

Environmental Activities in Arabic Industries: The Case of Libya

Milad Abdelnabi Salem ¹⁺, Norlena Hasnan ², Nor Hasni Osman ³, Hafezali Bin Iqbal Hussain ⁴ and
Mohd Farid Shamsudin ⁵

¹ School of Business, University Kuala Lumpur, Malaysia

^{2,3} School of Technology and Logistic Management, University Utara Malaysia.

^{4,5} School of Business, University Kuala Lumpur, Malaysia

Abstract. Although the importance of environmental aspects and the appearance of the concept green within the business world, yet many Arab countries do not pay enough attention to this issue. Therefore, this paper tries to point the light on such issue and evaluate the environmental activities of the industrial sector in Libya. It considers six aspects of green namely green conventional practices, employees' involvements, organizational practices, environmental management systems, strategic planning process and stakeholders' integration. The results indicated that the majority of these practices have not received enough attention by the managements at these companies.

Keywords: Environmental Practices, Evaluation, Industrial Sector, Libya.

1. Introduction

The environmental degradation has negatively effects on both the environment and economic performance. Such facts have been widely accepted in the developed countries, and great efforts have been provided to reduce such degradation. However, such efforts have not been observed in developing countries. Additionally, the environmental evaluation seems to be focused more on developed countries than developing countries [1]-[4]. Such event leads to raise a question about the stage of environmental protection in developing countries. Moreover, the consequences of environmental degradation can extent to be reasons of poverty and uncompetitive due to the resource wasting methods [5]. Porter and Van der Linde believe that the way an industry use to protect the environment is one indicator of its competitiveness. Moreover, the International Bank of Construction and Development in 2010 found that North Africa and Middle East regions were affected negatively by several environmental signals such as the pollution and lose of resources, and consequently cost these countries between two to five per cent of GDP on an annual basis.

This paper points the light on the actual environmental practices in Libyan industrial companies as a proxy of developing country. Libya is one of the largest countries in Arabic region, and the one of most wealthy countries in both Arabic and African regions. However, the country suffers from poor natural environment represented by several environmental problems such as desertification and water shortage. For instance, Libya at a critical situation regarding water sustainability, since approximately 95% of the country receives only between 0 mm and 25 mm of rainfall per year [6]. It has been noted that Libya suffers from a water shortage. He added that approximately 95% of the country receives only between 0 mm and 25 mm of rainfall per year, which puts the country in a serious situation with regard to water sustainability. Let alone that almost 94.2 % of land in Maghreb region of Arabic countries (where Libya is located) is considered as desert land or under the threat of desertification (7).

⁺ Corresponding author. Tel.: 0060172503249.
E-mail address: milad@unikl.edu.kl.my.

Eventhough there are several studies related to the environmental practices [1], [7]-[11], these studies evaluate the disclosure and say nothing about the actual environmental practices in Libya. Therefore, that studying the environmental practices in Libyan industrial sector can reflect the importance paid by these industries to environmental activities.

2. Methodology

The study adopted a survey study based on questionnaire combines 55 items have been adopted from related studies [12]-[17]. The questioner covers six environmental practices namely conventional environmental practices, employees' involvements regarding environmental issues, environmental management systems and procedures, strategic planning process, including the environmental practices in functional areas, and stakeholders' integration. The previous practices were chosen based on extensive reviewing of previous related literature and validated by judgments of experts. After assuring the reliability and validity of the questionnaire, it sent to 490 of 868 industrial corporations. The questionnaire was answered by the environmental manager, production manager, or general manager. Such determinants reflect the professionally of the respondents.

3. Analysis

The data are analysed using Statistical Packages for Social Sciences (SPSS) software (18). Such programme can achieve the objectives of the descriptive study [18], since the focus in this paper on describing the state of environmental practices in Libyan industrial sector. 155 is returned and considered as useable questionnaires represented a response rate of 57% that can be considered as acceptable response rate [19]-[21].

4. Results

The descriptive part of the analysis shows that actual environmental practices need to have more attention by the corporations if they want to be green and make environmental sound of their activities. The following points summarize the state of environmental issues regarding the six environmental practices used in this study. It places more emphasis on the shortcoming of the aspects related to each practice.

Table 1: Descriptive Statistics of Green Conventional Practices

Items	Mean	Std. Deviation
Clean processes and technologies	4.28	1.993
Reducing waste generation during production	4.27	1.877
Reducing resource consumption during the production	4.26	1.729
Substituting polluting material	4.25	1.821
Preferring green products in purchasing	4.24	1.834
Reducing resource consumption at the product usage	4.11	1.696
Consolidating the shipments	4.05	1.792
Cleaner transportation methods	4.03	1.848
Ecological material in primary packaging	3.97	1.830
Recyclable packaging	3.96	1.772
Adopting recycling systems	3.95	1.688
Product's ability to dismantle	3.86	1.814
Reducing waste generation at the product usage stage	3.86	1.807

n = 155. Seven-point Likert scale, in which 1 means not important at all, and 7 means very important

First, as appeared in Table 1, green conventional practices in Libyan industrial sector vary in the importance they have received from these industries. If these corporation aim to become green, several improvements have to be made with regard to green practices generally, but specially with respect to practices related to reducing waste generation at the product usage stage, a product's ability to be dismantled, adoption of recycling systems, using recyclable packaging, and including ecological material in primary packaging.

