1.1 Introduction

In business ethics, the question, what responsibilities a business *should* have towards society, is a core question that may be approached in several ways, e.g. through *Corporate Social Responsibility* (CSR) approach, the *stakeholder theory*, concept of corporate citizenship. The present study, however, brings this discourse to the oil and gas sector in India and tries to find the answer to the abovementioned question through the lens of the concept of *sustainable business practices*. The concept of *sustainability*, originally developed in environmental ethics and associated with the concept of *sustainable development (SD)*, is gaining attention as a possible paradigm for the responsibility of maintaining an intricate balance between the integrated body of social, environmental and economic responsibilities of a business.

Globally, the oil and gas sector is a high turnover sector, which is also known for imposing massive risks, e.g., oil spill, greenhouse gas emission, depletion of non-renewable natural resources, to environment and society. The United Nation has repeatedly asserted that the available energy services fail to meet the needs of the poor and thereby create more social disparity and service barriers with widespread social and environmental impact. The mandate for the hydrocarbon-based oil and gas sector thus is the pursuit of *sustainable energy*, i.e., production and use of energy as engine of long-term human development without compromising the three dimensions of sustainability: social, environmental, and economic.

However, the directive of *sustainable energy* poses a difficult challenge for the oil and gas sector of an emerging economy such as India. With continuously growing energy needs, decline in domestic coal production, supply of oil and gas being subject to the caprices of oil pricing, stricter climate change policies, the sector is reportedly striving for a sustainable solution. Very little literature, however, exist on the sustainability practices in this sector. The present study of the prevalent sustainability practices among the premier companies, both PSU and privately owned, of the oil and gas sector of India was undertaken to fill this gap to some extent.

1.2 Theoretical backdrop of the study

In business ethics, the question, what responsibilities *should* a business have towards the society, is a core question which has gained more and more importance with time. There is heightened awareness about environmental impact, e.g. degradation, greenhouse gas emission, through business operations. The consumers are more aware now; the voice of the NGOs is more powerful now. As a result, expectations from the businesses run high to carry out business a whole lot more responsibly than before.

The very recent BP oil spill in Gulf of Mexico is perhaps a prime example in point. Oil spills are a kind of water pollution with far reaching implication for the fragile marine ecosystem, and also for the humans. Large scale oil spills as a result of operations of major oil company are not exactly uncommon. However, the BP oil Spill in Gulf of Mexico on April 20, 2010 was one of the world biggest manmade disasters. The 'Deepwater Horizon' drilling rig of BP, a nine-year old semi-submersible mobile offshore drilling unit, had an explosion as methane gas under high pressure gushed out of the drill column and ignited. The consequences were disastrous. Eleven platform workers were killed in the incident (Welch and Joyner 2010) and many had to be airlifted. For days and months, the media showed to the world how from the damaged rig the oil continuously leaked into the rich fishing waters of Gulf of Mexico, at times at an amazing rate of up to 25000 barrels per day (Environmental leader 2010). The damage to marine ecosystem, birds, and wildlife habitats nearby was significant. The oil slick was large, soiling 160 Kms of coastline and affected the fishing grounds badly. On April 29, 2010, US President Obama pledged military and other US Governmental resources to contain the oil spread, and Louisiana State was declared a state of emergency. Obama also stated that BP is responsible for the cleanup. When US Senate Energy Committee chairman Jeff Bingaman declared that the explosion on the rig was due to a "cascade of errors", technical, human and regulatory, the involved companies, BP, Transocean and Halliburton, started blaming each other, though on April 30 BP Chief Executive Tony Hayward had stated that the company would take the full responsibility for the spill and would pay all legitimate claims and the cost of the cleanup On June 1, BP shares fall by 17% in London trading, and the US Attorney General declares that there would be a criminal and civil investigation into the rig explosion (Reuters 2010). After some failed attempts only on July 15, 2010, the underwater well-head could be capped to stop the spill, but by then about 4.9 million barrels of crude oil had been released into the ocean. The far-reaching implications of the spill for the area are grim; scientists report huge underwater plumes of dissolved oil in the Gulf area which could not be observed from the surface (Gillis 2010). The spill also adversely affected the livelihood of people involved in Gulf area's tourism and fishing industry, as well as the quality of life for the residents.

