Environmental Sustainability :
A Comparative Study of Domestic and Foreign Companies

Shalini Shukla*   **Shailendra Kumar Tripathi****

The sustainability concern for the planet has become the need for the day. With the advent of new technologies, developments and increasing standard of living, pressure on the environment for fulfilling the demand over the regeneration capacity is increasing. Life threatening hazards are inevitable and casting shadow on the whole world. Generally poor and developing economies bear the negative consequences as well as alleged for environment alteration. Keeping this view as a pivot, the present study is an attempt to analyze the importance of environmental sustainability in domestic as well as foreign companies' operating in India. The findings highlight that foreign companies operating in India show significant concern towards environmental sustainability and have better performance compare to their counterpart domestic companies. Furthermore, new technological development isdiscussed that can be adopted by various Indian companies, those have direct links with environment alteration like mining and mineral industry. The study presents number of imperatives for professional, business organizations as well as researchers.

Keywords: Companies; India; Mining and mineral industry; Sustainability.

INTRODUCTION

Nature can fulfil our needs not avarice demands. Rules of the nature govern everyone living in this world, irrespective of its species and variety (Maheshwari& Ganesh, 2006). However, with the development of culture, society and technology, humans started quelling these rules. Now, this avoidance has brought about the perceptible shift in sustainability and survival. Therefore, environment becomes a most discussed topic in Indian as well as global context. As per the Industrial development and growth of the economy is concerned, many issues have always worried the veterans. Among all these issues, environmental sustainability is gaining momentum at every state, every country and at every region.

India is the second most populous country having 1,243.3 million people with 1,505 US dollar GDP per capita (Global Competitive Index, 2014-15). It is one the important emerging economies in the world (Bhasin 2013). Emergence of any economy at the global map is lead by the development and growth pace of that country where industrial, infrastructural, technological development etc are

need of the day. Eventually, this development disproportionally burdens the natural capital, environment and society. Today industries become the integral part of the society on which the building of development stands, simultaneously root cause of environment alteration. Some industries like mining, mineral, energy etc bears the largest proportion of altering the eco-system as well society. Sensing the urgency of issue, developed nations have adopted many guidelines, code of conducts etc for industries and other organisations to minimise the harmful impact of their operations on environment. Although, transitional and under developed economies have still not adopted or taken any serious initiative that can really be fruitful at ground level.

Thus, present paper tries to analyse the difference between domestic and foreign companies operating in India on the basis of concern and importance shown toward their environment and sustainability.

REVIEW OF LITERATURE

There is increasing concern of sustainability in research, academics, business and other realms since last decades. Sustainability is the word that cannot mean inmany senses, but in recent time it is basically related to the environment, earth and human life. With the pace growth, we are lagging behind from the balance between environment and development that ultimately affects our ability to

* Department of Business Administration, University of Lucknow, Lucknow

**Monnet Ispat and Energy Limited, Raigarh

sustain today as well as tomorrow.

Defining Environmental Sustainability-

Sustainability is now becomes the news of the front page. Various researchers have defined and coined the term environmental sustainability. According to the Morrelli (2011), some authors take sustainability" Ecological Sustainability as a Conservation Concept," and describe environment sustainability as "meeting human needs without compromising the health of ecosystems."

As ISC sustainability report defined this term as, "Environment sustainability requires the design and provision of products and services that incorporate and promote waste minimisation and the efficient and effective use and rescue of resources."

In present study we have taken the diversified perspective sustainability with ecological, social, economical, technical aspects.

Environmental sustainability in the context of Business-

In today's scenario development is all around linked with industrial growth. Industries are totally dependent on raw material provided by society and environment. Nature has limited capacity of regenerating these resources. With the pace industrial development, utilization of all natural capital is over passing the regeneration capacity of nature. Nature is not able to replenish these resources with such speed and eventually the next generating is coming on the red line and bio diversity of the earth is also in danger.

When we talk about the hazardous impact some industries like mining, mineral, energy etc are in front desk. These industries have strongest ecological as well as social impact in terms of sustainability as well as economic development. So that restriction or banning on these industries can't solve the problem and leave the economical development in lurch. Indeed, research and innovation in field of green technology, green chemistry, green building etc can fuel the development with sustainability.

