CHAPTER 5- FINDINGS AND DISCUSSIONS

This primary study of 50 chemical / petrochemical and pharma companies aims to analyse the factors that lead to Responsible Business Behaviour of those companies operating in Gujarat for sustainable society and business. The data were collected from Unit heads, General Managers / Asst. General Managers and/or HR heads using comprehensive well-structured questionnaire which endeavoured to cater companies Responsible Behaviour towards CSR & Legal Compliances, Corporate Governance, Business Ethics & Sustainable Initiatives taken by these companies during the study period from financial year 2017 to 2019. The quantitative descriptive analysis of the data presents following findings:

Demographical Representation of Respondent companies

Study consists of 72% of Chemicals/Petrochemicals companies and rest 28% companies belong to Pharmaceutical companies. All the selected companies were from Ahmedabad to Vapi Location (known as 'Golden Corridor of Gujarat') as major Chemicals, Petrochemicals and Pharmaceutical clusters were located in these regions.

Sample companies included 12% Government owned and 88% Non – Government owned companies, 50% Unlisted companies and 50% listed companies, 14% sample companies were in existence for up to 25 years (new companies) and 86% were in existence for more than 25 years (old companies), 20% belongs to medium and small sized firms and rest 80% were large sized firms.

Financial performance (Economic sustainability) of sample companies

Amongst the sample companies 70% had avg. Revenue of three years up to Rs. 3000 crs. and 30% had more than 3000 crores; with reference to avg. PAT, 1 out of 10 companies were running in loss and rest 90% companies were in profit; 6% companies reserve values were in minus figures and rest had their avg. reserve value in positive figures.

Fluctuations in ROE, ROCE, ROA and NPM ratios were found within the range of 14% to 72% companies; constant increase were found in 8% to 57% companies; and constant decrease were found in 0% to 33% companies

Revenue performance

Amongst all the sample companies, 7 out of every 10 companies had their avg. revenue up to Rs. 3000 crs while 3 out of every 10 companies had their avg. revenue performance more than Rs. 3000 crs. Similarly, 2 out of every 10 government companies and 8 out of every 10 non-government companies' had their avg. revenue up to 3000 crs while 8 out of every 10 government companies and 2 out of every 10 non-government companies' had their avg. revenue performance more than Rs. 3000 crs; 9 out of every 10 unlisted companies and 4 out of every 10 listed companies' had avg. revenue up to Rs. 3000 crs while 4 out of every 10 unlisted companies and 6 out of every 10 listed companies' had avg. revenue more than Rs. 3000 crs; 9 out of every 10 new companies and 7 out of every 10 old companies had their avg. revenue up to Rs. 3000 crs while 1 out of every 10 new companies and 3 out of every 10 ole companies had their avg. revenue more than Rs. 3000 crs; and finally all medium & small sized sample companies and 6 out of every 10 large sized companies' avg. revenue up to Rs. 3000 crs while 4 out of every 10 large sized companies' had avg. revenue more than Rs. 3000 crs.

PAT performance

With context to avg. PAT performance two groups were – up to Rs.100 crs. and more than Rs. 100 crs. It was found that 5 out of every 10 chemical and petrochemical companies' and 4 out of every 10 pharmaceutical companies' had their avg. PAT more than Rs.100crs. Similarly, 8 out of every 10 government companies and 4 out of every 10 non-government companies' had avg. PAT more than Rs.100 crs; 2 out of every 10 unlisted companies and 8 out of every 10 listed companies' had avg. PAT more than 100 crs; almost all sampled new companies and 5 out of every 10 old companies had their avg. PAT up to Rs. 100 crs while 5 out of every 10 old companies had avg. PAT more than Rs.100 crs; and finally all medium / small sized sample companies and 4 out of every 10 large sized companies' had avg. PAT up to Rs. 100 crs while 6 out of every 10 large sized companies' had avg. PAT more than Rs.100 crs.

Reserves & Surplus performance

Reserves and Surplus performance were divided into two groups – avg. reserves up to 1000 crs and avg. reserves more than 1000 crs. It was noted that, 5 out of every 10 chemical and petrochemical companies' and 4 out of every 10 pharma companies' had their avg. reserves more than 1000crs. Similarly, 8 out of every 10 government companies and 5 out of every 10 non-government companies' had their avg. reserves more than

1000crs; 2 out of every 10 unlisted companies and 8 out of every 10 listed companies' had their avg. reserves more than 1000 crs; 1 out of every 10 new companies and 6 out of every 10 old companies had their reserves more than 1000 crs; and finally all medium / small sized sample companies and 4 out of every 10 large sized companies' had avg. reserves up to 1000 crs whereas 6 out of every 10 large sized companies' had their reserves were found more than 1000crs.

Profitability Ratio performance on the basis of types of Industry

With respect to ROE / ROCE / ROA & NPM performance of sample organizations, it is revealed that 2 out of every 10 chemical / petrochemical had constant decrease in ROE and ROCE. 1/4th part of the sampled chemical / petrochemical companies had constant decrease in ROA and NPM. Whereas 1 out of every 10 pharma companies had constant decrease in ROE and ROA, 2 out of every 10 pharma companies had constant decrease in ROCE and NPM. In case of variation, 6 out of every 10 chemical / petrochemical companies observed variation in ROE, ROCE, ROA, 5 out of every 10 chemical / petrochemical companies observed variation in NPM. Whereas, 6 out of every 10 pharma companies observed variation in ROE and ROA and 4 out of every 10 pharma companies observed variations in ROCE and NPM. Finally, in case of constant increase, 2 out of every 10 chemical / petrochemical companies had constant increase in ROE, ROCE and NPM, 1/4th part of the sampled chemical / petrochemical companies had constant increase in NPM. Whereas, 3 out of every 10 pharma companies showed constant increase in ROE, 4 out of every 10 pharma companies had constant increase in ROCE and NPM and 2 out of every 10 pharma companies showed constant increase in ROA.

Profitability Ratio performance on the basis of sector ownership

ROE / ROCE / ROA & NPM performance with context to constant decrease, variation and constant increase revealed that, 3 out of every 10 government companies and 2 out of every 10 non-government companies observed constant decrease in ROE, 2 out of every 10 government & non-government companies observed constant decrease in ROCE & ROA, and 2 out of every 10 government companies and 3 out of every 10 non-government companies had observed constant decrease in NPM performance. In case of variation, 2 out of every 10 government companies and 7 out of every 10 non-government companies had variation in ROE, 3 out of every 10 government companies and 6 out of every 10 non-government companies had variation in ROCE and in ROA, and 3 out of every 10 government companies and 5 out of every 10 non-government companies had observed variation in NPM performance. Finally, in case of constant increase, 5 out of every 10 government companies observed constant increase in ROE, ROCE, ROA & NPM and 2 out of every 10 non-government companies' observed constant increase in ROE, ROCE, ROA and 3 out of every 10 non-government companies' had observed constant increase in NPM performance.

Profitability Ratio performance on the basis of legal status of the firm

ROE / ROCE / ROA & NPM performance with context to constant decrease, variation and constant increase showed that, 2 out of every 10 unlisted and listed companies had observed constant decrease in ROE, ROCE and ROA performance and 2 out of every 10 unlisted and 3 out of every 10 listed companies had observed constant decrease in NPM performance. In case of variation, 7 out of every 10 unlisted companies observed variation in ROE, ROCE and ROA and 5 out of every 10 unlisted companies observed variation in NPM whereas 2 out of every 10 listed companies observed variation in ROE, 4 out of every 10 listed companies observed variation in ROCE & NPM, and 5 out of every 10 listed companies observed variation in ROA. Finally, in case of constant increase,1out of every 10 unlisted had constant increase in ROE & ROA, 2 out of every 10 unlisted companies had constant increase in ROCE and 3 out of every 10 unlisted companies observed constant increase in NPM whereas 3 out of every 10 listed companies observed constant increase in ROCE, ROA & NPM and 4 out of every 10 listed companies' had constant increase in ROE.

