



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Green supply chain management in sun pharmaceutical industry: Risk and challenges

DHRUVSINH KOSADA

KISHANSINH BARAD

DHWANI BHAVSAR

STUDENT:-PARUL

STUDENT:- PARUL

PROFESSOR: PARUL

UNIVERSITY

UNIVERSITY

UNIVERSITY

ABSTRACT:-

Green supply chain management is the essential element for an enterprise to follow green management strategy. The pharmaceutical industry is mainly used in for transporting life serving outcomes to the public, still the pharmaceutical industry influence the environment by many ways for their material, product and service. The in appropriate disposal of pills by patients, expired and unused medicines. Also in addition to that the release of drugs by pharmacies or household garbage which is in unacceptable manner combined with excessive drugs and by this action, the environment gets influenced. To prevent all these problems, we need to look into environmental responsibilities that lead us to the Green supply chain management concept. Implementing green supply chain is the challenge for pharmaceutical industry as impact of GSCM on the performance of supply chain system has not been studied. This work is done in the view of what are the key challenges and Risk for managers when implementing GSCM. This work can assist the manager or team leader to developing and managing green supply chain initiative in line with sustainability.

KEYWORDS:-

Green supply chain management, Green management strategy, Supply chain initiative, Environmental performance, Risk, Sustainability, Pharmaceutical industry.

Introduction

The supply chain combines all those activities that are associated with the transport of goods for the raw materials phase to the end user. Supporters of business process recognize that significant productivity gains can only be achieved by managing relationship, information and material flow across the company boundaries. In other words, SCM is the management that integrates the physical flow of goods and related information from acquisition to end use, enriching the customers and enriching the economical value.

Carbone Dioxide emissions are considered an important factor in making economical expansion sustainable. In this context, waste and emissions generated throughout the supply chain have become a major sources of serious environmental problems. The Green Supply chain (GSC) emerges as one of the most recent revolution to protect the environment. It not only help to improves the efficiency of the company, but also its profitability. Hence, in developing countries like India, there is plenty of scope to embrace GSCM practices and achieve organizational brilliance. GSCM can become a source of competitive advantages for companies by improving environmental efficiency. Organizations can adopt green best practices and have aboard that other non-green organization can follow. Environmental awareness has become a vital part of an organization's business in achieving its business objectives.

LITERATURE:-

Ming-Lang Tsenga,* , Md Shamimul Islamb :-Study found that analysis of drivers or obstacles to green supply chain management showed that showed a downward trend, while the application of mathematical optimization models to improve decision making to pursue the environmental performance showed an increasing trend. In addition, the study found that due to intensification of global warming and changes in biodiversity, due to intensification of global warming and changes in biodiversity increase pressure from companies to improve environmental performance. is increasing the pressure on companies to improve environmental performance.

Thoo Ai China,* , Huam Hon Tatb:-Increasing attention to the topic of Green Supply Chain Management (GSCM) motivated the writing of this article. The GSCM concept is to integrate environmental thinking into supply chain management (SCM). The purpose of this article is twofold: (i) review the existing literature on the relationship between GSCM, environmental cooperation and sustainability performance, and (ii) propose a reasonable conceptual model to clarify these three variables in Malaysia in The relationship in the context. The results of the study are particularly important for environmental cooperation between manufacturing companies and their suppliers to achieve sustainability performance.

Zhuoyan Qin:- It can be found that the relationship between green supply chain management and corporate performance has been initially studied and explored by some scholars. Most studies have shown that green supply chain management has a positive impact on corporate environmental performance and social performance, but the impact of green supply chain management on corporate economic performance is positive or negative, and there is no unified expression. First, continue to explore the relationship between green supply chain management and corporate economic performance, and clarify whether the impact of green supply chain management on economic performance is positive or negative. The second is to explore the reasons for the inconsistent impact of green supply chain management on the economic performance of enterprises. Is it correct to use traditional supply chain management performance appraisal methods to evaluate green supply chain management performance? Will the current performance evaluation methods lead to inconsistent effects of green supply chain management on the economic performance of the company's? Future research can explore the relationship between corporate performance and green supply chain management from other aspects of corporate performance.