Need for environmental sustainability-

After 20th century, we have seen our planet from the space first time with lots of beautiful clouds, gases, greenery, oceans, soil not human and its activities (Morrelli, 2011). Morrelli (2011) further stated that our planetary system is altering because of mismatch between the human activities and its pattern. Therefore, many life threatening hazards are coming with these changes. Every country, every region, every company is in consternation about the issue of sustainability and survival. Climate change, green house effect, soil erosion, water pollution, noise pollution, loss of bio diversity etc are life hazardous impact of ignored sustainability (IEG report on environment sustainability, 2008).

Globally as well domestically economic development with industrial development is always wrecking the balance of environment and sustainability. As far as developing countries are concerned, they are always alleged by developed countries on the matter of environmental alteration. Now, the time has come when strong heed as well as action become need of the day for developing as well as developed countries to change their policies and practices in such a manner that will bolster the competitiveness as well as positive impact on environment.

RESEARCH OBJECTIVES

With acknowledging the need of sustainability, present study attempts to find out the following research objectives-

1) Extent of importance given to environment sustainability by companies.

2) Comparison of domestic and foreign companies in term of importance given to environment sustainability.

3) Co-relation between financial performance and importance given to environmental sustainability.

4) Comparison of domestic and foreign companies in term of financial performance.

5) New technologies and innovations in the field of environment sustainability.

RESEARCH METHODOLOGY

Content analyses of annual reports are done to find out the importance given to the environmental sustainability. Non probability purposive sampling has been used for the selection of sample. ETIG data base (2012) has been used to identify the foreign as well Domestic companies. An ET 500 company (2012) (Top companies in India) has been used to get the relevant sample size. On the basis of foreign shareholding patterns (Foreign promoters, foreign institutional investors, foreign venture capital) 51 companies are indentified, whose foreign shareholdings are more than 50 percent that are taken as foreign. And to equalise it 51 Domestic companies also included in sample size irrespective of the industries. So that total sample size for this study is 102 (51 foreign companies + 51 Domestic companies i.e. N=120).

After selection of sample, data is collected through the websites of the respective companies. Annual reports of all companies are downloaded from their official websites. Content analysis method has been used to analyse on the following basis of indicators-

- Sustainability word used (Categorical variable)
- Responsible word used (Categorical variable)
- Any initiative other than CSR (Categorical variable)
- Types of sustainability (Categorical variable)-

  1) Ecological- Plantation, waste management, environment related campaign etc)

  2) Human- (Charity to vulnerable group, old age help, shelter homes, rehabilitation programsetc)

  3) Economical- (Profitability, business sustainability etc)

  4) Technical- (Green technology initiative and other technology related programs etc)

  5) Others/ Many (Natural calamities related programs etc)

RESEARCH HYPOTHESES

H01: There is no significant difference between domestic and foreign companies in terms of importance given to environmental sustainability.

$H_0 1(a)$: There is no significant difference between domestic and foreign companies in terms of concern towards sustainability.

$H_0 1(b)$: There is no significant difference between domestic and foreign companies in terms of concern towards responsibility of environmental sustainability.

$H_0 1(c)$ There is no significant difference between domestic and foreign companies in terms of initiatives taken for environmental sustainability.

$H_0 1(d)$ There is no significant difference between domestic and foreign companies in terms of types of sustainability.

H02 There is no significant difference between the performance of Indian and foreign companies.

$H_0 2(a)$ There is no significant difference between domestic and foreign companies in term of percentage change in profit after tax.

$H_0 2(b)$ There is no significant difference between domestic and foreign companies in term of percentage change in revenue.

DATA ANALYSIS

Collecting, tabulating and performing various test on SPSS data presented as following-

Table 1 (Table 1 about here) indicated that there are total 102 companies (51 foreign companies and 51 Indian companies), in which 86 were form manufacturing sector (37 foreign and 49 Indian) and 16 were (14 foreign and 2 Indian) operating in service sector.

Table 2 (Table 2 about here) depicted that 21.6 percent (11 companies) foreign companies have not used the word sustainability in their annual reports i.e. less than Indian companies, where 37.3 percent (19 companies) were not included such word anywhere in their annual report. In total scenario 29.4 percent companies were not included any sustainability word in their annual reports. Indeed,70.6 percent of the total companies have been found concernedtoward environmental sustainability issues.

