Scenario of Indian Industry and Evaluation on Sustainable Development

¹Saurabh Kumar Singh & ²Dr. Satyavir Singh

¹Research Scholar, Department of Mechanical Engineering, OPJS University Churu Rajasthan, Email: saurabh.sk1985@gmail.com ²Associated Professor, OPJS University Churu Rajasthan

Received: November 23, 2018

Accepted: December 27, 2018

ABSTRACT India is in growing state in terms of increasing the industrial units and these figures are escalating with the incorporation of liberalization. There are assorted business segments in India which are free from the industrial environmental hazards. These entities include Advertising Industry, Agricultural Industry, Aviation Industry, Banking Industry, Bio technology Industry, Biscuit Industry, Chocolate Industry, Coir Industry, Cosmetic Industry, Cottage Industry, Electronic Industry, Food Processing Industry, Furniture Industry, Garment Industry, Insurance Industry, Railway Industry, Real Estate Industry, Retail Industry, Shipping Industry, Solar Industry, Tea Industry, Telecom Industry, Television Industry, Tourism Industry, Toys Industry, Turbine Industry and many others. These are known as green mark industries in which there are minimum environmental hazards are decreasing a lot. There is need to incorporate these segments with the eservices so that the environmental hazards can be reduced to minimum level. **Keywords:** Indian Industry, Feedback on Environmental Factors, Indian Environmental Feedback, Scenario of Indian Industry

Introduction

There is need to associate the overall relationship between industrial growth with the environmental factors which are directly or indirectly affected. Even if the industrial growth of any nation is very important still there is need to evaluate the impact on environmental factors and pollutants so that the overall social and healthcare related perspectives can be analyzed.

- Association Rule Mining with the Industrial Growth is lacking with the Environmental Association
- Extraction and Evaluation of Effectual and Most Prominent Datasets from Authentic Sources for Analytics between Industrial Growth and Environmental Factors
- To collect and analyze information from government and industrial portals with the deep analysis
- Benchmarking and Performance Evaluation of datasets related to industrial growth and government initiatives.
- To perform the sentiment analysis along with the root cause analysis
- Evaluation of the Approach on multiple parameters

This section presents the research design of the primary and secondary data. It includes research objectives and the hypothesis of the study from primary data analysis and also research objectives, hypothesis, sample size and data sources for both primary and archived data. The chapter puts forth details about its structure, the guidelines observed in designing the questionnaire along with respondents' and organizational demographics. Finally. measurement problems, research methodology for primary as well as secondary data, research variables, tools and techniques with model specifications are presented.

The study followed the methods of descriptive data. The study links both the qualitative and the quantitative approaches. The descriptive method of design will assist both the approaches and hence, the study includes the principles of the descriptive design. The descriptive study tries to explain systematically a condition, difficulty, occurrence, service or programme, offers data regarding the living circumstances of a group, or explains attitudes towards a subject.

REGIONS ASSOCIATED WITH DATASET COLLECTION AND RELATED SEGMENTS

Corporate Regions and Industries					
Corporate Region	Number of Respondents				
Punjab	200				
Himachal Pradesh	200				
Chandigarh	200				
Haryana	200				
Total	800				



Figure 1 – Corporate Regions of Analysis

Number of Respondents



Figure 2 – Corporate Regions of Analysis

TEST S Cross-7 Sustair	CENARIO Fabulatio nable Dev) on be velopme	etween ent	Region	and	
Count						
	Busines	Business Region				
	Punja	Hary	Chand	Hima	Total	
	b	ana	igarh	chal		
				Prad		
				esh		
Yes	170	140	182	135	627	
No	30	60	18	65	173	
Total	200	200	200	200	800	

Chi-Square Tests

	Value	Df	Asymp. Sig.
			(2-sided)
\Pearson Chi-Square	1.193ª	2	.543
Likelihood Ratio	1.199	2	.546
Linear-by-Linear	.155	1	.694
Association			
N of Valid Cases	800		

a. 0 SPSS evaluation cells (.0%) are having the count in expected dimensions less than 5. The minimum expected count is 14.21

Pearson's Chi² result here is $X^{(2)} = 1.193$, p=0.543. This tells us that there is no significant association between current business region and the sustainable development.

