required (Wei Loon, Omar and Sa'ari, 2015). Moreover, Asa and Prasad (2015) used Perren's (1997) sixteen factors for growth and Storey's (1994) three necessary components to identify factors contributing to the sustainability of growth of small firms in developing countries.

Agribusiness SMEs Sustainability measures

Various measures were used in previous studies to address sustainability of agribusiness SMEs according to the study purpose. Those measures are listed and discussed in alphabetical order in this section.

Brand Loyalty

Brand experience affects the brand trust (intentions and reliability) to build brand loyalty (Ong, Salleh and Yusoff, 2015). Repeated purchase and spread of positive word of mouth are the contribution of loyal customers to the business (Zhang and Bloomer, 2008). In addition, Winit and Kantabutra (2017) also used corporate reputation and brand equity in evaluating business sustainability. Apart from generating continuous sales, brand loyalty also reduce the cost of promotion. As SMEs are having limited financial capital, attaining brand loyalty would be a guarantee for them to survive in the industry even during financial hardships (Ong, Salleh and Yusoff, 2015).

Business Performances

Five out of 22 articles reviewed used the business performance attributes to measure sustainability of agribusiness SMEs. Asa and Prasad (2015) separated business performance into financial and non-financial to measure sustainability. The financial performance indicators include sales turnover, operating profit, profit after tax, growth of customer number and increase in productivity. Non-Financial performance is measured by Simon's (2009) Hidden Champions of the 21st century factors, including customer relations/service,



markets/competition, government relations and network, organization, leadership and human resource management, business strategies, product and innovation and internalization. Similarly, Yusi and Idris (2016) also measured small firm sustainability by both financial (capital carrying capacity) and non-financial (extensive marketing, competition and human resource development) performances. In addition, Tuan Hassan, Yaacob and Abdullatif (2014) used a simpler approach to evaluate sustainability, which examines annual income (financial) and owner's satisfaction (non-financial). On top of that, Raziq and Wiesner (2016) used financial sustainability and market-based sustainability outcomes in measuring firm sustainability. According to Simon (2009), firms with good non-financial performance could excel within the industry even if they do not possess financial supremacy. This is because support from stakeholders and shareholders could aid them refurbish and sustain after hardships.

Meanwhile, Bourlakis et al (2013) handled a different approach in measuring business performance, which is through Supply Chain Performance Indicators (SCPI). SCPI includes efficiency, flexibility, product quality and responsiveness. An efficient firm is believed to optimize resource utilization by cost/waste minimization and profit maximization. Apart from that, flexibility in meeting unique need of individual customers is also a sustainability indicator (Gunasekaran et al, 2004). Product quality which includes raw material quality (Lewis, 2005) and traceability (Maloni and Brown, 2006) is another characteristic of a sustainable agribusiness. The role of a sustainable firm do not end with purchase of good product, but also continues up to after sales services, in other word, responsiveness (Shepherd and Gunter, 2006).

Competitive Advantage

A firm's competitive advantage (CAd) is the ability of the firm to offer products and services that meet or exceed customer values, currently offered by its competitors, substitutes and possible new coming businesses (Bhuiyan, 2011; Martinez et al, 2014). Sachitra and Siong-Choy (2017) had found that a firm may have the resources to generate CAd, but the resources are inadequate without support from dynamic capabilities.

Corporate Social Responsibility (CSR)

According to Friedrich, Heyden and Theuvsen (2013), in a management context, sustainability often referred through a corporate social responsibility (CSR) approach. European Commission (2001) had declared CSR as a concept that on a voluntary basis that integrates social and environmental demands into business operations and the stakeholders' relationship. Based on this logic, Carroll (1998) highlighted four responsibilities in order to be sustainable, namely economic, legality, ethical and philanthropic. Friedrich, Heyden and Theuvsen (2013) found that sustainability of business product and process is ensured by implementing CSR.

Critical Success Factors

Ramukumba (2015) had used the critical success factors to measure sustainability of agribusiness small firms in South Africa. The critical success factors isolated by this study are



product quality and ability to attract repeated customer. When a firm is able to cater various needs of its customers and could sustain their purchase, that firm is considered sustainable.