BP, however, claims that it was prompt to accept responsibility and to come forward quickly with a four-point spill clean-up plan as mentioned below:

1. Transparency with the U.S. government and public;
2. Investing to make the Gulf oil industry safe;
3. Take financial responsibility for any and all environmental damage;
4. Be responsible to those who have suffered economic harm.

BP claims to have adopted various strategies to counter the effects of the spill e.g., capturing the oil from ocean surface, cleaning up the oil-soaked beaches, compensating legitimate claims, helping actively in the environmental restoration and rehabilitation. The clean-up expenses cost BP nearly US$ 5 Million, and by its own proclamation BP plans to sell off upto USD 30 billion of its assets creating a smaller but higher quality business. In unison with Gulf of Mexico Alliance, BP has also announced a commitment for US$ 500 Million for a 10 year long independent research initiative, the aim of which is to study the effects of the oil spill and the potential hazards that present for public health and environment (British Petroleum 2010).

The response of BP with respect to oil spill in 2010 stands in stark contrast in certain respects from the response of Exxon Valdez, for example, in 1989 when it spilled about 240,000 barrels of oil in Alaska's Prince William Sound. Exxon Valdez, the company responsible for the major oil spill, was widely criticized for its tardy response to the disaster and its reluctance to own the responsibility of the incident. Only through litigation the company was forced to pay up the punitive damages. Pressure was there in case of BP as well, governmental pressure as well as the pressure of mounting public opinion. BP shares plunged in the market after the incident. However, unlike Exxon Valdez, in case of BP, it did not have to go to the level of forcible coercion. BP itself showed a somewhat positive attitude. After an internal investigation, BP itself disclosed that it committed certain mistakes which led to the oil spill (Bates 2010), and accepted the responsibility of clean up. Though the clean up cost was huge, BP wanted to project a small but 'cleaner' image. This is a change that has transpired in the last two decades.

Also, discoveries of malpractices by business enterprises such as in case of huge financial scams in Enron, WorldCom and other giant corporations, engagement of cheap labor, forced labor and child labor by MNCs in less vigilant countries, have adversely affected the public trust in the companies, and in consequence we find stricter corporate governance norms, and self-disclosures by the companies. The power of public opinion on business activities has been witnessed recently on many occasions when, for example, the sales figure and the brand image of Nike dropped steeply after reports of exploitation of workers, violation of minimum wage rule in its supply outfits in Vietnam and Indonesia surfaced. The geographical distance between the Nike headquarters and the outsourcing outfits in Southeast Asia did not matter any more. The public perception clearly held the multinational giant responsible for what its outsourcing arms do, and expected that the corrective measures should come from the corporation itself.

These cases may be taken as pointers that the question, what responsibilities *should* a business have, still remains centrally important in business ethics.

There also appears to be greater public expectation from the corporations that the companies show a more proactive, ethical responsiveness. A 2005 poll (Googins, Mirvis and Rochlin 2007, 47) conducted in 21 countries with the question whether the companies were "not at all", "somewhat" and "completely" responsible for their operations and impact on society found that a large majority of people hold the companies "completely" responsible for operational safety, product safety, employee safety and fair treatment, and environmental safety. However, remarkably many also held the companies "completely" responsible for worldwide social challenges that are not really part of the operational aspects of the company, such as reducing human rights violations, poverty alleviation, preventing HIV/AIDS epidemic. Thus, as per the perception of people, the role and responsibilities seems to have grown larger than before. Though no agreement seems to emerge from the poll about where the boundaries of the enlarged role and responsibilities of a business lie, the top few items for which an overwhelming majority of respondents held companies "completely responsible" are:

- Product safety and health
- Environmental impact
- Fair treatment of the employees
- Responsible production of materials

In this changed scenario of greater public expectation from business and the changed responses from business, our present study has tried to pose the question, what responsibilities a business *should* have, for the oil and gas companies in India. We have attempted to understand and appraise the answers obtained through the conceptual framework of *sustainable development*. In business ethics the two more usual theoretical frameworks which provide significant inputs on the nature and extent of what responsibilities a business should have, and on the ethical dimension of these responsibilities, are:

(a) The framework of *corporate social responsibility* (CSR), and
(b) The framework of *organizational stakeholders*.

