International Journal of Agriculture Innovations and Research
Volume 4, Issue 3, ISSN (Online) 2319-1473
Manuscript Processing Details (dd/mm/yyyy) :
Received : 29/12/2014 | Accepted on : 07/01/2015 | Published : 26/12/2015

Partnership Perspective on Green Agriculture Products Supply Chain

Chao-Chen Hsieh
Department of International Business,
Chang Jung Christian University, Changda Rd.,
Gueiren District, Tainan City 711, Taiwan (R.O.C.)
Email: hsieh104@mail.cjcu.edu.tw

Jun-Zhi Chiu
Graduate Institute of Hospitality Management,
National Kaohsiung University of Hospital and Tourism
Songhe Rd., Xiaogang Dist., Kaohsiung City 812, Taiwan (R.O.C.)
Email: jun-zhi65@mail.nkuht.edu.tw

***Abstract* – The purpose of this study is to explore the relationship between partnership and green supply chain management. The key point of this relationship is that how trust and commitment can positively impact organizational performance. This paper was applied the qualitative research approach as the methodology. The results find that the green supply chains' organizations must pay attention on the connection of the all chain's companies in order to cooperate efficiently and effectively and have higher performance include the sale of excess inventory, sale of scrap and used material, environmental auditing programs. Hence trust affects the green agriculture products supply chain (GAPSC) partnership in its signal firm, not only affects environment-related project but also develops performance. Additionally, GAPSC partnership's commitment example is that effective coordination of green agriculture products design, manufacturing, packing, and distribution throughout the entire product lifecycle total quality environment management.**

***Keywords* – Agriculture Products, Green Supply Chain, Partnership, Trust and Commitment.**

I. INTRODUCTION

In early environmental management frameworks, managers were involved only at arm's length. Separate organizational units had responsibility for ensuring environmental excellence in new product development, operations, quality management, logistics, marketing, regulatory compliance and waste management. Today, this has changed. As in the quality revolution of the 1980s and supply chain revolution of the 1990s, it has become clear that the best practices call for integration of environmental management with ongoing operations. The supply chain is a global network used to deliver products and services from raw materials to customers, through an engineered flow of information, physical distribution and cash. Supply chain partnership requires trust and commitment for long-term cooperation along with a willingness to share risks [17][12]. Partnership can be defined as a complex member interaction channel. In this relationship the members need to trust and cooperative with each other in the way to have this kind of relation the goal is very important because only have the same goal then the members can do anything at the same path toward the goal [5].

The supply network of agricultural products in Taiwan is complicated and unstable. The external negative effects of exhaust emission, noise pollution, waste of resource, traffic congestion, and wastage exist in the process of the agricultural products logistics. The green supply chain of agricultural products is a good operating mechanism. This relatively new expectation for upstream agricultural products suppliers goes beyond the more traditional requirements of their customers to reduce logistics costs and improve service quality.

The aim of this study is to explore the following sections: firstly, the dimensions among green agriculture products supply chain, partnership and performance; secondly, based upon the literature and previous studies to propose the research method; and finally, making the conclusion and providing proper suggestions for researchers and regulators.

II. THEORETICAL BACKGROUND

A. Green supply chain management (GSCM)

Green supply chain management (GSCM) practices involve organizations assessing the environmental performance of their suppliers, requiring suppliers to undertake measures that ensure environmental quality of their products, and evaluating the cost of waste in their operating systems [7]. GSCM definition has ranged from green purchasing to integrated supply chain flowing from supplier, to manufacturer, to customer and reverse logistics [26]. Hervani et al. indicated GSCM activities including green design, purchasing, manufacturing or processing, production, marketing, recycling and material source [8]. Srivastava describes GSCM as combining environmental thinking and supply chain management (SCM) and defines it as including product design, material sourcing and selection, manufacturing processes, delivery of the final product to the consumer, and end-of-life management of the product after its useful life [18].

B. Agriculture Products Supply Chain

Green agriculture products supply chain (GAPSC) makes the concept of green, health and environmental protection throughout the agriculture products supply chain, in the product life cycle process from agriculture products design, production, packaging, warehousing, transportation, consumption and waste recycling processing, through green design, green material, green production, green manufacturing, green logistics, green marketing and green recycling and other technical means, produce high yield, high quality, efficient green agriculture products, and advocate green consumption, to ensure quality and safety of agriculture products [25].

C. GAPSC Partnership Perspective

From previous studies, the coordination plays an important role and trust and commitment are the key factors of coordination [19]. In order to clarify the

Copyright © 2015 IJAIR, All right reserved

meaning of coordination, the trust and commitment were needed to discuss as follow.