Profitability Ratio performance on the basis of experience / age of the company

ROE / ROCE / ROA & NPM performance with context to constant decrease, variation and constant increase showed that,1 out of every 10 new companies and 2 out of every 10 old companies had constant decrease in ROE / ROCE / ROA, 1 out of every 10 new company and 3 out of every 10 old companies had constant decrease in NPM. In case of variation, 7 out of every 10, 4 out of every 10 and 6 out of every 10 new companies observed variations respectively, 6 out of every 10 old companies observed variation in ROE, ROCE and ROA, 3 out of every 10 new companies and 5 out of every 10 old companies observed variation in NPM. Finally, in case of constant increase, 1 out of every 10 new companies and 3 out of every 10 old companies had constant increase in ROE, 4 out of every 10 new companies had constant increase in ROCE, 3 out of every 10 new companies had constant increase in ROA and 6 out of every 10 new companies had constant increase in NPM whereas 2 out of every 10 old companies had constant increase in ROCE, ROA and NPM.

Profitability Ratio performance on the basis of size of the firm

ROE / ROCE / ROA & NPM performance with context to constant decrease, variation and constant increase showed that, none of the medium / small sized firms observed constant decrease in ROE, 2 out of every 10 medium/small sized firms observed constant decrease in ROCE and NPM,1 out of every 10 medium / small sized firms observed constant decrease in ROA while 2 out of every 10 large firms observed constant decrease in ROE and ROCE, and 3 out of every 10 large companies observed constant decrease in ROA & NPM. In case of variation, 6 out of every 10 large sized firms observed variations in ROE, ROCE & ROA, 5 out of every 10 medium / small and large sized firm observed variations in NPM, 8 out of every 10 medium / small firms had variations in ROE, 6 out of every 10 medium / small observed variations in ROCE and 7 out of every 10 medium and small sized firms observed variation in ROA. Finally, in case of constant increase, 2 out of every 10 medium/small sized and large sized companies observed constant increase in ROE and ROA, 2 out of every 10 medium/small sized and 3 out of every 10 large sized companies observed constant increase in ROCE, 3 out of every 10 medium/small sized and large sized companies had constant increase in NPM performance.

Long term & Short term Business & Sustainability Objectives of Sample Companies

It was found that all sampled organization have economical sustainability in their vision, mission and value statements, 84% sampled companies reflected social sustainability and only 50% of the sample companies reflected environmental sustainability as part of their vision, mission and value statements.

It was observed that 6 out of every 10 chemical/ petrochemicals companies and 2 out of every 10 pharma companies included environment sustainability in their vision, mission and value statements. Similarly, all sampled government companies and 4 out of every 10 non-government companies; 5 out of every unlisted companies and listed companies (with minor difference); 5 out of every 10 old companies and 3 out of every 10 new companies; 6 out of every 10 large sized companies and 3 out of every 10 medium / small sized companies; 5 out of every 10 companies earning avg. revenue up to 3000 crs and 6 out of every 10 companies earning avg. revenue more than 3000 crs; 48% companies earning avg. PAT up to 100 crs and 52% companies earning avg. PAT more than 100 crs (with minor difference); and finally 6 out of every 10 companies having avg. reserves up to 1000 crs and 4 out of every 10 companies having avg. reserves more than 1000 crs had included environment sustainability in their vision, mission and value statements.

Further, it was noted that 9 out of every 10 chemical/ petrochemicals companies and 6 out of every 10 pharma companies included social sustainability in their vision, mission and value statements. Similarly, all sampled government companies and 8 out of every 10 non-government companies; almost all listed companies and 7 out of every 10 unlisted companies; 9 out of every 10 old companies and 4 out of every 10 new companies; almost all large sized companies and 3 out of every 10 companies; 8 out of every 10 companies earning avg. revenue up to 3000crs and all sampled companies earning avg. revenue more than 3000 crs; 7 out of every 10 companies earning avg. PAT up to 100 crs and all sampled companies earning avg. PAT more than 100 crs; and finally 7 out of every 10 companies having avg. reserves up to 1000 crs and all sampled companies having avg. reserves more than 1000 crs included social sustainability in their vision, mission and value statements.

Responsible Behaviour of companies towards CSR & Legal Compliances for business & societal sustainability

CSR & Compliance Behaviour of companies with respect to people, planet and profit were studied as a part of Responsible business behaviour for business and sustainable society.

Companies Engagement in types of CSR activities

Descriptive statistics reveals amongst all the areas of CSR activities, highest engagement was found in educational activities (3.60) and least engagement in women welfare (2.67) followed by priority sectors (2.81). Further, the mean of each items ranged between 1.69 (giving insurance policies for rural and urban poor women) to 4.61 (arranging tree plantation programs) on a scale. The normally distributed data reveals that Companies engagement on CSR activities was found highly reliable / Excellent (α=0.931). Present study finds Significant association between legal status, Reserves of the firm and Engagement of Companies in CSR activities. An association was found highly statistically significant in case of Size, PAT of the firm and Engagement of companies in CSR.

Significant association between PAT of the firm and CSR was found consistent with the findings of Amole et al., (2012) and Naurikay & Obalade, (2023).

Significant difference exists in sector (government companies) and Responsible Behaviour of Companies through engagement in CSR. Differences were found highly statistically significant in case of legal status of the firm (listed) which is in line with previous studies (Le Ha Diem Chi & Bui Thi Thu Hang, 2023) probably because of the reason of mandatory requirement, Size of the firm (large sized) which is in line with previous studies (Kumar & Batra, 2020; Russo & Tencati, 2009), revenue of the firm (companies earning revenue more than Rs. 3000crs), PAT of the firm (companies earning PAT more than Rs.100 crs.) and Reserves of the firm (companies earning Reserves more than 1000 crs).

Attitude of companies towards CSR compliances

Descriptive statistics where mean of each items ranged between 3.60 (Company makes a benchmark in CSR activities; CSR as an image building exercise for the company to have competitive advantage) to 4.64 (company follows all the mandatory requirements specified as per New Companies Act, 2013). The scale on 'Compliant Behaviour of companies towards CSR' was found excellent / highly reliable (α=0.904); and the reliability scale on 'Responsible Behaviour of companies towards CSR' was found 'good'(α=0.798).

It was observed that number of chemical / petrochemical companies having compliant behaviour or responsible behaviour is equal. However, numbers of Pharma companies having compliant behaviour were more than chemical / petrochemical companies having responsible behaviour. Number of Government companies observing responsible behaviour were more than number of government companies observing compliant behaviour. Whereas number of non-government companies observing responsible behaviour was less than number of non-government companies observing compliant behaviour. Compliant behaviour of companies was found to be related with the legal status of the company i.e. listed company had better compliant behaviour; however, responsible behaviour of companies was not associated with legal status of the company.

Number of new companies exhibited responsible behaviour was more than the number of new companies exhibiting compliant behaviour. Whereas number of old companies observing responsible behaviour was less than number of old companies observing compliant behaviour. Compliant as well as Responsible behaviour of companies was found to be related with the size of the company i.e. large company observed better compliant and responsible behaviour.