Innovation

Two articles had measured business sustainability by innovation. Halme and korpela (2014) viewed environment and social responsible innovation as the reputational asset of the firm. Responsible innovation could be created with very different combinations of resources, according to their availability. Halme and Korpela (2014) believed that, for a sustainable firm, innovation is possible even in resource scarcity. Martin et al (2015) on the other hand, measured agribusiness smallholders' sustainability by innovation and market success. According to them, a sustainable small firm should be able to operate, create networks, gain access to resources, deliver innovations to customers, get feedback and able to earn uncertain returns.

Sustainable Development

Sustainable development concept is about integrating sustainability pillars into the development strategies. Brien and Hamburg (2014) believed adaptability of a firm to economic conditions as an important criterion of sustainable development. According to them, continuous survival of a firm is determined by its readiness to change their way of doing business and collaborate with other firms. Meanwhile, Musa et al (2016) isolated three capital based measures of sustainable development, namely financial, human and social. Nurliza and Dolorosa (2017), on the other hand, had examined competitiveness and environmental impact of a firm in addressing its sustainability.

Triple Bottom Line (TBL)

Among all measures used, the Triple Bottom Line (TBL- economy, environment and society) is applied in (seven articles) in previous studies. However, only two of them measured all three pillars of sustainability, namely Abdul Rashid et al (2017) and Akhtar, Ismail and Hussain (2015). The sustainable performance indicators of a firm should include appropriate utilization of natural resource, exert minimal environmental pressure, profitable, productive and possess good market share, as well as creates awareness among public (Abdul Rashid et al, 2017). Meanwhile, Akhtar, Ismail and Hussain (2015) implemented a total of 41 items to measure firm sustainability. Martin et al (2015) and Wei-Loon and Abdul Majid (2013) examined only environmental and social performances of firms. They viewed sustainability as the readiness of firms to reduce the impact of business on the environment and social problems. Akhtar et al (2015), Heinemann et al (2013) and Wei-Loon, Omar and Sa'ari (2015) distinctly measured social (organisational sustainability), economic (yield) and environmental (role to solve degradation) performances respectively.



Conclusion

In a nutshell, this study had identified and categorized the theory and measures used in addressing agribusiness SMEs sustainability. Three main theories, institutional theory, resource based view and stakeholder theory (most used) are used to construct the research frameworks. However, the selection of variables and pathway varies according to the study purpose. On the other hand, various measures are utilized to justify sustainability of firm. Among them, business performance indicators were found to be more objective and holistic. As business sustainability is an infant concept, there is ambiguity in understanding among scholars. Thus, this article is hoped to provide a summary of theories and measures available in previous literatures to evaluate and demonstrate agribusiness SMEs sustainability. The limitation of this review is the scarcity of sector specific articles which deals solely on agribusiness SMEs. However, all articles reviewed involved agribusiness SMEs at least as a part of the study sample. In future, more sector and scale specific studies regarding business sustainability, especially examining agribusiness SMEs are expected to emerge.

References

- Abdul Rashid, S.H., Sakundraini, N., Raja Ghazila, R.A., Thuraysamy, R. (2017). The impact of sustainable manufacturing practices on sustainability performance: Empirical evidence from Malaysia. *International Journal of Operations and Production Management*, 37(2): 182-204. Retrieved on July 7th, 2017 from https://doi.org/10.1108/IJOPM-04-2015-0223
- Akhtar, C.S., Ismail, K. and Hussain, M.A. (2015). Social capital and organisational sustainability: Case of Malaysian SMEs. *Recent Advances in Environmental Sciences and Financial development*, 87-91.
- Akhtar, C.S., Ismail, K., Ndaliman, M.A., Hussain, J. and Haider, M. (2015). Can intellectual capital of SMEs help in their sustainability efforts. *Journal of Management Research*, 7(2): 82-97. Retrieved on July 7th, 2017 from http://www.macrothink.org/jmr
- Asa, A.R. and Prasad, N.S. (2014). Analysis on the factors that determine sustainable growth of small firms in Namibia. *International Journal of Management Science and Business* Administration, 1(1): 5-11.
- Bhuiyan, M.S.H. (2011). Tacit sources of competitive advantages of the leading Chinese companies extracted from the longitudinal analysis of Chinese internationalization. *Procedia Social and Behavioral Sciences*, 24(1): 727-736.
- Bourlakis, M., Maglaras, G., Gallear, D. and Fotopoulos, C. (2013). Examining sustainability performance in the supply chain: the case of the Greek dairy sector.
- Brien, E.O. and Hamburg, I. (2014). Supporting sustainable strategies for SMEs through training, cooperation and mentoring. *Higher Educational Studies*, 4(2): 61-69.
- Carroll, A.B. (1998). The four faces of corporate citizenship. *Business and Society Review*, 100(1): 1-4.
- Cesar, L.E., and Calum, G.T. (2006). Business start-up survival challenges and strategies of agribusiness and non-agribusiness entrepreneurs. Agricultural Financial Review. 66(2): 61-75.