However, for reasons explained below the present study has not opted for either of these two frameworks, but has tried to answer the question about the ethical responsibilities that a business should have through the lens of:

(c) The concept of *sustainable business practices* and the theoretical framework of *sustainability* and *sustainable development*.

What follows in the rest of the chapter is first a brief exposition of the CSR and stakeholder frameworks, followed by a discussion on the justification of selecting the sustainable development framework for approaching the responsibilities of the Indian oil and gas sector. A more specific discussion on the oil and gas sector, in general and in India, is taken up in the next chapter.

1.3 The theoretical framework of CSR and responsibilities of a business

The question about responsibilities of a business is answered in a certain way in the discourse of corporate social responsibility (CSR). The concept of CSR, which according to some (Carroll 1999) is a core construct in business ethics, has a rather long and varied history with many changes in its definition (Carroll 1979, 498). The changes in the definition are considered significant enough to be compared to an 'evolution' (Min-Dong 2008). Scholars point out that there is no universal definition of CSR (Carroll 1999; Garriga and Mele 2004). However, a common strand in the discourse on CSR is that, in addition to its fiduciary obligations, a business has many *non-financial* obligations as part of its social responsibilities.

In the west, typically Bowen's (1953) seminal work on social responsibility of business is acknowledged as the beginning of modern understanding of CSR (Carroll 1999, 269-270). Bowen claimed that a business has an obligation to pursue policies and actions that are compatible with the objectives and values of society. The role of social expectations as a driver for shaping business policies and action plans is evident in Bowen's writing. Later, Davis (1960) also defined CSR as those activities which go *beyond* the statutory duty of business to comply with the legislation and to undertake profit-making initiatives. Johnson (1971) maintained that the implications of doing CSR are that an organization should take proactive, voluntary steps to improve the living standard of employees as well as local communities and society at large while counter balancing the demands from a 'multiplicity of interests' of stakeholders.

In sharp response to those who thought that a business should not only pursue profit but also must engage in socially desirable activities such as community welfare, economist Milton Friedman (1970), a defender of neoclassical view of economics, had famously stated: "there is one and only one social responsibility of business to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud". That is, the primary responsibility of business is to stay within the law and to maximize profits for its stockholders. He argued that only individuals can have responsibilities, not corporations; and as agents of stockholders or customers or employees a business executive is not a "principal". As an agent, he has the primary responsibility to protect the interests of the people he is answerable to. The responsibility of the business executive should be to find avenues through which the wealth of the stockholders be increased.

Carroll on CSR: Friedman's view of responsibility of business has been contested by many CSR theorists; however, among these Carroll's work stands out. Carroll's famous three dimensional structure of CSR (Carroll 1979) is an effort to clarify and integrate various definitions of CSR and concerns expressed in the CSR literature, and to offer a more systematic understanding of CSR for businesses to follow. Carroll's basic claim is that a firm's economic responsibility is not separable from CSR, but is just a part of it.

To help a firm to identify its social responsibilities and responsive philosophy, he provided a four-part framework of responsibilities, each of which constitutes a part of total social responsibilities that a society expects a business to accept. The four responsibilities on which Carroll founded his theory of CSR are:

(a) **Economic**: The basic responsibility to produce and sell goods at a profit
(b) **Legal:** To operate within laws and regulations
(c) **Ethical**: To accept extra-legal moral obligations, i.e. *over and above* the basic legal duties, e.g. customer safety
(d) **Discretionary**: Voluntary adoption of what society expects.

The multipart CSR model that he offered is claimed to give directions for corporate social performance and was supposed to provide a philosophy of responsiveness. Carroll maintained that none of these four responsibilities is mutually exclusive, nor do they represent a continuum in one of end of which are a firm's economic responsibilities and the social concerns in the other. Accordingly, he defined CSR in terms of these as a cluster of *multi-layered* responsibilities as follows:

> The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time (Carroll 1979, 500).

However, subsequently in his model he placed the four responsibilities in a hierarchical order with the economic responsibilities as the most basic and foremost among the responsibilities. This ordered structure is reiterated in Carroll's subsequent publication (Carroll, 1991, 1999, 283-284). He (Carroll 1991) revised the ordered structure of the four responsibilities as a 'pyramid' (as shown in Figure 1).