Jamal Fortes:-Manufacturers in the late 1980s went beyond the purpose of this document to briefly review the literature on Green Supply Chain Management (GrSCM) over the past 20 years. The key themes of appearing in the literature are: green operations, green design, green manufacturing, reverse logistics and waste management. However, the key themes that have emerged in the GrSCM literature over the past 20 years are the concepts of ecological design, green operations, reverse logistics, waste management and green manufacturing (Guide & Srivastava, 1998; Srivastava, 2007). This article recommends that researchers pay more attention to qualitative research, such as interviews, to understand stakeholders` different views on green supply chain management.

Noor Aslinda Abu Seman1 , Norhayati Zakuan1 , Ahmad Jusoh1 and Mohd Shoki:-This article aims to briefly review the recent GSCM literature and determine the new direction in this emerging field. The focus of the review is the development of GSCM in developed and developing countries, including all researchers related to the environmental and social sustainability of to achieve operational management and supply chain. It shows that lacks research to examine the adoption and implementation of GSCM practices, especially in developing countries such as Malaysia. Although some studies in the literature discuss the implementation of GSCM on a global scale, including driving factors, practices, and performance, still has very little research on the implementation and adoption of GSCM in developing countries, especially Malaysia.

Zhuoyan Qin:-This article summarizes the relevant literature on green supply chain management, the relationship between green supply chain management and corporate performance, and presents future research trends and questions for future research. This article summarizes the relevant research literature on the impact of green supply chain management and green supply chain management on corporate performance. Most studies have shown that green supply chain management has a positive impact on corporate environmental performance and social performance, but the impact of green supply chain management on corporate economic performance is positive or negative, and there is no unified expression.

Dr Maruf Hasan:- The study will investigate environmental management practices adopted by Australian companies in greening the supply chain, and how these practices affect the environmental and operational performance of these companies. The study is expected to examine the relationship between GSCM practices and the Australian company`s operations and environmental performance. In particular, Study will examine whether adopting environmental practices in supply chain management will lead to positive operating performance for the company. The study will also reveal how the various components of GSCM`s practice affect the environmental performance and operating performance of the company.

This research will be of great benefit because it is expected to provide valuable information about the evolving field of environmental supply chain management and will make a significant contribution to "sustainability. " In particular, the project is expected to provide guidance to Australian organization in implementing environmental supply chain management practices and enhance`s international competitiveness, thereby bringing economic benefits to Australia.

José Antonio Plaza-Úbeda, Emilio Abad-Segura , Jerónimo de Burgos-Jiménez:-Therefore, the supply chain management concept has become "greener" with the development of reverse logistics programs and other practices. The original supply chain management concept is also related to sustainability In the process, several related concepts have helped build the different contributions that have been published. Otherwise, it is convenient to mention the relevance of technology, because like many other areas, technological development provides opportunities to improve the process and achieve better results in the short term. Perhaps deeper contacts between companies and researchers may help achieve this type of management transformation.

Finally, it is necessary to implement the concepts identified in the literature, such as described in some recent work [37], and put them into practice to improve the circular economy (this article is mainly GSCH and RL). In our view, this type of work is necessary to emphasize the extensive work done by other researchers to consolidate the theory of circular economy, and therefore, to overcome the new challenges of sustainability-focused production activities.

M. Ahmed¹, S. Ishtiaque^{1*}, M. M. R. Sarker¹, A. S. M. M. R. Khan¹, A. K. Choudhury¹: The experiment was conducted at farmers' field of On-Farm Research Division (OFRD), Bandarban during Rabi season of 2014-15 to find out suitable combination of hybrid maize and chilli intercropping system to increase system productivity and economic return. The results revealed that maize single row (150 cm x 25 cm) + 3 rows Chilli (50 cm x 40 cm) combination might be suitable and economically profitable for the hilly areas. The result revealed that single row maize (150 cm x 25cm) + 3 rows chilli (50cm x 40cm) combination had higher equivalent yield and economic return than sole crop of maize and chilli. So, this combination might be suitable for improving crop productivity and economic return in the hilly areas.