Companies earning avg. Revenue more than 3000 crs and avg. PAT more than 100 crs exhibited both compliant and responsible behaviour. However, significant association was found between avg. PAT more than Rs. 100 crs. and Responsible behaviour of companies. Companies having avg. reserves up to 1000 crs or more than 1000 crs were equally concerned with compliant behaviour and responsible behaviour. However, companies having reserves up to 1000 crs had shown less concern for compliant and responsible behaviour than the companies having reserves more than 1000 crs and this association was significantly found correct.

Present Study shows significant association between Size, PAT of the firm and Compliant Behaviour of companies towards CSR. Association was found highly statistically significant in case of legal status, Reserves of the firm and Compliant Behaviour of companies towards CSR. Further, Significant association was observed between Reserves of the firm and Responsible Behaviour of companies towards CSR. Also association was found highly statistically significant in case of size of the firm and Responsible Behaviour of companies towards CSR.

Moreover, Significant difference exist in age (old companies), size (large sized), revenue of the firm (companies earning avg. revenue more than 3000 crs) and Corporate Compliant behaviour towards CSR. Differences were found highly statistically significant in case of legal status (listed), PAT (companies earning avg. PAT more than 100 crs), Reserves of the firm (companies having reserves more than 1000 crs) and Corporate Compliant behaviour towards CSR.

Whereas, significant difference was found in age (old companies), size (large companies), Reserves of the firm (companies having reserves more than 1000 crs) and Corporate Responsible behaviour towards CSR. Differences were found highly statistically significant in case of legal status (listed companies) and PAT of the firm (companies earning PAT more than 100 crs) and Corporate Responsible behaviour towards CSR.

Type of legal problems faced and the ways these issues were managed by the company

Respondent companies, both Chemicals/petrochemicals as well as pharmaceutical companies were maximum confronted with environment based legal issues (30%) and labour laws issues (18%) during the study period. It was also observed that 38% companies had not faced any legal issues. All types of corporate legal issues were mostly managed by companies own in-house team, consultants & their legal departments. It was found that maximum companies accepted legal compliance issues and brought changes as and when required.

Most of the law related issues with respect to environment and labour were reported in chemical / petrochemical and Pharma industries. The other legal issues (consumer, IP, and tax) were faced by 1 in 4 chemical / petrochemical industries. However, other legal issues were almost absent (only one case of IP) in Pharma industries. Government sector struggled equally with labour and tax (17%) issues. While non-government organizations faced environment (41%) and labour (23%) issues the most. However, the other issues (consumer, IP, and tax) were the hallmark of the non-government sector only. Environment (28%) and labour laws (12%) issues were reported more in listed companies than unlisted companies. The other legal issues (consumer, IP, and tax) were faced by both listed and unlisted companies almost equally.

New companies faced environment (29%) and other legal issues (28%) and no labour issues at all. The old companies faced environment and labour related issues more than new companies. Medium / small sized firms faced environment (37%) and labour (26%) issues more than large sized firms facing environment (35%) and labour (18%) issues. The number of other legal issues was more or less same irrespective of medium / small and large sized firms.

Environment (37%) and labour laws (29%) issues were reported more in companies earning avg. revenue up to 3000 crs. than companies earning avg. revenue more than 3000 crs. however, other legal issues including IP & tax issues (26%) were faced more by companies earning avg. revenue more than 3000 crs. as compared to other legal issues including consumer, IP & tax issues (15%) faced by companies earning avg. revenue up to than 3000 crs.

Companies earning avg. PAT up to 100 crs. reported more environment (44%) and labour (33%) related issues compared to companies earning avg. PAT more than 100 crs. The other legal issues (consumer, IP, and tax) were faced equally by both companies earning avg. PAT up to 100 crs. and companies earning avg. PAT up to 100 crs. Companies having avg. reserves up to 1000 crs. reported more environment (48%) and labour (32%) related issues compared to companies having avg. reserves more than 1000 crs. Other legal issues (consumer, IP, and tax) were observed more in companies having avg. reserves more than 1000 crs. than their counterparts.

Responsible Behaviour of companies towards Corporate Governance for business & societal sustainability

Economic & Political Reforms impacting business performance

Descriptive statistics reveals that the mean of each reform items were between 3.28 (Stand up India) and 3.96 (GST) showing moderate to positive impact on business performance of sample companies. GST, Swachcha Bharat factors had positively impacted business, and factors like Stand up India, and Demonetization moderately impacted business performance of sample companies. Further, majority of companies made strategies and appointed consultants to overcome economic and political reforms that impacted their businesses. It was noted that none of the sample companies got collapsed due to economic and political reforms. The non-normally distributed scale on Economic and political reforms impacting business was found highly reliable ($\alpha = 0.906$).

Number of chemical / petrochemical companies ($2/3^{rd}$) was reported to be more positively impacted due to reforms than the number of pharmaceutical companies (1/2 of them). All sampled government companies and approximately half of the non-government companies reported to be highly positively impacted due to reforms. $2/3^{rd}$ of listed companies and approximately 1/2 of the unlisted companies were highly positively impacted due to reforms. Number of New companies (57%) and Old companies (60%) were reported to be more or less same in terms of highly positively impacted due to reforms. The number of large sized firms (65%) were impacted positively due to reforms, however, 60% of medium and small companies reported to have less positively impacted.

Number of Companies (63%) earning avg. Revenue up to 3000 crs, and nearly half of companies earning avg. revenue more than 3000crs were highly positively impacted with the reforms. Number of Companies (63%) earning avg. PAT up to 100 crs, and more than half of companies earning avg. PAT more than 100crs were highly positively impacted with the reforms. Number of Companies (64%) having avg. Reserves up to 1000 crs, and nearly more than half of the companies having avg. reserves more than 1000crs were highly positively impacted with the reforms.

Study revealed no significant association between Economics and Political reforms impacting business and various demographical variables of the study. But there exist significant differences between in legal status of the firm and Economic & political reforms impacting business.

Responsible Investment Behaviour of Respondent companies

More than 2/3rd of the respondent companies were aware of concept Responsible Investment, and 62% sample companies practiced Responsible Investment while implementing business decisions. Long term sustainability of business (74%), Compulsion from Government bodies (45%), and Companies wishing to make an impact on certain global issues like climate change, and diversity, social justice (42%) were the three main reasons reported for making an investment in RI. Lack of awareness on Responsible Investments (84%), costly to implement (28%), and lack of consensus about the impact of responsible investing on investment returns (26%) were three major reasons for companies for not investing in RI till now.

Respondent companies were equal in terms of Socially Responsible Investment (SRI) & Green investment Projects (78%). 50% of companies made thematic Investments and 44% made impact Investments. It was noted that, 64% of chemical / petrochemicals respondent companies and more than half of the pharma companies (57%) invested in Responsible investment projects. All sampled government companies and approximately more than half of the non-government companies (57%) invested in Responsible investment projects. Responsible Investment behaviour of companies was found to be related with the legal status of the company i.e. listed company invested more in Responsible investment projects. 71% of new companies and 60% of old companies invested more in Responsible investment projects. 2/3rd of large sized firms and 40% of medium / small sized firms invested in Responsible projects.

Responsible Investment behaviour of companies was found related with the avg. Revenue of the companies i.e., Companies earning avg. revenue more than 3000 crs invested more in Responsible investment projects. Nearly about 75% companies earning avg. PAT more than 100 crs and more than half of the sample companies (52%) earning avg. PAT up to 100 crs. invested in responsible investment projects. 72% of sample companies earning avg. reserves more than 1000 crs and more than half of the sample companies (52%) earning avg. reserves up to 1000 crs., invested in responsible investment projects.