Table 3 (Table 3 about here) is all about the responsibility word used in their annual reports. 98 percent (50 companies) of foreign companies have used responsibility word compare to their counterpart i.e. 96.1 percent (49 companies). On the flip side, 2 percent of foreign companies with 3.9 percent of Indian do not use the word responsibility in their annual reports.

Table 4 (Table 4 about here) depicted the status of initiative taken by companies regarding the sustainability other than CSR. 41.2 percent of foreign companies take some initiative for maintaining the sustainability of the environment. On the other hand only 25.5 percent of the Indian companies fall in this category.

Discussing about the types of initiative taken by companies on environmental sustainability table 5 (Table 5 about here) clearly shows that maximum

Table 1- Types of company * Company is operating in which sector. Cross tabulation

		Company is operating in which sector.		
		Manufacturing Sector	Service Sector	Total
Types of company	Foreign	37	14	51
	Indian	49	2	51
Total		86	16	102

Table 2- Types of company * Sustainability word used Cross tabulation

			Sustainability word used		
			No	Yes	Total
Types of company	Foreign	Count	11	40	51
		% within Types of company	21.6%	78.4%	100.0%
		% within Sustainability word used	36.7%	55.6%	50.0%
	Indian	Count	19	32	51
		% within Types of company	37.3%	62.7%	100.0%
		% within Sustainability word used	63.3%	44.4%	50.0%
Total		Count	30	72	102
		% within Types of company	29.4%	70.6%	100.0%
		% within Sustainability word used	100.0%	100.0%	100.0%

Table 3 Types of company * Responsible word used Cross tabulation

			Responsible word used		
			No	Yes	Total
Types of company	Foreign	Count	1	50	51
		% within Types of company	2.0%	98.0%	100.0%
		% within Responsible word used	33.3%	50.5%	50.0%
	Indian	Count	2	49	51
		% within Types of company	3.9%	96.1%	100.0%
		% within Responsible word used	66.7%	49.5%	50.0%
Total		Count	3	99	102
		% within Types of company	2.9%	97.1%	100.0%
		% within Responsible word used	100.0%	100.0%	100.0%

Table 4 Types of company * Other initiative for environmental sustainability Cross tabulation

			Other initiative for environmental sustainability		
			No	Yes	Total
Types of company	Foreign	Count	30	21	51
		% within Types of company	58.8%	41.2%	100.0%
		% within Other initiative for environmental sustainability	44.1%	61.8%	50.0%
	Indian	Count	38	13	51
		% within Types of company	74.5%	25.5%	100.0%
		% within Other initiative for environmental sustainability	55.9%	38.2%	50.0%
Total		Count	68	34	102
		% within Types of company	66.7%	33.3%	100.0%
		% within Other initiative for environmental sustainability	100.0%	100.0%	100.0%

Table 5 Types of company * Types of sustainability Cross tabulation

			Types of sustainability						Total
			None	Ecological	Human	Economical	Technical	Many*	
Types of company	Foreign	Count	4	5	15	5	2	20	51
		% within Types of company	7.8%	9.8%	29.4%	9.8%	3.9%	39.2%	100.0%
		% within Types of sustainability	50.0%	26.3%	55.6%	29.4%	66.7%	71.4%	50.0%
	Indian	Count	4	14	12	12	1	8	51
		% within Types of company	7.8%	27.5%	23.5%	23.5%	2.0%	15.7%	100.0%
		% within Types of sustainability	50.0%	73.7%	44.4%	70.6%	33.3%	28.6%	50.0%
Total		Count	8	19	27	17	3	28	102
		% within Types of company	7.8%	18.6%	26.5%	16.7%	2.9%	27.5%	100.0%
		% within Types of sustainability	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(*Many: Mixed of ecological, human, economical, technical and other aspects of sustainability)

Table-6 Types of company * Whether company has positive/ negative percentage increased in profit Cross tabulation

			Whether company has positive/ negative percentage increased in profit			Total
			Decreased profit	Increased profit	Not increased nor decreased	
Types of company	Foreign	Count	25	25	1	51
		% within Types of company	49.0%	49.0%	2.0%	100.0%
		% of Total	24.5%	24.5%	1.0%	50.0%
	Domestic	Count	34	17	0	51
		% within Types of company	66.7%	33.3%	0.0%	100.0%
		% of Total	33.3%	16.7%	0.0%	50.0%
Total		Count	59	42	1	102
		% within Types of company	57.8%	41.2%	1.0%	100.0%
		% of Total	57.8%	41.2%	1.0%	100.0%