Kritika Rana^{* 1} and Sanjeev K. Sharma²: Adopting green supply chain management practices has been argued to enhance the environmental performance of many organizations, but its impact on the performance of the entire supply chain has not been studied so far in the context of the Indian pharmaceutical industry. This can prove beneficial to the managers of the pharmaceutical industry to justify the investments made in environmental initiatives and motivate them to voluntarily accept their responsibility towards the environment and society at large. To conclude, this study can prove useful for managers who are suspicious about the positive impact of GSCM practices on performance as a whole. Also, society is in dire need of companies to own up to their responsibilities towards the environment, and society at large and green supply chain management can act as the appropriate method.

Nur Syamimi Zulkefli, Fatimah Mahmud, and Nurhaizan Mohd Zainudin: In recent years, increasing concerns about the environment and sustainability have prompted participants in the construction industry to adopt Green Supply Chain Management (GSCM) in their organizations. Therefore, this document aims to reveal the challenges faced by Malaysian construction companies in implementing GSCM. The study found that, in addition to changing the mindset and culture and the support and oversight of the government, leadership and commitment of top management are the main challenges for construction participants to implement GSCM. Overall, the survey results show that leadership and senior management engagement, change, and regulations are the most critical challenges facing the construction industry in implementing GSCM.

The author believes that the challenges identified in the study and their impact will help practitioners plan appropriate actions and strategies to overcome these challenges and strengthen the activities involved in the implementation of GSCM. This will help organizations cultivate and institutionalize the green culture and lead to the successful implementation of GSCM. Before the successful implementation of GSCM, coordination needs to be carried out among all members involved in the construction chain, as well as industry leaders, governments and consumers. Overall, the survey results show that the leadership and commitment of senior management, mentality changes, and organizational culture and lack of government support Summarize.

GSCM

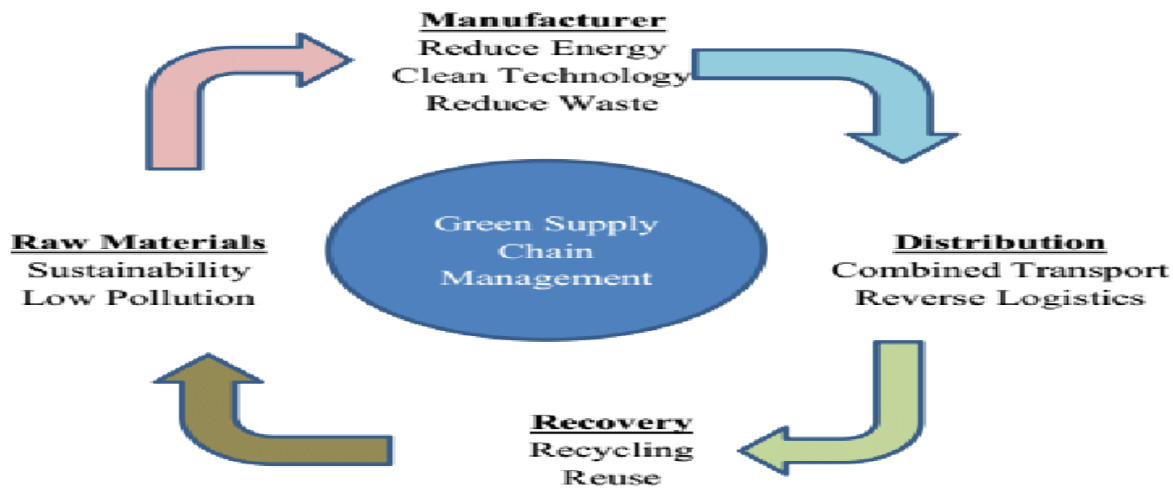
Green supply chain management is defined as "The process of using environmentally friendly inputs and turning those inputs into products that can be recovered and reused at the end of their supply cycle." Life to create a sustainable supply chain. Businesses around the world continue to use deadly chemicals, packaging and shipping practices that release clouds of gas that add to global warming. However, from the extraction and manufacturing of materials to packaging, logistics and distribution, each stage of the supply chain offers opportunities to reduce waste and pollution.

Recycling and the effective and efficient use of resources can make a significant contribution to reducing environmental pollution. GSCM measures not only improve your level of performance, but can also help to protect the environment.