ESG Investment by Respondent companies

ESG criteria was considered by 64% of the sample companies while making investment decisions.

Further analysis on ESG investment revealed that 2/3rd of chemical / petrochemical companies and 50% of pharma companies reported to have done ESG investments. Similarly, all government companies and 59% of non-government companies; less than half of unlisted companies (44%) and 88% of listed companies; 1/3rd of younger companies and 2/3rd of old companies; very few (20%) medium and small sized companies and 3/4th of large sized companies; less than 50% companies earning avg. revenue up to 3000 crs and all sample companies earning avg. revenue more than 3000 crs; 37% of the companies earning avg. PAT up to 100 crs and almost all samples companies earning avg. PAT more than 100 crs; and finally 44% companies having avg. reserves up to 1000 crs and 84% companies having avg. reserves more than 1000 crs. reported ESG investments. Statistically highly Significant association was observed between legal status, size, revenue, PAT and Reserves of the firm, and ESG Investments.

Descriptive statistics shows that the mean of each items on ESG investment behaviour scale was found between 3.34 (Company advocates ESG training for investment professionals) and 3.84 (Company incorporates ESG issues into investment analysis and decision-making processes). The normally distributed scale on 'Corporate ESG compliant behaviour' was found excellent / highly reliable (α=0.911) and the reliability scale on 'Corporate ESG Responsible behaviour' was found 'good' (α=0.839).

Study noted that ESG compliant behaviour was observed more (64%) than the ESG responsible behaviour (48%) in Chemicals and petrochemicals organizations, however, ESG responsible behaviour was observed more (86%) than the ESG compliant behaviour (43%) in pharma companies. ESG compliant behaviour was observed more (83%) than the ESG responsible behaviour (50%) in government organizations however, in non-government companies not much difference was observed in ESG responsible behaviour (58%) and the ESG compliant behaviour (54%). ESG compliant behaviour was observed only in 40% and ESG responsible behaviour in 30% of unlisted companies. ESG responsible and complaint behaviour was found equally in listed companies i.e. 68%.

Significant association and differences were found with respect to legal status (listed companies) and ESG compliant behaviour, however, no association was observed between legal status and ESG responsible behaviour but significant difference exist between them. New companies and medium & small companies were indifferent in terms of ESG compliant behaviour i.e. 50–50%. Older companies and large sized companies are almost equal in their ESG compliant (60%) and ESG responsible behaviour (57%).

ESG compliant behaviour as well as responsible behaviour was found to be almost equal irrespective of companies earning avg. revenue up to 3000 crs or more than 3000crs. ESG compliant behaviour (73%) and responsible behaviour (68%) was found more in companies earning PAT more than 100 crs, however, significant association and differences were found in companies earning PAT more than Rs.100 crs. and ESG compliant behaviour. Companies having reserves up to Rs. 1000 crs and more than 1000 crs were indifferent in terms of ESG compliant behaviour and almost found equal with respect to ESG responsible behaviour. Presence of planning, strategies & goal setting activities (69%), Strong culture of the company (59%) and Knowledge /expertise of Managers (56%) led to successful implementation of ESG investments by the companies.

Stakeholders' / Shareholders' Activism

The frequency distribution shows that 88% of respondent companies reported familiarity with the term stakeholders' activism. Most of them understood the concept as Informal company engagement outside of AGM (43%), Raising the issues with company authorities (43%), Public campaigns by stakeholders (27%), and Filing the issues with govt. authorities (27%) etc…

Respondent companies were confronted more with environment related sustainability aspects (48%) compared than the social related aspects (42%) through Stakeholders / shareholders Activism, however, 26% companies refrained to disclose any matters related to stakeholder's activism. Three major environmental issues confronted through stakeholders' activism were water waste water management (63%), industrial waste & hazardous material management (54%) and GHG / Carbon emission (42%). It was observed that Chemical / petrochemical companies were confronted more issues on water / waste water management (67%), industrial waste/hazardous material management (61%) and air quality issues (50%) while pharma companies were confronted more of GHG / Carbon emission issues (67%) and water / waste water management issues (50%)

through stakeholder activism. The overall other issues confronted were noise pollution (33%), Product recycling (33%) and energy fuel management issues (29%). Maximum no. of issues confronted were water / waste water management and industrial & hazardous waste irrespective of the sector they belong, their legal status, revenue earned and PAT earned. The same issues were also reported high in the old companies and large sized companies.

The highest number of people related issues (social) reported were labour standards and working (41%), employee health and safety (36%), fair labour policies and practices (27%) and human rights & community relation (27%). The issues were sector specific, legal status specific, age specific, size specific, earning of avg. revenue specific, reserve specific except labour standards and working conditions however, similarities were observed with respect to PAT of the firm only.

The chemical / petrochemical companies had highest issues related to employee health safety (47%), labour standards and working conditions (41%) whereas pharma companies had highest issues with labour standards and working conditions (40%). Government companies had equal number of issues on Pay equity (50%) and employee health and safety (50%) whereas non-government companies had highest issues on labour standards and working conditions (50%) and employee health safety issues (33%). Unlisted companies had equal % of issues i.e., 43% on community benefits, employee health and safety, labour standards and working conditions and human rights while listed companies had highest issues related to labour standards and working conditions (40%) and employee health and safety issues (33%). New companies did not report any social issues than single case of human rights and community benefits while the old companies, however had highest issues on labour standards and working conditions (43%) and employee health and safety issues (38%). Medium and small sized companies had issues equally distributed (33%) on human rights, labour standards and working conditions, pay security issues and community benefits whereas large sized companies had highest issues of employee health and safety and labour standards and working conditions (42%).

Companies earning avg. revenue up to 3000 crs. had highest issues with labour standards and working conditions (46%) and employee health and safety (39%) while companies earning avg. revenue more than 3000 crs had equal % of issues i.e., 33% related to human rights, labour standards and working conditions, fair labour policies and practices and employee health & safety. Companies earning PAT up to 100 crs had equal issues i.e., 29% related with human rights, labour standards and working conditions, fair labour policies and practices and employee health & safety whereas companies earning avg. PAT more than 100 crs. Faced highest issues related to labour standards and working conditions (47%) and employee health & safety (40%). Companies having reserves up to 1000 crs had equal issues (29%) with human rights, labour standards and working conditions and community benefits and companies having reserves more than 1000 crs had highest issues with labour standards and working conditions and employee health & safety (47%).

Descriptive statistics shows that the mean of each items on Stakeholders activism influencing Responsible Behaviour of companies' scale was found between 3.25 (Formal structures are created in the organization to address stakeholders' concerns; Stakeholders can influence corporate affairs through a number of regulatory laws and practices) to 3.57 (Stakeholders can influence matters related to sustainability of business and society, positively or negatively). The normally distributed scale on Stakeholders activism influencing Responsible Behaviour of companies was found highly reliable having (α) value 0.850.

Majority of pharma companies (54%) had high agreement towards stakeholders' activism influencing responsible behaviour and low agreement in chemical /petrochemical companies (55%); high agreement in government companies (67%) and low in non-government companies (55%); high agreement in listed companies (58%) and low in unlisted companies (65%); low agreement in new companies (67%) whereas old companies were divided into 50 – 50 % with agreement and disagreement; low agreement in medium /small sized companies (86%) and high agreement in large sized companies (54%).