Table 7- Ranks

Types of company		N	Mean Rank	Sum of Ranks
Percentage change in profit after tax	Foreign	51	59.18	3018.00
	Domestic	51	43.82	2235.00
	Total	102		

Table 8- Test Statistics[a]

	Percentage change in profit after tax
Mann-Whitney U	909.000
Wilcoxon W	2235.000
Z	-2.620
Asymp. Sig. (2-tailed)	.009
Kolmogorov – Smriow Z	3.800
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Types of company

Table 9- Types of company * Whether company has increased / decreased percentage change in revenue Cross tabulation

			Whether company has increased / decreased percentage change in revenue		Total
			Decreased Revenue	Increased Revenue	
Types of company	Foreign	Count	3	48	51
		% of Total	2.9%	47.1%	50.0%
	Indian	Count	8	43	51
		% of Total	7.8%	42.2%	50.0%
Total		Count	11	91	102
		% of Total	10.8%	89.2%	100.0%

Table 10- Ranks

Types of company		N	Mean Rank	Sum of Ranks
Percentage change in revenue	Foreign	51	51.05	2603.50
	Indian	51	51.95	2649.50
	Total	102		

Table 11- Test Statistics[a]

	Percentage change in revenue
Mann-Whitney U	1277.500
Wilcoxon W	2603.500
Z	-.154
Asymp. Sig. (2-tailed)	.878

a. Grouping Variable: Types of company

Table 12- Chi-square test for type of companies and environmental sustainability

Chi-square test	Value	df	Sigma
Type of the company X Sustainability word used (See Table 13)	2.022[a]	1	0.042
Type of the company X Responsibility word used (See Table 14)	.343[a]	1	0.558
Type of the company X Other sustainability initiative taken (See Table 15)	2.024[a]	1	0.043
Type of the company X Percentage change (increased/ decreased) in profit (See Table 16)	3.897[a]	2	.143
Type of the company X Percentage change (increased/ decreased) in revenue (See Table 17)	2.547[a]	1	.110
Sustainability word used X Percentage change (increase/ decrease) in profit (See Table 18)	3.256a	2	.196
Responsibility word used X Percentage change (increase/ decrease) in profit (See Table 19)	.839a	2	.657
Other sustainability initiative taken X Percentage change (increase/ decrease) in profit (See Table 20)	1.140a	2	.565
Sustainability word used X Percentage change (increase/ decrease) in revenue (See Table 21)	1.528a	1	.216
Responsibility word used X Percentage change (increase/ decrease) in revenue (See Table 22)	1.633a	1	.201
Other sustainability initiative taken X Percentage change (increase/ decrease) in revenue (See Table 23)	.815a	1	.367
Industry Sector X Sustainability word used (See Table 24)	1.039a	1	.308
Industry Sector X Responsibility word used (See Table 25)	.575a	1	.448
Industry Sector X Other sustainability initiative taken (See Table 26)	.148a	1	.700

Table 13 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.022[a]	1	.042		
Continuity Correction[b]	2.314	1	.128		
Likelihood Ratio	3.050	1	.081		
Fisher's Exact Test				.128	.064
N of Valid Cases	102				

Table 14 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.343[a]	1	.558		
Continuity Correction[b]	.000	1	1.000		
Likelihood Ratio	.350	1	.554		
Fisher's Exact Test				1.000	.500
N of Valid Cases	102				

Table 15 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.024[a]	1	.043		
Continuity Correction[b]	2.162	1	.141		
Likelihood Ratio	2.843	1	.092		
Fisher's Exact Test				.141	.070
N of Valid Cases	102				

Table 16 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.897[a]	2	.143
Likelihood Ratio	4.298	2	.117
Linear-by-Linear Association	3.665	1	.056
N of Valid Cases	102		

Table 17 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.547[a]	1	.110		
Continuity Correction[b]	1.630	1	.202		
Likelihood Ratio	2.633	1	.105		
Fisher's Exact Test				.200	.100
N of Valid Cases	102				

Table 18 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.256[a]	2	.196
Likelihood Ratio	3.327	2	.189
Linear-by-Linear Association	.156	1	.693
N of Valid Cases	102		

Table 19 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.839*	2	.657
Likelihood Ratio	.850	2	.654
Linear-by-Linear Association	.640	1	.424
N of Valid Cases	102		