Benefits of GSCM

The impact of GSCM extends to all areas, both tangible and intangible. SCM roles, including environmental and social roles, could be corroborated by GSCM traits, which in turn could be categorized as material, immaterial, and emotional. From a materialistic point of view, GSCM would help to reduce environmental impact, reduce costs of suppliers, reduce costs for the manufacturer, reduce operating costs for the customer and reduce the consumption of resource for society.

From an immaterialist point of view, GSCM would be cooperative to overcome prejudice and skepticism about the environment, reduce rejects for the suppliers, facilitate production for the manufacturer, create a suitable situation and happy environment for the customer and satisfy him for social advancement. GSCM would help inspire stakeholders for the environment, improve the images in the minds of suppliers and manufacturers, help customers feel good and with quality of life, and put the industry in a positive position.



phases of green supply chain management

Research methodology

The research is based on information gathered from reviews of various journals, articles, research papers, magazines, etc. Numerous innovative processes were considered in business, industrial and cooperative environments. An in-depth study of the various companies' plans for GSCM has been conducted and appropriate recommendations have been obtained.

Challenges

GSCM is not easy to do, but organization may phase such challenges, some of which include:-

1. Cost is considered a major concern when implementing Green SCM.

In general, organizations often use any new technology or process where they can see results in clear terms. However, because GSCM is a naive concept, it is becoming increasingly difficult to use measurable data to prove the value of the value chain.

2. You need the right technology to do business with green practices.

Lack of green architects, consultants, green engineers, regional contractors. With a shortage of 4,444 green workers, companies are afraid to keep investing. Important An important feature of GSCM is the integration of reusable products. For many companies it is a great challenge to integrate (recycled) waste as recycling material for recycling plants. Another challenge is the fear of failure. Organizations do not trust the green program to lead to success or failure.

3. Lack of awareness about implementation process, regulations and best practices.

Factor The most important factor in implementing the GSCM system is the support and commitment from senior management but unfortunately due to lack of confidence in the original thinking and investment, senior management became alarmed at the use of crude practices.

4. Because the transactions have a large number of participants, doubts about the adoption and participation of in the design and technology process affect the overall performance of the entire series.

Finally, companies are reluctant to continue to do so due to lack of customer awareness of GSCM and green products.

Strategies of GSCM

Risk-Based Strategies

The simplest GSCM strategy for developing investment resources in organizations is one of risk minimization. Companies using this strategy are encouraged to do so in a conspicuous response to stakeholder requests. This strategy is ideal for companies that have a minimum of 4,444 internal environmental management resources, or that have only recently begun 4,444 to consider implementing a supply chain greening program. It is based on a minimal interorganizational commitment (Gyaneshwar, 2011).

Efficiency-Based Strategies

A more complex strategy that has evolved in recent years has been the “eco-efficiency” or “lean and green” approach for GSCM. This type of strategy results in supply chain environmental performance benefits that go beyond mere regulatory compliance, as suppliers must meet operational efficiency goals (Gyaneshwar, 2011).

Innovation-Based Strategies

The innovation-based green supply chain management strategy differs from the efficiency-based approach by using an environmentally specific supply chain environmental performance strategy (Gyaneshwar, 2011).

Close Loop Strategies

The entire supply chain includes the return flow of products and materials for the exchange of materials, waste treatment, reprocessing, remanufacturing, repair and / or recycling. The complete logistics system should consist of two parts: direct logistics and reverse logistics. However, in the current scenario, Indian corporate managers only focus on forward logistics as they are unfamiliar with reverse logistics. There are two types of reverse logistics, asset recovery and green reverse logistics. The first speaks of the return of the actual product, while the second speaks of the supplier's responsibility for the disposal of the packaging material, i. H. environmentally sensitive, stressed. Industries are more aware of reducing pollution, and through this process, they are gaining the trust of 4,444 customers and placing an emphasis on packaging materials, recycling waste, and reusing 4,444 processes. India is a huge country with over 1.2 billion people. The Indian economy is growing exponentially and disposable income is also increasing. As IT has increased, 4,444 Indians have become more tech-savvy and this has resulted in an increase in online shopping, 4,444 responsible for the majority of product returns. As a result, India is one of the fastest growing and most credible reverse logistics markets in the world. Five years ago, Future Group started its own Reverse Logistics operations across all of its retail chains, including Big Bazaar. It was the first retail chain in India to establish such a unit in.