Agreement to stakeholders' activism influencing responsible behaviour was less in companies earning avg. revenue up to 3000 crs (62%) and high in companies earning avg. revenue more than 3000 crs. (67%); less in companies earning avg. PAT up to 100 crs (56%) and high in companies earning avg. PAT more than 100 crs. (52%); less in companies having avg. reserves up to 1000 crs (62%) and high in companies having avg. reserves more than 1000 crs. (56%).

No Significant Association was observed between various demographical variables of the study and Stakeholders Activism influencing Responsible behaviour, however significant differences exist on the basis of legal status; Size; avg. Revenue and avg. Reserves of the firm and Stakeholders Activism influencing Responsible behaviour.

Further, 66% of companies dealt with stakeholders' activism with intention to fulfil compliance and 50% companies accepted issues and take steps from time to time.

Responsible Behaviour of companies towards Business Ethics for business & societal sustainability.

Ethical Behaviour of companies with respect to people, planet and profit were studied as a part of Responsible business behaviour for business and sustainable society.

Dimension through which business ethics of companies were guided

The descriptive statistics reveals that the companies Business Ethics were guided by Moral Values (2.26), letter of law (2.34), stakeholder wellbeing (2.98), Industry association code of conduct (3.18) and Utilitarian approach (4.08) in the order of ranking.

Membership of companies with Industry Association

The Business Ethics of companies guided by Industry association code of conduct has been reported to take a back seat however, companies preferred to get associated with various industrial association. Membership with CII was highest (48%) followed by FICCI (32%). Study revealed that 98% of the companies claim to regularly following rules and code of conduct stated by industry association and 30% of the respondents have agreed that Industry association impose penalty for non-compliance of their rules and code of conduct.

Value Addition

The highest rating for Value Addition was given to the statement that Business has strategically re-aligned its products, services, and operations so as to add value to the firm, society and the environment (4.38) followed by Businesses ought to utilize skills, resources, and management capability that lead to social progress (4.24). The least rating was given to Company ensures that its contribution to tackle social issues is integral to the core of their business (3.76). The non-normally distributed scale on Value Addition (n=50) was found reliable having (α) value 0.827. Overall composite score of value addition behaviour shows that companies scored more or less same on high agreement towards

Value addition irrespective of the type of industry – chemical / petrochemical (83%) and pharma companies (86%).

100% high agreement with value addition was observed in government sector, listed companies (found significant association and differences), companies earning avg. revenue more than 3000 crs, companies earning avg. PAT more than 100 crs, (found significant association and differences) and companies earning avg. reserves more than 1000 crs (found significant association and differences).

Majority of companies giving high agreement to value addition than the low agreement to value addition were observed in unlisted companies (68%), new companies (71%), old companies (86%), medium & small sized companies (60%), large companies (90%) (found significant association and differences), companies earning avg. revenue up to 3000 crs. (77%), companies earning avg. PAT up to 100 crs. (70%), companies having avg. reserves up to 1000 crs. (68%). Study also found significant association and differences between size of the company and high agreement on value addition.

Social and Environmental issues addressed by the companies

Social issues addressed by the companies - Study shows that respondent companies took stand on social issues like employment generation (62%), Upliftment of weaker sections (52%), Equal employment opportunities (50%) and least priority was given to poverty eradication (12%) and Women Empowerment (42%).

Chemical and petrochemicals companies gave highest priority to Upliftment of weaker sections (66%) and employment generation (65%) while pharma companies gave equal priority to employment generation and creating equal employment opportunities i.e. 64% each. Government companies had highest priority for Upliftment of weaker sections (83%) followed by equal weightage to employment generation and women empowerment with 67% each while non-government companies had highest priority for employment generation (64%). Unlisted firms had highest priority for employment generation (67%) followed by upliftment of weaker sections (67%) however listed companies had highest priorities for women empowerment (67%) and employment generation (63%). New and old both types of companies had priority for employment generation i.e. new companies with 86% and old companies with 61%. The second most priority for the new companies was equal employment opportunities (57%) and for old companies was upliftment of weaker section (56%). Medium /small sized and large sized firms both gave highest weightage to employment generation (large sized – 66% and medium/small sized – 60%).

The second priority of the large sized companies were Upliftment of weaker sections (61%).

Companies earning avg. revenue up to 3000 crs gave highest priority to employment generation (61%) followed by upliftment of weaker sections (49%) while Companies earning avg. revenue more than 3000 crs gave equal weightage to employment generation and equal employment opportunities (73%). The second most priority was given to the Upliftment of weaker sections (67%) by Companies earning avg. revenue more than 3000 crs. In case of Companies earning avg. PAT up to 100 crs, highest priority was given to employment generation (63%) followed by Upliftment of weaker sections (44%) however, Companies earning avg. PAT more than 100 crs gave highest priority to equal employment opportunities (71%) followed by giving equal weightage to employment generation and upliftment of weaker sections (67%) and then the next priority was women empowerment (62%) and finally, Companies having avg. reserves up to 1000 crs gave highest priority to employment generation (64%) followed by giving equal weightage to Upliftment of weaker sections and equal employment opportunities (44%), however top most priority and equal weightage was given to employment generation, women empowerment and Upliftment of weaker section (65%) followed by equal employment opportunities (61%) in case of Companies having avg. reserves more than 1000 crs.

Steps taken by companies to address environment issues - Companies addressed the environmental problems with solution on priority basis as tree plantation (96%), adopting green technology, treating water before discharge (78%) and recycling the used water (74%).

Study reveals that on the priority basis, companies have taken following steps to address various environmental issues – tree plantations by chemical /petrochemical companies (94%); pharma companies (93%); government companies (100%); non-government companies (93%); unlisted companies (92%); listed companies (96%); new companies (100%); old companies (93%); medium /small sized firm (70%); large sized firm (100%); Companies earning avg. revenue up to 3000 crs (91%); Companies earning avg. revenue more than 3000 crs (100%); Companies earning avg. PAT up to 100 crs (89%); Companies earning avg. PAT more than 100 crs (100%); Companies having avg. reserves up to 1000 crs (88%); Companies having avg. reserves more than 1000 crs

(100%). However, the second priority differed from company to company with respect to industry, ownership, legal status of the company, age, size of the company, companies earning avg. revenue up to or more than 3000 crs., companies earning avg. PAT up to or more than 100 crs. and companies having reserves up to and more than 1000 crs. Further, it was found that steps to reduce carbon footprints was not a priority of any of the company except government companies.

Adoption of Green Technologies - It was observed that 78% respondent companies who adopted green technologies out of them 77% used indigenous technology. The highest three reasons for not investing in green technology by 22% companies were costly affair (36%), will be shortly doing (36%) and no support from the government (27%).

According to respondent companies, the highest two benefits reaped out of adopting green technology were – green technology has helped to manage and recycle waste material (85%) and green technology has also helped in conservation of energy (82%). However, companies reported less benefits of green technology on account of reducing carbon emission and purification of air and water (59%) as well as Rejuvenating Ecosystems (38%).