Trust in GAPSC partnership

Trust is frequently defined as a willingness to take risk [13] and a willingness to rely on an exchange partner in whom one has confidence. Trust exists when one party has confidence in an exchange partner's reliability and integrity [14]. In their attempt to bring trust into the TCA framework, scholars have argued that trust has the important effect of lowering transaction costs. Trust is frequently defined as a willingness to take risk [13]. Trust exists when one party has confidence in an exchange partner's reliability and integrity [14]. The outcome of trust, therefore, is the "firm's belief that another company will perform actions that will result in positive outcomes to the firm as well as not take unexpected actions that result in negative outcomes" [1].

Additionally, Debufalo found across 52 published studies of trust in supply chain relationships (subsuming 96 independent samples and in excess of 69,000 subjects), inter-organizational trust positively impacts outcomes such as continuity, joint responsibility, relationship satisfaction, willingness to invest, and organizational performance outcomes [4]. Analyzing their field data, Beccerra and Gupta categorized both key negative consequences of lack of trust and key positive results from high-trust relationships. Pertaining to negative aspects resulting from a lack of trust, they observed tine emergence of higher transaction costs and agency costs in low-trust relationships [2]. In contrast, a partnership with high trust would enjoy open mind and willingness to take risks. People in high-trust relationships are not afraid to share all information and believe in tile content of the information received. Furthermore, partners with high-trust relationships are more inclined to take risks than low-trust partners. They also indicated that the overall performance would be enhanced if the problems of distrust were reduced [2].

Much of the previous research has been focused on how trust affects the relationships between the organizational actors, not just on how it affects performance [10]. This research has found that firms that have greater trusting relationships are able to cooperate efficiently and effectively for success [10] and ensure to total quality environment management of agriculture products.

Commitment in GAPSC partnership

This study adopts the concept of commitment from Morgan and Hunt [14]who define it as "an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it; that is, the committed party believes the relationship endures indefinitely", and commitment is central to all the relational exchanges between the firm and its various patterns. The above definition has its roots in social exchange [3], marriage [20], and firms. Without commitment, business relationship and subsequent transactions become fragile and vulnerable. Accordingly, enduring commitment is a basic requirement for successful supply chain implementation [9].

However, successful green management is the same with SCM and both require effective coordination of production design, manufacturing, delivery, distribution, and disposal throughout the entire product lifecycle [23]. The key for effective GSCM lies in the development and maintenance of collaborative relationships between a manufacturer and its suppliers [27]. Hence, in the study we adopt the coordination partnership, the trust and commitment, to improve the performance of an individual firm, and to improve the performance of the whole GSCM.

D. GAPSC partnership and performance

Previous study though SCM is the integration of all activities associated with the flow and transformation of goods from new materials, through to the end user, as well as associated information flows, through improved supply chain relationships to achieve a sustainable competitive advantage. The literature is replete with buzzwords such as: integrated purchasing strategy, integrated logistics, supplier integration, buyer supplier partnerships, supply base management, strategic supplier alliances, supply chain synchronization and SCM, to address elements or stages of this new management philosophy [19]. SCM has been defined to explicitly recognize the strategic nature of coordination between trading partners and to explain the dual purpose of SCM: to improve the performance of an individual company, and to improve the performance of the whole supply chain. The concept of SCM has received increasing attention from academicians, consultants, and business managers [19]. In Taiwan many firms have begun to recognize that SCM is the key to building sustainable competitive edge for their products and/or services in an increasingly crowded marketplace especially in GAPSC.

Now companies must assert product stewardship and the strategic capability of pollution prevention in order to achieve sustainable development[15]. Product stewardship requires not only coordinating functional groups within a firm, but also cooperating with suppliers and customers to design for the environment. Zhu and Sarkis indicate environmental performance and economic performance are the constructs of firms' performance in GSCM [26]. Vachon and Klassen found out that firms were able to improve their performances upon sharing environmental required relative information and joint planning environment-related solutions among upstream suppliers and downstream customers [22]. Environmental performance focused on the reduction of polluting substances emissions and environmental improvements, while economic performance focusing on the reduction of manufacturer waste cost and environmental disaster fine. Therefore, GAPSC partnership needs mutually trust and commitment to each other continuously adapt to sustainability demands to create sustainable goal and to improve the performance of the whole GSCM.