Moreover, the group has also added product return facilities at its fashion and furniture businesses. The challenges faced by India in reverse logistics are:

1. Meeting customer expectations
2. Managing expenses
3. Infrastructure
4. Unorganized Retail
5. Complicated rules and regulations

Limitation/Scope

The above case studies suggest that we can further substantiate the benefits of the green supply chain by performing a quantitative analysis of CO2 emissions, waste products, etc. We can take a case study of a large conglomerate ready to start a green supply chain program and then calculate the process efficiency and cost benefits. A numerical value can then be assigned to green Innovation, Economy and Sustainability. Additionally, future research can focus on specific industries so that the results can be generalized to those industries. A comparative study can be conducted between Indian companies that follow GSCM practices with companies from other countries to get a better view of the sustainability of the green supply chain.

The conclusion

Green is a journey and not a place. Crude sales are an industry problem that will only increase in value for the next years. The use and development of green energy requires time and effort all the time. The current system of 4,444 measurements in organizations, not only in India but also globally, is harmful to the environment and the day will soon come when the damage to our planet will be irreparable. GSCM is visible when the country should be kept green. There is great pressure on all 4,444 organizations to provide green products for their manufacture, production, supply, use and use. Over the next 4,444 years, companies will invest heavily in networking, collaborative collaboration, procurement, purchasing, packaging changes, and innovative approaches, with an emphasis on reducing the carbon footprint in all acquisition phases. As other industries move closer to manufacturing location, this will be a great incentive to implement a green SCM. Of the many parameters that affect the implementation of GSCM, the technology costs and the complexity of the processes are considered the main obstacles to the implementation of Green SCM, drawing attention to the cost-effective and easy-to-use solution. . Another important factor for manufacturing companies is the recycling of 4,444 raw materials. Companies invest heavily in green production facilities. An Introduction to Green Archives and Distribution 22 Supply Chain Management Systems Magazine Volume 3 Issue January 1, 2014 Efforts have made companies less efficient and more efficient. Since the concept is still very low in India, the raw SCM information is not visible. A framework needs to be established to raise awareness and disseminate information on GSCM practices that reflect the costs and benefits of companies. The chain is made up of partners and the large and transparent collaboration between them will lead to the successful and sustainable use of GSCM. Although the challenges may change, the foundations for good business will remain the same. Executives should view environmentally friendly purchasing management as a key element of a business that can create cost competition and price creation in the long run.

Acknowledgement

We are both grateful and wholeheartedly grateful to Prof. Dhvani bhavsar who is our professor, academic advisor, with whom we discussed putting the final word on our current paper.

References

- [1] Shang, K.C., Lu, C.S., Li, S., (2010) "A taxonomy of green supply chain management capability among electronics-related manufacturing firms in Taiwan", *Journal of Environmental Management*, 91, pp 1218–1226.
- [2] Wang, M-L., Kuo, T-C., & Liu, J-W. (2009). Identifying target green 3C customers in Taiwan using multi-attribute utility theory. *Expert Systems with Applications*, 36(10), 12562-12569
- [3] Yuang, A., & Kielkiewicz-Yuang, A. (2001). Sustainable supply network management, *Corporate Environmental Strategy*, 8(3), 260-268
- [4] Ramudhin, A., & Chaabane, A. (2010). Carbon market-sensitive sustainable supply chain network design. *International Journal of Management Science and Engineering Management*, 5(1), 30-38
- [5] Zhu, Q., Sarkis, J., & Lai, K-H. (2006). Green supply chain management: pressures, practices and performance within the Chinese automobile industry. *Journal of Cleaner Production*, 14, 271-284
- [6] Laming, R., & Hampson, J. (1996). The environment as a supply chain management issue. *British Journal of Management*, 7, 45-62
- [7] Chung-Hsiao, (2008). The Green supply chain management in the electronic industry. *International Journal of Environmental Science & Technology*, 5(2), 205-216
- [8] Zhu, Q., Sarkis, J., & Lai, K-H. (2008). Confirmation of a measurement model for green supply chain management practices implementation. *International Journal of Production Economics*, 111, 261–273.
- [9] Fengfei Zhou (2009). Study on the Implementation of Green Supply Chain Management in Textile Enterprises, vol 2 no. 1
- [10] Handfield, R., Walton, S., & Sroufe, R. (2002). Applying environmental criteria to supplier assessment: A study of the application of the analytical hierarchy process. *European Journal of Operational Research*, 141, 70–87.
- [11] Walton, S.V., Handfield, R.B., & Melnyk, S.T. (1998). The green supply chain: Integrating suppliers into the environmental management process. *International Journal of Purchasing and Materials Management*, 2–11
- [12] Zhu, Q., Geng, Y., Sarkis, J., & Lai, K.H., (2011) "Evaluating Green Supply Chain Management among Chinese Manufacturers from the Ecological Modernization Perspective", *Transportation Research Part E*, 47, pp 808-821.
- [13] Liu, X., Yang, J., Qu, S., Wang, L., Shishime, T., & Bao, C., (2011) "Sustainable Production: Practices and Determinant Factors of Green Supply Chain Management of Chinese Companies", *Business Strategy and the Environment*.