Behaviour towards managing its business functions

The overall responsible behaviour towards managing business functions were observed highest in marketing function (4.54) and lowest in Human Resource function (3.89). Within functions, Responsible behaviour in procurement function was found highest in Company monitors non-use of child labour during production by the suppliers (4.30) and Company considers supplier's sustainability (4.22) and lowest was Company prefers those suppliers promoting women empowerment (3.36). In Manufacturing function, highest focus was observed on resource optimization (4.66) and company taking care of proper disposal of industrial waste (4.64) while lowest focus was on Safe products are designed having recyclability and biodiversity (4.12) and Company has Sustainable and eco-friendly product packaging (4.28). In HR function, highest and equal priority was given to promotion of accident prevention, disaster and emergencies management programmes at work place (4.56) and Safety audits are regularly conducted in the company (4.56) followed by Company regularly provides safety training programmes to its employees related HSSE (4.54) while lowest concern was observed for Company practicing reservation policy for weaker section (2.62), frequently recruits disabled employees (3.10) and prefers male than female employees while providing employment (3.20). Further, the non-normally distributed scale on Responsible behaviour towards companies' business function having total 35 items was found highly reliable having (α) value 0.937.

High agreement was found for responsible behaviour towards business function in chemical /petrochemical companies (72%) than pharma companies (50%). High agreement was found in government companies (83%) than non-government companies (64%). Similarly, more in listed companies (80%) than unlisted companies (52%); more in new companies (71%) than old companies (65%); more in large companies (70%) than in medium and small sized companies (50%); more in companies earning avg. revenue more than 3000 crs (80%) than companies earning avg. revenue up to 3000 crs (60%); more in companies earning avg. PAT more than 100 crs (83%) than companies earning avg. PAT up to 100 crs (52%); more in companies earning avg. reserves more than 1000 crs (80%) than companies earning avg. reserves up to 1000 crs (52%). However, the significant differences and association was observed between legal status, avg. PAT and avg. Reserves of the firm with Responsible behaviour towards business functions.

Economic sustainability of business

Customer base fluctuations - Highest number of respondent companies i.e. 88% claimed no customer based fluctuations to sometimes, meaning that companies have a sustainable revenue generation through business. The steps taken by companies for economic sustainability of business were customer responsiveness (78%), cost reduction (68%), Product innovation and Addressing Social & Environmental Concerns (56%) each and least steps were taken towards human capital management (32%) and inclusive business activity (26%)

In customer responsivesness scale, highest priority was given to Company maintains speed and quality in providing customer service and communication (4.70), timely addressing issues raised by customers, company brings sustainable advantage and competitive edge to the business (4.50) while least concern was shown to Company periodically does marketing research to anticipate customer need & satisfaction to develop new products (4.20). The non-normally distributed scale on Responsible behaviour of companies towards customer responsiveness was found reliable having (α) value 0.837.

Study indicates no significant association and differences between any of the demographic variable of the study and companies responsible behaviour towards customer responsiveness.

Inclusive Business Model

Products and services designed for poor or low income group has been done by 42% of the respondent companies. 58% of companies who have not involved in doing so, did it for the reasons that companies business does not have such possibilities (62%) and high cost involved (26%). Further, low income stakeholders were part of business model of 42% companies, out of those highest priority was for low income customers (62%) and employees (52%).

Moreover, the objectives to address lower income stakeholders group were value creation in products and services (86%), mutual beneficial to business and society (86%) and strategic business growth plan (81%) was second most preferred objectives of the companies. Implementation of inclusive business model by companies has suffered highest constraints due to inadequate infrastructure (29%) and difficulty faced in creating market (encourage demand) (29%) at the first place; limited market information (24%) and Ineffective regulatory environments (24%) at the second place. However, companies have taken certain steps to overcome these constraints. Highest among them were - For improving knowledge and skills in value chain company has invested in entrepreneurial skill training of local producers and suppliers (62%) at first place and Limited market information constraints managed through technological adaptation or business process redesign (52%) and for increasing access to finance and resources, company has collaborated with other organizations and pool resources (52%) at the second place.

Companies which considered consumers as low income stakeholders group reported to have business benefits as exploring new markets (71%) and deepening market penetration and increasing sales (59%) and society was benefitted by increase in quality of life (82%) and Increased choices of products for use (53%). From suppliers / distributors /entrepreneurs point of view, respondent companies claimed to get benefitted by fulfilling the social responsibility (53%) and strengthening supply chains (47%) and society benefitted by Empowering communities (59%), Skills building (35%) and Better integration with the Company for sustainability (35%). The low income employees that were part of inclusive business model could reap the profit for business by having motivated workforce (75%) and better employer branding (56%). The society could reap the benefits of having more job opportunities (62%) and Improving incomes and livelihood (50%).

Product Stewardship

Product Stewardship has been implemented by 74% of the respondent companies and the majority of them claimed that companies strong R&D (73%), unique technology (54%) and scope of fulfilling the market (38%) as major driving factors that helped companies to achieve product stewardship.

Descriptive statistics shows that the mean of each items on product stewardship scale was found between 4.27 (Company has strong expert team who works for each aspect of a product's lifecycle so that risks can be characterized and controlled; Company has strong response team to respond any accidents or hazardsituation arising during product life cycle) to 4.62 (Company takes responsibility to ensure safety of products throughout their lifecycle)

The non-normally distributed scale on ‘Compliant behaviour towards Product Stewardship’ having 4 items was found reliable (α=0.880); and the reliability scale on ‘Responsible behaviour towards product stewardship’ having 4 items was found ‘good’ (α=0.860).

However, high agreement towards compliant behaviour was more in chemical / petrochemical companies (89%) than pharma companies (78%); more in government companies (100%) than in non-government companies (84%); more in listed companies (95%) than in unlisted companies (78%); more in old companies (87%) than new companies (83%); almost similar in medium /small sized companies (87%) and large sized companies (86%); high in companies earning avg. revenue more than 3000 crs (90%) than companies earning avg. revenue up to 3000 crs (85%); high in companies earning avg. PAT up to 100 crs (89%) than companies earning avg. PAT more than 100 crs (83%); and finally high in companies having avg. reserves up to 1000 crs (89%) than companies having avg. reserves more than 1000 crs (84%). Further, study shows No significant association between various demographic variables of the study and companies compliant behaviour towards product stewardship, however, significant differences were noted between sector ownership, legal status of the firm and complaint behaviour of companies towards product stewardship.

The high agreement towards responsible behaviour of product stewardship was found more in chemical / petrochemical companies (93%) than pharma companies (56%); more in government companies (100%) than non-government companies (81%); more in listed companies (89%) than in unlisted companies (78%); more in old companies (87%) than new companies (67%); more in large sized companies (90%) than medium / small sized companies (62%); high in companies earning avg. revenue more than 3000 crs (90%) than companies earning avg. revenue up to 3000 crs (81%); high in companies earning avg. PAT more than 100 crs (94%) than companies earning avg. PAT up to 100 crs (74%); and finally high in companies having avg. Reserves more than 1000 crs (95%) than companies having avg. Reserves up to 1000 crs (72%).

Study observed significant association between types of industry and Responsible behaviour of companies towards product stewardship, however, significant differences were found between Sector ownership, Reserves of the firm and Responsible behaviour of companies towards product stewardship.

Responsible Behaviour of companies towards sustainable development initiatives taken for business & societal sustainability.

Incorporating sustainable initiatives at workplace will not only lessen the negative environmental impacts of operations, but also lead to sustainable business. It helps in creating long term value and fosters longevity of business.

Supply Chain Integration (SCI)

Most of the respondent companies faced challenges with supply chain partners mainly due to late delivery of materials (38%), communication issues with supply chain partners (24%) and workers issues suppliers (22%). The factors that are responsible to drive the respondent companies to adopt SCI were mostly increase competitiveness (62%), Improvise quality of products (48%), and focus on core competencies (38%). By adopting these SCI initiatives, the companies reaped the most benefits like consistent on-time delivery (64%), increase in customer responsiveness (60%) and reduced inventory cost (58%) which are raison d^etre for increasing better delivery of goods and services.