- Delmestri, G. (2009). Institutional streams, logics and fields. *Research in the sociology of organisations*, 27(special issue on Institutional Idealogy): 115-144.
- European Commission. (2001). *Promoting a European framework for corporate social responsibility*. Green Paper: Brussels.
- Food and Agricultural Organisation (2014)^a. The state of food and agriculture 2014 in brief. FAO.
- Food and Agricultural Organisation (2014)^b. Global employment trends 2014. FAO.
- Friedrich, N., Heyder, M. and Theuvsen, L. (2013). Sustainability management in agribusiness: challenges, concepts, responsibilities and performance. Department of Agricultural and Rural Development, Georg-August University of Gottingen: Germany.
- Grant, M.J. and Booth, A.A. (2009). A typology of reviews: an analysis of 14 review types and associate methodologies. *Health Information Library Journal*, 26(2): 91-108. Retrieved on July 1st, 2017 from https://mclibrary.duke.edu/
- Gunasekaran, A., Patel, C., and Mc Gaughey, R.E. (2004). A framework for supply chain performance measurement, *International Journal of Production Economics*, 87(3): 333-347.
- Halme, M. and Korpela, M. (2014). Responsible innovation toward sustainable development in small and medium-sized enterprises: a resource perspective. *Business Strategy and Environment*, 23: 547-566.
- Heineman, J.A., Massaro, M., Coray, D.S., Agapito-Tenon, S.Z. and Wen J.D. (2014). Sustainability and innovation in staple crop production in the US Midwest. *International Journal of Agricultural Sustainability*, 12(1): 71-88. Retrieved on July 8th, 2017 from http://www.tandfonline.com/loi/tags20
- Hodgson, G.M. (2006). What are institutions? Journal of Economic Issues, 1-25.
- Kolk,A. (2004). A decade of sustainability reporting: developments and significance. International Journal of Environment and Sustainable Development, 3(1): 51-64.
- Lewis, H. (2005). Defining product stewardship and sustainability in the Australian packaging industry. *Environmental Science and Policy*, 8(1), 45-55.
- Leyden, D.P. (2016). Public sector entreprenenurship and the creation of a sustainable innovative economy. *Small Business Economy*, 46: 553-564.
- Malaysian SMEs Development Plan (2013). Ministry of Finance, Malaysia.
- Maloni, M.J. and Brown, M.E. (2006). Corporate social responsibility in the supply chain: an application in the food industry. *Journal of Business Ethics*, 68(1): 35-52.
- Martin, S., Rieple, A., Chang, J., Bonaventure, B. and Ahmed, A. (2015). Small farmers and sustainability: institutional barriers to investment and innovation in the Malaysian pam oil industry.
- Martinez, J.A., Bornales, J., Zamudio, A.G. and Gaytan, J. (2014). Competitiveness's determinants in the avocado export sector's value chain. *American Journal of Experimental Agriculture*, 43(2): 275-289.
- Mudavanhu, V., Bindu, S., Chigusiwa, L., and Muchabaiwa, L. (2011). Determinants of small and medium enterprises failure in Zimbabwe: A case study of Bindura. International Journal



of Economic Research, 2(5): 82-89. Retrieved on July 15th, 2016 from http://www.ijeronline.com