III. METHODS

This study used focus group discussion to observe and take note of visual aspects such as respondents' body language and facial expressions while they are given topics to discuss. In the focus group discussion, the pre-

Copyright © 2015 IJAIR, All right reserved

screened responses to each topic are encoded in the study. In the case where establish a group and introduce a GSCM influence on agriculture products through the supply chain (production, preparation/processing, distribution or sale). Focus group should be formed based on the agreed basic plan for the purpose of operating the system. The roles and responsibilities of each agriculture products operator should be clearly defined according to the "basic plan". Secondly, each of the participating agriculture products operator should make in house preparation for implementation GSCM. In particular, the following matters are required: Ensure necessary personnel for the GSCM implementation. Two researchers encoded the interview messages independently to judge participants are positive vs. negative influence and high vs. low trust and commitment. Four focus groups to conduct the discussion. Each group consisted of four pre-screened responses have similar backgrounds or experiences in the labeling management and/or green supply chain management related to agricultural products. Every group discussion lasted around 2 hours. Examples of the key questions included two issues: 1.Would the partnership has positively influence with green supply chain performance? 2. How trust and commitment affect the partnerships' performance? Examples of the key questions included "What is your understanding of the operating mechanism of green supply chain management and influence on agriculture products?", "What kind of policy will be effective for the GSCM and could ensure partnerships' performance of agriculture products?"

III. Result and Discussion

The result found that partnership has positively influence with green supply chain performance. There is a significant correlation between the relationship marketing variables (include trust [30] and commitment [14][31]) and GSCM. The result also found that perceived trust in the supply chain is more effective in influencing the adoption of green supply chain management. Trust like the aforementioned studies had a statistically significant relationship with the implementation of GSCM. Trust was followed by commitment on their influence on the adoption of GSCM. This also aligns with Ukpabi et al. [32].

IV. Conclusion and Implication

The purpose of this study is to explore the relationship among supply chain partnership, green agriculture products, and green supply chain's performance. The key point of this relationship is that how relationship can create the more effective GSCM. There are two research questions have been proposed.

First, GAPSC partnership has positively influence with green supply chain performance

The value chain analysis offers the organizations to increase their competition and implication's direction (Porter, 1985). Due to the digital globalization, in the past decades, the concept of organization function has been changed from inner arrangement became the integration between inside and outside factors of organization. The whole green supply chain should be cooperated among each single part of green supply company in Taiwan. There are several researches disclose supply chains and organizations can gain green capability by being the first to adopt environmental sustainability and implement GSCM practices. For example, Diabat and Govindan studied various drivers that affect the implementation of green supply chains and found that green design positively influences the performance of green supply chains [29].Therefore, the flowing green supply chain system is the key for all different kinds of green supply chain firms [11].

According to the literature and previous studies can indicate the partnership has significant relationship with green supply chain performance such us sharing environmental required relative vision and joint planning SCM environment-related solutions project ….

Second, GAPSC partnership has greater trusting and commitment relationships are able to cooperate efficiently and effectively for success. While some studies such as Zhu and Sarkis [26], Rao and Holt [16] and Green et al. found positive relationships between environmental practices and GAPSC partnership performance [6]. Yet other studies including Zhu et al. [28] suggested that green practices include the sale of excess inventory, sale of scrap and used material, environmental auditing programs, trust affects the GAPSC partnership in its signal firm, not only affects environment-related project but also develops performance, GAPSC partnership's commitment example is that effective coordination of green agriculture products design, manufacturing, packing, and distribution throughout the entire product lifecycle total quality environment management. This point was support by Wu et al. (2011) who found a combination sustained development vision and performance [24].

References

[1] J. C.Andersonand J. A. Narus(1990). A model of distributor firm and manufacture firm working partnerships. Journal of Marketing.54(1). pp. 42-58.

[2] M.Beccerra and A. K.Gupta(1999).Trust within organization: integrating the trust literature with agency theory and transaction costs economics. Public Administration Quarterly. 23(2). pp. 177-203.

[3] K. S. Cookand R. M. Emerson (1978). Power, equity and commitment in exchange networks. American Sociological Review. 43. pp. 721-739.

[4] E.Debufalo (2012). Outcomes of inter-organizational trust in supply chain relationships: A systematic literature review and a meta-analysis of the empirical evidence. Supply Chain Management: An International Journal. 17(4). pp. 377-402.

[5] N. M. Dixon(2000). Common Knowledge: How Companies Thrive by Sharing What They Know, MA: Harvard Business School Press.

[6] K.Green, P. Zelbst,J.Meachamand V.Bhadauria(2012). Green supply chain management practices: impact on performance. Supply Chain Management: An International Journal. 17(3). 1-44.

[7] R.Handfield,S.Walton,R.Sroufe and S.Melnyk(2002). Applying environmental criteria to supplier assessment: a study in the application of the analytical hierarchy process. European Journal of Operational Research. 141. pp. 70-87.