Descriptive statistics shows that the mean of each items on a companies' behaviour towards SCI scale were found between 3.54 (Company asks its suppliers to use recyclable packaging materials when they deliver supplies) to 4.38 (Company's SCI integrates ERP and technology). Companies behaviour towards SCI was divided as 'Extrinsic SCI Responsible Behaviour of companies' and 'Intrinsic SCI Responsible behaviour of companies'. The normal scale on 'Extrinsic SCI Responsible Behaviour of companies' having 8 items was found excellent / highly reliable (α=0.901) and non-normal scale on 'Intrinsic SCI Responsible behaviour of companies' having 8 items was also found 'excellent'(α=0.891). Normal data 'Extrinsic SCI Responsible Behaviour of companies' had a less weighted mean (3.93) than the non- normal data of intrinsic SCI responsible behaviour of companies (4.17).

The high agreement on 'Extrinsic SCI Responsible Behaviour of companies' was found more in chemical / petrochemical (78%) than in pharma companies (71%); more in government companies (83%) than non-government companies (75%); more in listed companies (80%) than in unlisted (72%); more in new companies (100%) than in old companies (72%); more in medium / small companies (80%) than large sized companies (75%); more in companies earning avg. revenue up to 3000 crs (77%) than companies earning avg. revenue more than 3000 crs. (73%); companies earning avg. PAT more than 100 crs. (78%) than companies earning avg. PAT up to than 100 crs. (74%); companies having avg. reserves up to 1000 crs. and companies having avg. revenue more than 3000 crs. had no difference (76%) in high agreement towards 'Extrinsic SCI Responsible Behaviour of companies'.

The high agreement on 'Intrinsic SCI Responsible behaviour of companies' was found more or less same in chemical / petrochemical companies (94%) and pharmaceutical companies (93%); listed (96%) and unlisted companies (92%); companies having avg. reserves up to 1000 crs. (92%) and companies having avg. reserves more than 1000 crs. (96%). However, the differences on high agreement was found more in government companies (100%) than in non-government companies (93%); more in new companies (100%) than in old companies (93%); more in large sized firm (98%) than in medium/small sized firms (80%); more in companies earning avg. revenue more than 3000 crs (100%) than companies earning avg. revenue up to 3000 crs (91%); and more in companies earning avg. PAT more than 100 crs (100%) than companies earning avg. PAT up to 100 crs (89%).

No significant association and difference were found between demographical variables of the study and 'Extrinsic SCI Responsible Behaviour of companies'. Further, no significant association was found between demographical variables of the study and ‘Intrinsic SCI Responsible Behaviour of companies’, however, no significant differences were observed between demographical variables of the study and ‘Intrinsic SCI Responsible Behaviour of companies’ except avg. PAT of the firm earning up to 100 crs and more than 100 crs.

Green Initiatives taken for sustainable business & society

Green HRM – The overall responsible behaviour through Green HRM were observed highest in Training & development function (4.13) and lowest in performance management function (3.45). The non-normally distributed scale on Responsible behaviour towards Green HRM function having total 23 items was found highly reliable having (α) value 0.934.

Within Green HRM functions, Responsible behaviour in ‘recruitment / selection & induction function’ was found highest in ‘Companies making sure that recruited new entrants gets familiar with an organization’s green environment initiatives and are capable of maintaining its environmental values’ (4.04) and lowest in ‘Company has developed job descriptions covering Green/ environmental aspects used during recruitment phase’ (3.40). In training & development function, respondent companies reported high agreement towards all its sub-functions (mean score greater than 4). In performance mgmt. function, highest priority was given to ‘Setting of environment based KPI, goals and responsibilities by company’ (3.92) and lowest priority was observed for ‘Companies putting Penalties for non-compliance on Environment friendly code of conduct’ (2.76). In case of Reward Mgmt. function, respondent companies reported high agreement towards ‘Companies recognizing employees who dedicate their time for tree plantations and promotion of green environment’ (4.04) and less for Company rewards innovation in products which are environment friendly (3.70). In employee relations function, high agreement was reported for Company promoting clean and green environment to prevent H&S hazards (4.16) and low agreement for Company dismisses employees for breaching environment related code of conduct (2.58). Finally, responsible behaviour in other green HR aspects were found highest in statement Company promotes shutting down computers and power when of no use (4.36) and lowest in Company encourages use of natural lights while working (4.04).

Green Operations - The overall responsible behaviour towards Green Operations were observed highest in green design (3.95) followed by companies giving equal priority to green procurement and green manufacturing functions (3.85). The normally distributed scale on Responsible behaviour towards Green operation function having total 17 items was found highly reliable having (α) value 0.932.

Within Green operation functions, Responsible behaviour in green design function was found highest in statement related to 'Products and processes are designed in a way that ensures reduction or elimination of environmentally hazardous materials' (4.26) and lowest in 'Company using Cradle to Cradle approach i.e. designing the products and systems in a way which results in taking-back products at the end of its useful life and turning it into new products of equal, if not greater value' (3.44). In green procurement function, respondent companies gave highest priority to cooperation and coordination with suppliers in order to attain environmental objectives (4.08) followed by using raw materials that are environmentally friendly and recycled where possible to save the environment (4.06) and lowest priority was given to companies purchasing products with bio-degradable or recyclable packaging (3.50). And in case of green manufacturing function, highest priority was observed for statement - Profit is generated by using environmentally friendly operating processes from design to disposal stage (4.10) and lowest priority was given to JIT and other similar approaches are followed by companies which helps to reduce inventory, improves inventory management thereby reduce costs (3.46) followed by Company Deploying renewable energy sources like CNG, wind, solar and biomass to achieve energy efficiency in operations (3.58)

Green Marketing & Logistics - The overall responsible behaviour towards Green marketing (3.80) and logistic (3.23) function was found greater than average but less than agreement on a 5 – point Likert scale. The normally distributed scale on Responsible behaviour towards Green marketing and logistic functions having total 09 items was found reliable having (α) value 0.864.

Responsible behaviour in green marketing function was found highest in Company choosing packaging material with minimal impact on the environment (3.88) and Company promotes products through eco-friendly modes of communication (3.88) and lowest in companies identifying customers' environmental needs and develop products to address these needs (3.68). While Responsible behaviour in green logistics function was found highest in Company taking initiative to limit carbon emissions (according to legislation) linked to the movement of goods, transit packaging used for distribution, the operation of distribution facilities, and damage or wastage (3.74) and lowest in Companies encouraging use of biofuels as fuel alternative (2.86).

Overall Green Initiatives - Overall composite mean score on responsible behaviour of companies towards green initiatives through its business function was 3.67 in which companies emphasized more on green operations function (3.89) followed by green HR functions (3.87) and least priority was given to green marketing and logistic functions (3.59). The non-normally distributed scale on companies Responsible behaviour towards Green initiatives having total 48 items was found highly reliable having (α) value 0.964.

The high agreement on Responsible Behaviour of companies towards green initiatives was found more in chemical / petrochemical (72%) than in pharma companies (57%); more in government companies (83%) than non-government companies (66%); more in listed companies (72%) than in unlisted (64%); more in new companies (71%) than in old companies (67%); more in large sized companies (75%) than medium / small companies (40%); high in companies earning avg. revenue more than 3000 crs (73%) than companies earning avg. revenue up to 3000 crs. (66%); high in companies earning avg. PAT more than 100 crs. (78%) than companies earning avg. PAT up to than 100 crs. (59%); high in companies having avg. reserves more than 1000 crs. (76%) than companies having avg. revenue up to 1000 crs. (60%).