- Musa, M., Shuib, R., Selamat, N.H., Mohd Isa, S., Osman, I. and Abu Bakar, S. (2016). A study of women micro entrepreneurs in Malaysia: Livelihood strategies and challenges. 3rd Kanita Postgraduate International Conference on Gender Studies.
- Noor Hazlina, A. and Pi-Shen, S. (2009). Dissecting behaviour associated with business failure: A qualitative study of SME owners in Malaysia and Australia.
- North, D.C. (1994). Economic performance through time. *American Economic Review*, 84: 358-368.
- Nurliza and Dolora, E. (2017). Effect relationships on sustainable development of palm oil production for independent smallholder farmers toward sustainable certification system. *Journal of Sustainable Development*, 10(1): 24-33.
- Olabisi, S.Y. and Olagbemi, A.A. (2011). Factors affecting small-scale business performance in informal economy in Lagos state- Nigeria: A gendered based analysis. Lagos: Lagos State University.
- Ong, C.H., Salleh, S.M. and Yusoff, R.Z. (2015). Brand experience, trust components and customer loyalty: sustainable Malaysian SME brands study. *Asian Social Sciences*, 11(26): 252-266. Canadian Center for Science and Education: Canada.
- Perren, L. (1999). Factors in the growth of micro-enterprises (part 1): developing a framework. Journal of Small Business and Enterprise Development, 6(4).
- Powell, W.W. and DiMaggio, P.J. (1991). *The new institutionalism in organisational analysis.* University of Chicago Press, Chicago: US.
- Ramukumba,T. (2014). Overcoming SME challenges through critical success factors: A case of SMEs in the western Cape Province, South Africa. Economic and business review, 16(1): 19-38.
- Raziq, A. and Wiesner, R. (2016). High performance management practices and sustainability of SMEs. Evidence from manufacturing and services-based industries in Pakistan. *Journal of Management Sciences*, 3(2): 83-107.
- Sachitra, V. and Siong-Choy, C. (2017). Relationship between institutional capital, dynamic capabilities and competitive advantage: empirical examination of the agribusiness sector. *International Review of Management and Marketing*, 7(1): 389-397.
- Shepherd, C. and Gunter, H. (2006). Measuring supply chain performance: current research and future directions. *International Journal of Productivity and Performance Management*, 55(3/4): 242-258.
- Simon, H. (2009). *Hidden champions of the twenty-first century: success strategies of unknown world market leaders*. Springer: New York.
- Storey, D.J. (1994). *Understanding the small business sector*. International Thomson Business Press: London.
- Tuan Hassan, T.M.R., Yaacob, M.R. and Abdullatif, N.K. (2014). Sustaining SMEs wood-based product manufacturing through best practices- the case of indigenous entrepreneurs in Kelantan. *Procedia Social and Behavioral Sciences*, 115(2014): 221-234. Retrieved on Jun 30th, 2017 from http://www.sciencedirect.com



- Wei-Loon, K. and Abdul Majid, I. (2013). Sustainable entrepreneurship among small and medium enterprises (SMEs) in Malaysia. *International Journal of Economics, Finance and Management*, 2(4): 286-290. Retrieved on July 5th, 2017 from http://www.ejournalofbusiness.org
- Wei-Loon, K., Omar, R., and Sa'ari, J.R. (2015). Factors influencing propensity to sustainable entrepreneurship of SMEs in Malaysia. *Procedia-Social and Behavioral Sciences*, 172(2015): 570-577. Retrieved on July 5th, 2017 from http://www.sciencedirect.com
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2): 171-180.
- Winit, W. and Kantabutra, S. (2017). Sustaining Thai SMEs through perceived benefits and happiness. *Management Research Review*, 40(5): 556-577.
- Yusi, M.S. and Idris, U. (2016). Rural banking: the strategic solution in capital strengthening and performance of micro and small agribusiness enterprises in South Sumatera Indonesia. *Journal of Internet Banking and Commerce*, 21(2): 1-18.
- Zhang, J. and Bloemer, J.M.M. (2008). The impact of value congruence on consumer-service brand realtionships. *Journal of Services Research*, 11(2): 161-178.