Table 20 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.140*	2	.565
Likelihood Ratio	1.445	2	.485
Linear-by-Linear Association	.293	1	.588
N of Valid Cases	102		

Table 21 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.528*	1	.216		
Continuity Correction*	.785	1	.376		
Likelihood Ratio	1.426	1	.232		
Fisher's Exact Test				.293	.186
N of Valid Cases	102				

Table 22 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.633*	1	.201		
Continuity Correction*	.111	1	.739		
Likelihood Ratio	1.140	1	.285		
Fisher's Exact Test				.292	.292
N of Valid Cases	102				

Table 23 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.815*	1	.367		
Continuity Correction*	.318	1	.573		
Likelihood Ratio	.782	1	.377		
Fisher's Exact Test				.499	.280
N of Valid Cases	102				

Table 24 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.039*	1	.308		
Continuity Correction*	.519	1	.471		
Likelihood Ratio	1.117	1	.291		
Fisher's Exact Test				.383	.241
N of Valid Cases	102				

Table 25 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.575*	1	.448		
Continuity Correction*	.000	1	1.000		
Likelihood Ratio	1.041	1	.308		
Fisher's Exact Test				1.000	.596
N of Valid Cases	102				

Table 26 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.148*	1	.700		
Continuity Correction*	.009	1	.923		
Likelihood Ratio	.146	1	.702		
Fisher's Exact Test				.775	.453
N of Valid Cases	102				

numbers fall in the ecological and many categories. Maximum companies considered every aspect of sustainability rather than only one side of the coin. This distribution also shows that foreign firms used mix of various approach simultaneously for environmental sustainability compare to domestic companies.

Table 6 (Table 6 to 8 about here) clearly depicted that 49.0 percent foreign companies have increased percentage change in profit compare to domestic companies i.e. 33 percent. On the flip side only 49.0 percent foreign companies and 66.7 percent domestic companies have decreased percent change in profit after tax. This table indicate the better performance of the foreign companies over domestic companies but to check the significance level of this result further analysis is required. Data is not normally distributed i.e. why we have performed Mann-Whitney U test for analysing that is difference is significant or not. Mean rank for foreign and domestic companies i.e. 59.18 and 43.82 and test value (U-909.00, Sig value-.000) in table 6.8 (Table 6.8 about here) clearly shows that null hypothesis will be rejected. The difference between domestic and foreign companies in term of percentage change in profit is significant.

Table 9 (Table 9 to 11 about here) shows that 47.1 percent of foreign companies and 42.2 percent of domestic companies have increased percentage change in the revenue. Present distribution does not difference vastly, even mean ranks i.e. 51.05 for foreign companies and 51.95 for domestic companies also shows that there is no significant difference were exist between two. Test statistics (U-1277.5, Sig.value-.878) confirm that null hypothesis will not be rejected and there is no significant difference exists between domestic and foreign companies in terms of percentage change in revenue.

Table 12 (Table 12 about here) is all about the impact of types of companies (foreign and domestic companies), Industry sector (Manufacturing and service sector), financial performance (percentage change in profit and revenue) on the importance and concern given to environmental sustainability. All significant value clearly indicate that null hypothesis will not be rejected and there is no impact of sector, financial performance and has found on concern and importance towards environmental sustainability initiatives of the companies operating in India except two variables these are, sustainability word used and sustainability initiative other than CSR. Null hypothesis is rejected in case of these variables and it can be stated that there is significant difference exist between domestic and foreign companies in term of sustainability word used in their annual report and initiative taken to secure the environmental sustainability. Foreign companies get better position compare to domestic companies (**Table 13 to 26 about here**).

RESULT AND DISCUSSION

Interpretation of the above data and the qualitative study of various managers from mining and mineral industries reveal the following results-

numbers fall in the ecological and many categories. Maximum companies considered every aspect of sustainability rather than only one side of the coin. This distribution also shows that foreign firms used mix of various approach simultaneously for environmental sustainability compare to domestic companies.