- [14] Li, Y. (2011). Research on the Performance Measurement of Green Supply Chain Management in China. *Journal of Sustainable Development*, 4(3).
- [15] Zhu, Q., Sarkis, J. & Lai, K., (2008) “Green supply chain management implications for “closing the loop”, *Transportation Research Part E: Logistics and Transportation Review*, Vol. 44, No. 1, pp 1–18.
- [16] Ninlawan, C., Seksan, P., Tossapol, K., & Pilada, W., (2011) “The Implementation of Green Supply Chain Management Practices in Electronics Industry”, *Proceedings of the International Multiconference of Engineers and Computer Scientists*, 3
- [17] Eltayeb, T. K. & Zailani, S.H.M., (2011) “Greening Supply Chain through Supply Chain Initiatives towards Environmental Sustainability”. *International Journal of Managing Value and Supply Chains (IJMVSC)* Vol. 3, No. 1, March 2012
- [18] Srivastava, S. (2007). Green supply-chain management: A state-of-the-art literature review. *International Journal of Management Reviews*, 9(1), 53-80.
- [19] Akyuz, G. (2010). Supply chain performance measurement: a literature review. *International Journal of Production Research*, 48(17), 5137-5155
- [20] Nair, R et al (2010). Sustainable development through green-marketing in the automobile industry. *SIES Journal of Management*, 7(2), 13-23
- [21] Bhagat, D., & Dhar, U. (2011). Agriculture supply chain management: A review. *The IUP Journal of Supply Chain Management*, 8(3).
- [22] Rajpal, R et al (2011). Green supply chain management: prospects and implementation of practices. *International Journal of Logistics and Supply Chain Management*, 3(1), 11-18
- [23] Ghosh, M. (2010). Green marketing – A changing concept in changing time. *BVIMR Management Edge*, 4(1), 82-92.
- [24] Nimawat, D., & Namdev, V. (2012). An overview of green supply chain management in India. *Research Journal of Recent Sciences*, 1(6), 77-82.
- [25] Sriyogi, K. (2012). Internal benchmarking of supply chain performance measures evidence from selected organizations. *The IUP Journal of Supply Chain Management*, 9(1).
- [26] Diabat, A. & Govindan, K., (2011) “An Analysis of the Drivers Affecting the Implementation of Green Supply Chain Management”, *Resources, Conservation and Recycling*. 55, pp 659- 667. Aditya Birla Group (2013). Retrieved from <http://www.adityabirla.com/> ITC Sustainability Report (2012). A+GRI Checked Report. Retrieved from <http://www.itcportal.com/sustainability/sustainability-report-2012/sustainability-report2012.pdf> Doing Business, (2019). [online] Available at: <https://www.doingbusiness.org/en/rankings> Ibid. Economic Times, (2020). [online] Available at: <https://economictimes.indiatimes.com/news/economy/policy/summing-up-modis-covidstimulustakeaways-so-far-from-the-mother-of-all-incentives/articleshow/75758840.cms> Key statistics – India, Source: Data World Bank, (2019). [online] Available at: <https://data.worldbank.org/country/india> [Accessed 04 August 2020]