p-> significance level

Asymp. Sig. -> SPSS shows Asymptotic Significance

df -> degree of freedom

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-	1.213ª	2	.543
Square			
Likelihood	1.299	2	.546
Ratio			
Linear-by-	.155	1	.599
Linear			
Association			
N of Valid	800		
Cases			

a. 0 SPSS evaluation cells (.0%) are having the count in expected dimensions less than 5. The minimum expected count is 13.91

Pearson's Chi² result here is $X^{(2)} = 1.213$, p=0.543. This underlines that there is no significant association between current corporate function and the environmental hazard.

p-> significance level

Asymp. Sig. -> SPSS shows Asymptotic Significance df -> degree of freedom

Cross-Tabulation between type of complex processes towards sustainable development for preservation of environment

Chi-Square Tests

om bydare i	6565				
	Value	Df	Asymp. Sig. (2- Sided)	Exact Sig. (2- Sided)	Exact Sig. (1- Sided)
Pearson	.031ª	1	.849		
Chi-Square					
Continuity	.001	1	.971		
Correction					
b					
Likelihood	.032	1	.858		
Ratio					
Fisher's				0.887	.485
Exact Test					
Linear-by-	.031	1	.858		
Linear					
Association					
N of Valid	800				
Cases					

a. 0 SPSS evaluation cells (.0%) are having the count in expected dimensions less than 5. The minimum expected count is 41.37

b. Computed only for 2 x 2 table

RESULTS

The Pearson's Chi square value is 0.31. $X^{(2)} = 0.31$, p=0.849. The results from data analysis depicts that there is weak impact of corporate business region with the type of documentation exercised by the company. It shows that there was uniformity and consistency in the documentation exercised and adopted by each company.

Cross-Tabulation between business region and environmental issues						
Cou	nt					
		Busines	ss Regio	n		
		Chan digar h	Him acha l Prad esh	Har yan a	Pu nja b	To tal
	As per the Govt. Rules and Proto cols	189	180	181	182	
	Swift, Spee dy and befor e presc ribed Govt. Time	11	20	19	18	
To tal		200	200	200	200	80 0

Chi-Square Tests

	Valu	D	Asymp	Exact	Exact
	e	f	. Sig.	Sig.	Sig.
			(2-	(2-	(1-
			Sided)	Sided	Sided
			-))
Pearson	.031ª	1	.859		
Chi-Square					
Continuity	.001	1	.969		

Correction ^b					
Likelihood	.029	1	.859		
Ratio					
Fisher's				0.889	.487
Exact Test					
Linear-by-	.029	1	.859		
Linear					
Associatio					
n					
N of Valid	800				
Cases					

a. 0 SPSS evaluation cells (.0%) are having the count in expected dimensions less than 5.

b. Computed only for a 2 x 2 table

RESULTS

The Pearson's Chi^2 result here is $X^{(2)} = 0.31$, p=0.859. The results obtained from data investigation illustrates that there is weak impact of business region and the environmental issues. It means that all the locations of business organizations are considered with equal treatment without any biasing factor.

Cross-Tabulation between tangibility as well as reliability in parallel as per service quality model during the process

Chi-Square	lests				
	Value	D	Asymp	Exact	Exact
		f	. Sig.	Sig.	Sig.
			(2-	(2-	(1-
			Sided)	Sided	Sided
			-))
Pearson	6.591	1	.010		
Chi-	а				
Square					
Continuity	5.736	1	.18		
Correction					
b					
Likelihood	6.517	1	.011		
Ratio					
Fisher's				0.18	.009
Exact Test					
Linear-by-	6.547	1	.011		
Linear					
Associatio					
n					
N of Valid	800				
Cases					

1. 0 SPSS evaluation cells (.0%) are having the count in expected dimensions less than 5. The minimum expected count is 18.49

Research Paper

IJRAR- International Journal of Research and Analytical Reviews j467

2. Computed only for a 2 x 2 table

The Pearson's Chi^2 value if 6.591, p=0.1 and the results illustrates that there is strong impact of tangibility and reliability that is adopted and exercised at the companies.

Cross-Tabulation between responsiveness as well as tangibility in parallel as per environmental quality model

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-Sided)	Exact Sig. (2-Sided)	Exact Sig. (1-Sided)
Pearson Chi- Square	5.491ª	1	.010		
Continuity Correction ^b	4.636	1	.19		
Likelihood Ratio	5.317	1	.01		
Fisher's Exact Test				0.19	.008
Linear-by- Linear Association	5.548	1	.011		
N of Valid Cases	128				

- 1. 0 SPSS evaluation cells (.0%) are having the count in expected dimensions less than 5. The minimum expected count is 19.72
- 2. Computed only for a 2 x 2 table

The Pearson's Chi² value if 5.491, p=0.1 and the results illustrates that there is strong impact of tangibility and responsiveness that is adopted and exercised at the companies. Because of this fact, it can be deduced that the companies are adopting and following the SERVQUAL model for service quality and delivery the higher degree of service in minimum overheads and lesser complexities related to environment.