Table 6 (Table 6 to 8 about here) clearly depicted that 49.0 percent foreign companies have increased percentage change in profit compare to domestic companies i.e. 33 percent. On the flip side only 49.0 percent foreign companies and 66.7 percent domestic companies have decreased percent change in profit after tax. This table indicate the better performance of the foreign companies over domestic companies but to check the significance level of this result further analysis is required. Data is not normally distributed i.e. why we have performed Mann-Whitney U test for analysing that is difference is significant or not. Mean rank for foreign and domestic companies i.e. 59.18 and 43.82 and test value (U-909.00, Sig value-.000) in table 6.8 (Table 6.8 about here) clearly shows that null hypothesis will be rejected. The difference between domestic and foreign companies in term of percentage change in profit is significant.

Table 9 (Table 9 to 11 about here) shows that 47.1 percent of foreign companies and 42.2 percent of domestic companies have increased percentage change in the revenue. Present distribution does not difference vastly, even mean ranks i.e. 51.05 for foreign companies and 51.95 for domestic companies also shows that there is no significant difference were exist between two. Test statistics (U-1277.5, Sig.value- .878) confirm that null hypothesis will not be rejected and there is no significant difference exists between domestic and foreign companies in terms of percentage change in revenue.

Table 12 (Table 12 about here) is all about the impact of types of companies (foreign and domestic companies), Industry sector (Manufacturing and service sector), financial performance (percentage change in profit and revenue) on the importance and concern given to environmental sustainability. All significant value clearly indicate that null hypothesis will not be rejected and there is no impact of sector, financial performance and has found on concern and importance towards environmental sustainability initiatives of the companies operating in India except two variables these are, sustainability word used and sustainability initiative other than CSR. Null hypothesis is rejected in case of these variables and it can be stated that there is significant difference exist between domestic and foreign companies in term of sustainability word used in their annual report and initiative taken to secure the environmental sustainability. Foreign companies get better position compare to domestic companies **(Table 13 to 26 about here)**.

RESULT AND DISCUSSION

Interpretation of the above data and the qualitative study of various managers from mining and mineral industries reveal the following results-

Domestic and foreign companies and importance of environmental sustainability-

Table 2 to 4 is all about the comparison of domestic and foreign companies for sustainability, responsibility words used and sustainability initiative other than CSR has been taken. Tables bring forth the finding that foreign companies are in better position compare to domestic companies. Foreign companies are more oriented towards the sustainability of the environment as they take much initiative other than CSR and have integrated the concept of sustainability in their competitive strategy and technological philosophy.

Domestic and foreign companies and types of initiative for environmental sustainability-

When we talk about the types of initiative for environmental sustainability by companies, it was found that many companies especially foreign companies were concerned about social, economical, technical and ecological aspect of sustainability rather than focusing only on one side of the coin. After this category 'Ecological' aspect of the sustainability has found maximum number and domestic as well as foreign both types of companies shows much concern towards this.

Financial performance of domestic and foreign companies-

Percentage change in profit after tax, percentage change in revenue has been taken as indicator of the organisational performance for nullifying the effect of industry type and size as extraneous variables. Tables 6 to 11 indicate that foreign firm have better performance compare to domestic firms in terms of percentage change in profit but no significant difference has been found in percentage change in revenue. Although seeing the percentage figure it can be analyse that foreign companies have little better performance compare to domestic companies.

Impact of sector, types of company, financial performance on environmental sustainability-

Types of companies variable has shown significant relation with sustainability word used and other sustainability initiatives taken. Result clearly state that foreign companies takes more initiatives to secure their environment in which they are operating compare to domestic companies. Even domestic companies less used the word sustainability in their annual report compare to foreign companies. This finding support the fact that developing countries are more concern towards the efficiency and production compare to developed nations. Therefore, companies from transitional economies are less oriented towards securing the environment for negative impact of development.

Technological development for environmental sustainability-

Technology is the application of knowledge for practical purpose. It is most difficult challenge to overcome due to complexity and incompatibility (Prakash et al. 2013) Interviewing the various managers from different industries (Energy, mining, mineral industries etc)it was found that the various reasons that are responsible for low level of concern and initiative by domestic companies towards sustainability is because of the following reasons-

i) Lack of stringent norms related to sustainability.

ii) Less concern on sustainability in efficiency oriented countries.

iii) Faulty implementation of laws and regulations.

iv) Corruption

Although in the present study low level of concern is also because of less voluntary disclosure practices by companies regarding environmental sustainability in annual reports. Indeed, there are some technological developments that can be adopted by companies for better environmental protection-

• Photovoltaics

• Wind turbins

• Bio reactors

• Bio filtration