Significant association was observed between size of the firm and Responsible behaviour of companies towards green initiatives and significant differences were observed between Sector Ownership, avg. PAT of the firm and Responsible behaviour of companies towards green initiatives.

Crisis Management behaviour

Survey revealed that 42% of respondent companies had faced crisis events in the past. Majority of which faced financial crisis (62%), technological crisis (33%), and Natural crisis through calamities (33%), wherein primary stakeholders of business (76%), were greatly affected due to crisis events. Immediate or long term consequencies due to crisis events were majorly found in the form of financial losses (66%), loss of reputation (29%), and loss of market share (24%).

Descriptive statistics shows that the mean of each items on Responsible Behaviour of companies towards Crisis Management scale was found between 3.74 (Pre-designated signals and alerts are used to communicate the presence of a crisis) to 4.12 (Companies has designed organization structure to prevent the occurrence and reduce the impact of crisis and Companies is capable and had good crisis response system to solve and grow from crisis events). Reverse coded item (Pressures to meet stakeholders' expectations encourages members to involve in unethical practices leading to crisis events) was responded near to moderate level. The non-normally distributed scale on 'Corporate Responsible behaviour towards Crisis Management' was found reliable having (α) value 0.857.

The high agreement on Responsible Behaviour of companies towards crisis management was found more in pharma companies (86%) than in chemical / petrochemical (78%); more in government companies (100%) than non-government companies (77%); more in listed companies (88%) than in unlisted (72%); more in new companies (100%) than in old companies (77%); more in large sized companies (82%) than medium / small sized companies (70%); high in companies earning avg. revenue more than 3000 crs (93%) than companies earning avg. revenue up to 3000 crs. (74%); high in companies earning avg. PAT more than 100 crs. (91%) than companies earning avg. PAT up to than 100 crs. (70%); high in companies having avg. reserves more than 1000 crs. (88%) than companies having avg. revenue up to 3000 crs. (72%).

No Significant association was observed between various demographical variables of the study and Responsible behaviour of companies towards crisis management however, significant differences were found between Sector Ownership, legal status, avg. PAT and avg. reserves of the firm and Responsible Behaviour of companies towards Crisis Management.

Risk Management Behaviour of Respondent companies

Study revealed that majority of respondent companies got affected due to strategic risks (36%) and then by financial risks (26%). In future, respondent companies may get affected due to regulatory risks (68%), and by operational / financial risks (58%). Further, companies also claimed that there are less / no chances of getting affected due to compliance risk (42%) and then by operational risk (28%)

Descriptive statistics specifies that mean of each item on a Responsible behaviour of companies towards Risk Management scale was found between 3.88 (Company is capable in evaluating strategic alternatives as a risk management mechanism) to 4.50 (Company is capable to scan its environments to understand existing and emerging risks - Risk identification). The non-normally distributed scale on 'Responsible behaviour of companies towards Risk Management' was found acceptable (α=0.723).

High agreement was found for responsible behaviour of companies towards risk management function in chemical /petrochemical companies (75%) than pharma companies (57%). Similarly, high agreement was found in government companies (100%) than non-government companies (66%); more in listed companies (84%) than unlisted companies (56%); more in old companies (72%) than in new companies (56%); more in large companies (78%) than in medium and small sized companies (40%); more in companies earning avg. revenue more than 3000 crs (87%) than in companies earning avg. revenue up to 3000 crs (63%); more in companies earning avg. PAT more than 100 crs (87%) than in companies earning avg. PAT up to 100 crs (56%); more in companies having avg. reserves more than 1000 crs (84%) than companies having avg. reserves up to 1000 crs (56%).

Significant association was found between Legal status, Size, avg. PAT and avg. reserves of the firm and Responsible Behaviour of companies towards Risk Management practices. However, Significant differences were observed between sector ownership, legal status, avg. revenue, avg. PAT and avg. Reserves of the firm and Responsible Behaviour of companies towards Risk Management practices.

Present study showing Significant association between PAT, Reserves of the firm (financial variables), and Responsible Behaviour of companies towards Risk Management practices which stands consistent with previous studies done by Rehman and Anwar (2019) and Soliman and Adam (2017).

Findings on Business – Society Coexistence & Sustainability Model as a Mitigation Strategy.

- Fluctuations and Decrease in ROE, ROCE, ROA and NPM in 14% to 72% of companies are sufficient to put these companies in Zone III (Irresponsible) and Zone I (Laissez Faire) due to negative returns in business profitability. If these companies concern for society is +ve, then they are in Zone I (Laissez Faire) and if the concern for society is –ve, then they are in Zone III (Irresponsible).

However, constant increase in ROE, ROCE, ROA and NPM in 8% to 57%, companies may fall under Zone II (Responsible) or Zone IV (Parasites). In this case, the concern for society as +ve, will lead to Responsible Business Behaviour and if the concern for Society is –ve, then they will fall under parasites.

- 84% companies that had social sustainability in their Vision, Mission and Values statements may fall under Zone I (Laissez Faire), if concern for Business is –ve, and may fall under Zone II (Responsible), if the concern for business if +ve.
- Companies showing compliant behaviour, fall in Zone V (Complementary). As anything less than compliant behaviour will make them more likely to fall in Zone I (Laissez Faire), Zone III (Irresponsible) and Zone IV (Parasites). This may happen due to Break even behaviour possibility for showing more concern for Business and Society. However, such companies may fall into Zone II (Responsible), if they become capable of breaking inertia of compliant behaviour to achieve the Responsible behaviour.

- With this discussion, the new companies fall in Zone V (Complementary) less than they fall in Zone II (Responsible), and old companies are observing Zone II (Responsible) behaviour less than Zone V (Complementary) behaviour.
- Large sized companies are falling in Zone V (Complementary) more than in Zone II (Responsible).
- Companies having reserves more than 1000crs. was found to be responsible towards CSR. Such companies fall under Zone I (Laissez Faire), if their concern for business is –ve, and fall under Zone II (Responsible), if their concern for business is +ve.
- Old companies, large companies, companies having reserve more than 1000cr. Listed co. and Companies having PAT more than 100crs may fall under Zone II (Responsible), if their concern for business is +ve and fall under Zone I (Laissez Faire), if their concern for business is –ve.
- 30% of companies that confronted environmental issues and 18% companies that confronted labour law issues will fall under Zone IV (Parasites), if their concern for business is +ve and fall under Zone III (Irresponsible) if their concern for business is -ve.
- Non -Government companies faced legal issues related to consumer, IP & Tax which are business related issues hence these companies will fall under Zone I

(Laissez Faire), or Zone III (Irresponsible) depending upon their concern to society +ve or –ve respectively. 4% Non-Government Co. and 23% Non-govt co. faced environ and labour issues respectively. Hence, these co.'s will fall under Zone III (Irresponsible) or Zone IV (Parasites). It can be concluded that the non-government organizations are more likely to fall under Zone III (Irresponsible) & Zone V (Complementary) due to their less concern towards Society & Business.

- ESG compliant behaviour was more in pharma companies', government companies, were found themselves is Zone V (Complementary), due to their compliant behaviour, then they were found in Zone II (Responsible), due to their responsible behaviour towards ESG.
- More chemical & petrochemical companies were found themselves in Zone II (Responsible), due to their ESG responsible behaviour then they were found in Zone V (Complementary).