Second, the involvement of employee (Table 2) in environmental activities have to get more importance, especially with regard to linking recognition and rewards connected with environmental improvement initiatives, and employees' participation in designing environmental management systems.

Table 2: Descriptive Statistics of employees' involvements

Items	Mean	Std. Deviation
Protecting employees who report environmental accidents.	4.26	1.694
Communicating environmental policies, objectives, and strategies to all employees	4.19	1.717
Recognizing employees for continuous environmental initiatives	4.15	1.899
Giving the permits to establish environmental improvement procedures.	4.15	1.781
The access of environmental information by employees.	4.15	1.751
Enhancing the direct communication between employees and managers	4.15	1.706
Employees have the required competencies in their professional activities	4.14	1.669
Employees' environmental training	4.13	1.716
Using diagrams or flow charts to highlight the potential environmental problems	4.04	1.743
Practicing the rewards based on group performance	4.01	1.683
Linking the recognition and rewards with environmental improvement initiatives.	3.92	1.919
Employees participation in the design of environmental management systems	3.57	1.679
Protecting employees who report environmental accidents.	4.26	1.694

n = 155. Seven-point Likert scale, in which 1 means not important at all, and 7 means very important

Third, the descriptive analysis as elaborated in the Table 3 showed that Libyan industrial corporations that aim to be green have to give more importance to their organizational practices and address the aspects of environment in all their functions, especially in the research and development, finance and accounting. The same should be considered with environmental management system and procedures, issues such life-cycle assessment, conducting natural auditing, and publishing environmental reports should receive more attention by the corporations that aim to be green.

Table 3: Descriptive Statistics of Organizational Practices

Items	Mean	Std. Deviation
Addressing the environmental considerations in the legal counsel function	4.38	1.691
Addressing the environmental considerations in the public relations function	4.27	1.817
Addressing the environmental considerations in the sales and marketing functions	4.23	1.754
Addressing the environmental considerations in the production function	4.17	1.910
Addressing the environmental considerations in the purchasing function	4.12	1.639
Addressing the environmental considerations in the R&D function	3.95	1.686
Addressing the environmental considerations in the finance and accounting functions	3.68	1.654

n = 155. Seven-point Likert scale, in which 1 means not important at all, and 7 means very important

Fourth, Table 4 shows that strategic process concept scored the lowest mean score among other greening competencies, which indicated the Libyan industrial corporations studied do not give considerable attention to this the planning process, a process that could help the corporations become green. It is clear that these aspects received importance lower than the average of seven-point scale, which can be indicator that Libyan industrial corporations neglect these issues.

Table 4: Descriptive Statistics of Strategic Planning Process

Items	Mean	Std. Deviation
When environmental issues are considered within the strategic planning process, the top management team makes proactive, forward thinking decisions	3.45	1.595
Considering the environmental issues when setting the strategic plans	3.29	1.600
Consideration for the natural environment is addressed within the company's mission statement or statement of business principles	3.25	1.496
Allowing the individual responsible for environmental issues to participate in the strategic planning of the corporation	3.23	1.585

n = 155. Seven-point Likert scale, in which 1 means not important at all, and 7 means very important

Fifth, even though stakeholder integration received the highest importance paid by industrial corporations in Libya (as seen in Table 5) when compared to other environmental related aspects, efforts should be made to enhance this integration, especially with regard to stakeholder participation in the decision-making process.

Sixth, with regard to assess the investment in formal (routine-based) management systems and procedures; the descriptive analysis of the seven items resulted in an overall mean value of 3.9195 and a standard deviation of 1.48579. This concept was less than 4 but was above the average level of the 7-point scale, which indicated not enough importance had been given to this construct by the corporations under study.