To analyze the results of the null as well as alternate hypothesis, the following statistical analysis using SPSS software has been performed.

ONEWAY Feedback360Degree BY Company Type /STATISTICS DESCRIPTIVES EFFECTS HOMOGENEITY BROWNFORSYTHE WELCH /MISSING ANALYSIS.

The Null Hypothesis that the feedback, observation and overall response of the users are not positive towards the services is hereby REJECTED because

The Significance Level of 0.025 is less than the threshold value of 0.05 indicating that the null hypothesis can be REJECTED. In conclusion, it is apparent that there is the positive response

towards the feedback on guidelines and implementation by the companies.

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
54.000	1	18	.000

Secondary Evaluation

With the growth of industrialization and changing the structure of Indian industries as well as in global perspectives, there is huge escalation of environmental hazards which needs to be avoided in the future initiatives.



Figure 3 Welfare Loss due to Air Pollution with Industrialization





Figure 4. Industrialization Based Labor Output Loss due to Air Pollution

[VOLUME 5 | ISSUE 4 | OCT. - DEC. 2018] http://ijrar.com/



Figures indicate % change in number of deaths due to air pollution between 1990 and 2013

Figure 5. Deaths due to Air Pollution because of Industrial Hazards



Figure 6. Industrial Hazards based Ranking of Hazards

City	Moon Voluo	Sugnanded neutionlate	
ony	of SO ₂ (mg/m ³)	matter (mg/m ³)	
Bombay	48.1	240.8	
New Delhi	44.4	601.1	
Calcutta	33.9	340.7	
Kanpur	16.9	543.5	
Ahmedabad	12.7	306.6	
Madras	9.3	100.9	
Nagpur	8.7	261.6	
Hyderabad	6.1	140.2	
Jaipur	5.2	146.1	



Figure 7. Annual Average Values of Air Pollutants at Graphite India





Conclusion

With the evaluation of datasets, it is found that the industries in India are striving towards the escalation of sustainable development with the overall growth still there is need to enhance the initiatives by the government and administrative entities in this segment.

References

- [1] Naumann E. and K. Giel (1995), Customer satisfaction measurement and management: Using the voice of the customer, Thomson Executive Press, Cincinnati.
- [2] Odriquez, & oderick, D. (2000) Trade policy and Economic Growth: a skeptic's guide to the cross-national evidence, National Bureau of Economic Research Working Paper No. 7081, Washington.
- [3] Odularu, G. O., & Okonkwo, C. (2010) Does energy Consumption Contribute to economic performance? Empirical Evidence from Nigeria. East-West Journal of Economics and Business, XII(2), 43-79.
- [4] Office of the U.S. Trade Representative, The Organization for Economic Cooperation and Development (OECD),Joseph
- [5] Office of the U.S. Trade Representative, The Organization for Economic Cooperation and Development (OECD), Joseph J. Schatz, Cantor, Hoyer Reach Ex-Im Bank Authorization Deal, Congressional Quarterly Today, May 7,2012.