Copyright © 2015 IJAIR, All right reserved

[8] A. A.Hervani, M. M.Helms and J. Sarkis(2005). Performance measurement for green supply chain management. Benchmarking: An International Journal. 12 (4). pp. 330-353.
[9] G. K. Ik-Whan and S. Taewon(2005). Trust, commitment and relationships in supply chain management: a path analysis. Supply Chain Management: An International Journal. 10(1). pp. 26-33.
[10] D. A.Johnston, D. M.McCutcheon, F. I.Stuart and H. Kerwood (2004). Effects of supplier trust on performance of cooperative supplier relationships. Journal of Operations Management. 22(1). pp. 23-38.
[11] G. Lorenzoni and C. B.Fuller(1995). Creating a strategic center to manage a web of partner. California Management Review.37(3).pp. 146-163.
[12] Y.Luo(2003). Industrial dynamics and managerial networking in an emerging market: The case of China. Strategic Management Journal. 24(13). pp. 1315-1327.
[13] R. C. Mayer, J. H. Davis and F. D.Schoorman(1995). An integrative model of organizational trust. Academy of Management Review. 29(3). pp.709-34.
[14] R. M.Morgan and S. D.Hunt (1994). The commitment trust theory of relationship marketing. Journal of Marketing. 58(3). pp. 20-38.
[15] M. E.Porter(1985). Technology and competitive advantage. Journal of Business Strategy. 5(3). pp. 60-78.
[16] P.Rao and D. Holt(2005). Do green supply chains lead to competitiveness and economic performance? International Journal of Operations and Production Management. 25(9).pp. 898-916.
[17] R. A.Ronald(1985). Business process reengineering an electronic products supply chain. The Journal of Supply Chain Management. 35(3). 16-24.
[18] S. K.Srivastava (2007). Green supply-chain management: a state-of-the-art literature review. International Journal of Management Review. 9 (1). pp. 53-80.
[19] K.C. Tan,S. B. Lyman and J. D.Wisner (2002). Supply chain management: A strategic perspective. International Journal of Operations and Production Management. 22(6).pp. 614-631.
[20] L.Thompson and G. B. Spanie (1983). The end of marriage and acceptance of marital termination. Journal of Marriage and the Family. 45.pp. 103-113.
[21] S.Vachon (2007). Green supply chain practices and the selection of environmental technologies. International Journal of Production Research. 45(18-19). pp. 4357-4379.
[22] S.Vachon and R. D.Klassen(2008). Environmental management and manufacturing performance: The role of collaboration in the supply chain. International Journal of Production Economics. 111. pp. 299-315.
[23] R.Venkata (2009). An improved compromise ranking method for evaluation of environmentally conscious manufacturing programs. International Journal of Production Research . 47(16). pp. 4399-4312.
[24] K.-J.Wu,M.-L. Tseng and T.Vy (2011). Evaluation the drivers of green supply chain management practices in uncertainty. Procedia Social and Behavioral Sciences. 25. pp. 384-397.
[25] B.ZhaoandandB.Y. Wang (2013). Research on the integrated system construction of green agriculture products supply chain, International Journal of Automation and Power Engineering. 2(4).pp. 161-165.
[26] Q.Zhu and J.Sarkis(2004). Relationships between operational practices and performance among early adopters of green supply chain management practices in Chinese manufacturing enterprises. Journal of Operations Management. 22(3). pp.265-289.
[27] Q. Zhuand J. Sarkis (2006). An inter-sectoral comparison of green supply chain management in China: Drivers and practices. Journal of Cleaner Production. 14.pp.472-486.
[28] Q.Zhu, J. Sarkis andK.-H. Lai(2007). Initiatives and outcomes of green supply chain management implementation by Chinese manufacturers. Journal of Environmental Management. 85.pp. 179-189.
[29] A. Diabat and K. Govindan (2011). An analysis of the drivers affecting the implementation of green supply chain management. Resources, Conservation and Recycling. 55. pp. 659-67.
[30] S. Hoejmose, S. Brammer and A. Millington (2012). Green supply chain management: The role of trust and top management in B2B and B2C markets, Industrial Marketing Management. 41.pp. 609-620.
[31] L. lrubaiee and N. Al-Nazer (2010). Investigate the Impact of Relationship Marketing Orientation on Customer Loyalty: The Customer's Perspective, International Journal of Marketing Studies. 2(1).pp.155-174.
[32] D.C. Ukpabi, Y.V.Ikaba, C.W. Enyindah andA.R. Idatoru (2015). IOSR Journal of Business and Management. 17(3). pp. 70-75.

AUTHOR'S PROFILE

Chao-Chen Hsieh
is an assistant professor specializes in the supply chain management and network analysis in the department of International Business, Chang Jung Christian University. Her current research areas include agriculture marketing, supply chain management and innovation technology.

Jun-Zhi Chiu
is an assistant professor specializes in the marketing managemenandgreen supply chain management in the Graduate Institute of Hospitality Management, National KaohsiungUniversity of Hospital and Tourism. His current research focuses on marketing management, food & beverage chain industry management and supply chain management.

Copyright © 2015 IJAIR, All right reserved