Table 5: Descriptive Statistics of Stakeholders' Integration

Items	Mean	Std. Deviation
Knowledge of stakeholders and their demands	4.56	1.710
Frequent managerial debate about the demands of stakeholders	4.52	1.621
Enough time and resources to meet stakeholders' interests	4.42	1.655
Special efforts to prepare the information for different stakeholders.	4.41	1.650
Developing new contacts with all stakeholders	4.40	1.650
Feedback from stakeholders.	4.35	1.615
Willingness to change corporation's objectives in line with stakeholders' demands	4.34	1.629
Formal and informal cooperation with stakeholders	4.30	1.657
Adapting the corporation's policies and priorities to meet stakeholders' demands	4.27	1.589
Keeping information on previous relationships with stakeholders.	4.25	1.573
Frequently meetings with stakeholders.	4.21	1.698
Stakeholders participation in the decision-making process	4.00	1.636

n = 155. Seven-point Likert scale, in which 1 means not important at all, and 7 means very important

5. Conclusion

A survey of the related literature has demonstrated a lack of studies that considered actual environmental practices in developing countries. This paper covered part of the missing focus. It evaluated the environmental practices within the industrial sector in Libya. The result confirmed that the environmental practices yet to have considerable importance by developing countries. Stages have to be done to get full benefits from such valuable resources. The paper opens the door to be discovered by the coming studies. Several points hope to be discussed in future; such as linking the environmental practices to the organizations outcomes, what are the missing motivations to green in developing countries, does market evaluate the green products. All these questions represent a part from the black box regarding green in developing word, particularly Arabic and African regions.

6. References

- [1] Ahmad, N. M., & Mousa, F. R. (2010). Corporate environmental disclosure in libya: A little improvement. *World Journal of Enterprenuership, Management and Sustainable development*, 6(12), 149-159.
- [2] Etzion, D. (2007). Research on organizations and the natural environment, 1992-present: A review. *Journal of Management*, 33(4), 637-664.
- [3] Goyal, P., Rahman, Z., & Kazmi, A. (2013) .Corporate sustainability performance and firm performance research: Literature review and future research agenda. *Management Decision*, 51(2), 361–379.
- [4] Mishra, S., & Suar, D. (2010). Does Corporate Social Responsibility Influence Firm Performance of Indian Companies? *Journal of Business Ethics*, 95(4), 571-601.
- [5] Porter, M. E., & Van der Linde, C. (1996). Green and competitive: ending the stalemate. *Hrvard Business Review*, September, 121-134.
- [6] Goodland, R. (2008). How Libya could become environmentally sustainable. *Libyan Studies* 39, 145-160.
- [7] Saad, Ali Mansour Ali, and Noresah Mohd Shariff. "Estimating Desertification in the Arab World Using GIS Approach." *Middle-East Journal of Scientific Research* 8.6 (2011): 1046-1053.
- [8] Abdulhamid, M., Ritchie, R., Lovatt, C., & Pratten, J. (2005). *The social role of accounting: views and perceptions of the accounting community in Libya towards corporate social responsibility and accountability*. Paper presented at the Business Studies and the Environment Conference , held at the University of Leeds, 4-6 September 2005 (UK).
- [9] Bayoud, N., Kavanagh, M., & Slaughter, G. (2012). The Impact of Social and Environmental Disclosure on Financial Performance Further Evidence and Exploration from Libya. Available at SSRN: <http://ssrn.com/abstract=1980051>.
- [10] Ahmad, N. (2004). Corporate environmental disclosure in Libya: Evidence and environmental determinism theory. Unpublished PhD Thesis, Napier University (UK).
- [11] Elmogla, M. (2009). Corporate social reporting in a transition economy: the case of Libya. Unpublished PhD

Thesis, University of Huddersfield (UK).

- [12] Aragon-Correa, J. A. (1998). Strategic proactivity and firm approach to the natural environment. *Academy of Management Journal*, 41(5), 556-567.
- [13] Baba, H. (2004). Corporate social responsibility and environmental performance of small-medium enterprises. Unpublished PHD thesis, University Utara Malaysia.
- [14] Buysse, K., & Verbeke, A. (2003). Proactive environmental strategies: a stakeholder management perspective. *Strategic Management Journal*, 24(5), 453-470.
- [15] López-Gamero, M., Molina-Azorín, J., & Claver-Cortés, E. (2009). The whole relationship between environmental variables and firm performance: Competitive advantage and firm resources as mediator variables. *Journal of environmental management*, 90(10), 3110-3121.
- [16] Plaza-Úbeda, J., de Burgos-Jiménez, J., & Carmona-Moreno, E. (2010). Measuring stakeholder integration: knowledge, interaction and adaptation behaviour dimensions. *Journal of Business Ethics*, 93(3), 419-442.
- [17] Sharma, S., & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, 19(8), 729-753.
- [18] Pallant, J. (2011). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows (4rd ed.)*. England: Maidenhead: Open University Press.
- [19] Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods, and Practices*. USF Open Access Textbooks Collection. Available at: http://scholarcommons.usf.edu/oa_textbooks.
- [20] Sekaran, U., & Bougie, R. (2009). *Research Methods for Business: A Skill Building Approach 5th Edition*. John Wiley & Sons Ltd., United Kingdom.
- [21] World Bank .(1997). *World Development Report 1997: The state in a changing world. Selected world development indicators*. New York, Oxford: Oxford University Press.