- [6] Ogborkor, C. A. (2001) Oil and Economic Growth: An Econometric Analysis. J Development Alternatives and Area Studies, 20(2 & 3), 124-130.
- [7] Okoroafo, S. C. (1999). Internationalization of family businesses: Evidence from Northwest Ohio, USA. Family Business Review, 12(2), 147-158.
- [8] Oscar Afonso (2002), The Impact of International Trade on Economic Growth,
- [9] Oviemuno, A. O. (2007) International Trade as an Engine of Growth on Developing Countries, a case study of Nigeria (1980-2003), Journal of Economics Perspective, 12(4) 45- 62.
- [10] Oyejide, T. A. (1974). Export and Economic Growth in African Countries: Economic International Journal, 2, 177-185.
- [11] Periasamy M.N. (2010) ?India?s textile is one of the mainstays of National Economy?, Kissan World, Vol.37, No.1, pp: 33 ? 36.
- [12] Planning Commission, Govt. of India, March, 2008: ?Report of the High Level Group on Services Sector?. Proceedings 83: 426-430.
- [13] Prabhu, P.R., 2013. A Study on Role of Exim Bank in Export trade. Asia Pacific Journal of Research" Vol, (1).
- [14] Qadri, A. and Singhal, R., 2014. Development and Diplomacy through Lines of Credit. ORF Occasional Paper, 53.
- [15] RBI monthly Bulletin 2012. Retrieved january 20, 2012, from www.rbi.org.in: http://www.rbi.org.in/scripts/BS_PressReleas eDisplay.aspx?prid=27201
- [16] RBI monthly Bulletin 2012. Retrieved january 20, 2012, from www.rbi.org.in: http://www.rbi.org.in/scripts/BS_PressReleas eDisplay.aspx?prid=27201
- [17] Rajesh K.Pillania(2006),?An Exploratory study of Indian Foreign Trade?, Journal of Applied Economic Sciences, Volume III,Issue3 (5).
- [18] Rajesh K.Pillania(2006),?An Exploratory study of Indian Foreign Trade?, Journal of Applied Economic Sciences, Volume III,Issue3 (5).
- [19] Rao, C. H. Hanumantha (1995), New Economic Policy and Indian Agriculture, Indian Journal of Agricultural Economics, Vol. 50, No.3.
- [20] Rao, M.K. and Nihar, K.L., Strategic Approach for Reviving Indian MFIs.
- [21] Roderick, D. (1998) Trade Policy and Economic Performance in Sub Saharan Africa. Paper prepared for the Swedish Ministry of Foreign Policy. NBER.
- [22] Rodriguez, F., & Rodrik, D. (1999). Trade Policy and Economic Growth: A Skeptic's Guide to Cross-National Evidence. NBER Working Paper No. 7081.

- [23] Rohit Singh Tomar (2014), Selected Macro Economic Variables and its Impact on Chinese and Indian Exports?, IOSR Journal of Business and Management Volume 16, Issue 3, Ver. II (Feb. 2014), PP 01-08.
- [24] Rossella Brevetti, CEE Urges Congress to Pass Ex-Im Reauthorization International Trade Daily, December 20, 2011.
- [25] Rossella Brevetti, CEE Urges Congress to Pass Ex-Im Reauthorization This Year, International Trade Daily, December 13, 2011.
- [26] Rossella Brevetti, CEE Urges Congress to Pass Ex-Im Reauthorization This Year, International Trade Daily, December 13, 2011.
- [27] Rossella Brevetti, CEE Urges Congress to Pass Ex-Im Reauthorization This Year, International Trade Daily, December 18, 2011.
- [28] SEB (2013). SEB [Online]. Available: http://www.seb.se assessed on [2013, 10 Jan].
- [29] Saboori, B., Sulaiman, J. B., & Mohd, S. (2012). An empirical analysis of the
- [30] Sachs, J. D., & Warner, A. (1995) Economic Reform and the Process of Global Integration. Brookings Paper on Economic Activity, 1, 1-118.
- [31] Salvatora, D. (2004). International Economics Schaum Outline Series, Tata McGraw Hill.
- [32] Sen Gupta, A.K. and Keshari, P.K., 2013. Study of Export Trade Financing in India with Particular Reference to Commercial Banks: Problems and Prospects.
- [33] Shafaeddin, S. M. (2005) Trade Liberalization Economic Reform and In Developing Countries. Structural Change 0r De-No. Industrialization? Discussion Paper, 179, United Nations Conference on Trade and Development, Geneva.
- [34] Shafi, S.M., 2014. INDIA'S TRADE IN FINANCIAL SERVICES: A DECADAL STUDY. Arabian Journal of Business and Management Review (Oman Chapter), 3(9), p.31.
- [35] Shan, J., & Sun, F. (1998). On The Export-led Growth Hypothesis: The Econometric Evidence From China. International Journal of Economics and Finance Vol. 1, No. 1. 341-351.
- [36] Sharma, A. and T. Panagiotidis (2005) ?An Analysis of Exports and Growth in India: Co integration and Causality Evidence (1971-2001)? Review of Development Economics, Vol. 9: 232-248.
- [37] Sharma, K., 2000. Export growth in India: has FDI played a role (No. 816). center discussion paper.
- [38] Singh, P., 2016. Foreign Direct Investment: A Significant Driver to India's Growth Story. International Journal of Pure and Applied Researches (IJOPAAR), 1(1), pp.70-80.