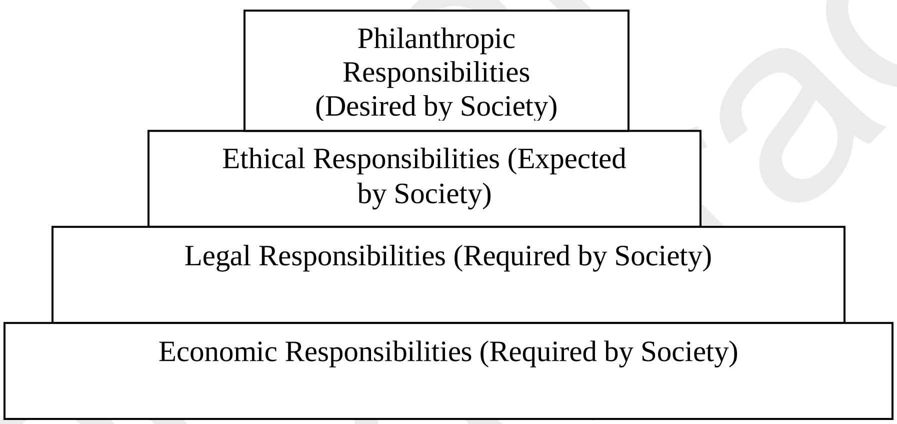

Figure 1.1: Carroll's CSR pyramid

In the CSR pyramid, the economic responsibilities form the wider base and are marked as one of the 'required' responsibilities. The legal compliance forms the next layer of responsibilities, also 'required' by the society. Then, he added the ethical and discretionary responsibilities to form the narrower parts towards the top of the pyramid. The ethical responsibilities may be understood as those which a business may take on conscientiously above and beyond merely fulfilling the demands of the "letter of the law". The 'discretionary' responsibilities became linked to *corporate citizenship* as seen appropriate by corporate wisdom. On Carroll's view, the ethical responsibilities of a business, though not "required", are "expected" by the society, and the discretionary responsibilities form the socially "desired" set of responsibilities. Thus, there is an ordering among Carroll's four responsibilities, in terms of being responsibilities that are mandatory and that may be adopted voluntarily by a business.

We may find the germination of this ordering of responsibilities in *the Committee for Economic Development* (CED) definition of CSR, which Carroll cited in appreciation in his writing (Ibid. 274-275). The CED model also used the economic activities as the core circle, and the environment, and employee concerns forming the next outer circle. The outer circle stood for the responsibility of business to meet the new challenges for actively improving the social environment. Carroll himself compared the CED outer circle to his proposed 'discretionary' responsibilities (Ibid. 284), which he elaborated as philanthropic activities or voluntarism adopted by a business (Ibid.). However, Carroll insisted that the 'pyramid' shape does *not* mean that a business may assume the responsibilities in a sequential manner; but that they must be adopted *simultaneously*.

1.4 CSR in India and Gandhiji's concept of Trusteeship

CSR, as it is known as a business ethics 'construct' in the western hemisphere, may not exactly be found in the history of Indian corporate world. However, in the history of India, the ethos of giving back to the society through philanthropy or by taking up socially relevant causes certainly exists and had existed as a distinct and visible trend among Indian businesses as a tradition. The ethos of "social giving" (Mitra 2007, 16) was prominent in the works of the ancient guilds, which represented a network of socio-economic-political-religious institutions in the Vedic times, and in which the businessmen formed a powerful component. The guild had the function to oversee that the revenues of the state were diverted to *social development.* Scholars also claim that lessons from Kautilya's *Arthashastra* (Bharatadesam 2009) are still relevant for corporate social responsibilities and governance today (Muniapan and Shaikh 2007).

Apart from a rich tradition of philanthropy and charity, India also has unique contribution to offer in the discourse of role and responsibilities of a business in the form of

Mahatma Gandhi's concepts of *Trusteeship* and *Sarvodaya*. Mahatma Gandhi, who strongly believed that the obligation to adopt practices guided by ethical values apply to business just as it applies to individuals, advocated 'Trusteeship' as the paradigm of role of a business in society. He desired that businesses and business owners should see themselves as *trustees, not owners*, of the wealth of the society (Mitra 2007). The philosophy of trusteeship believes in inclusive growth and growth for all (S*arvodaya*) within the society where the wealthier segment voluntarily takes on the additional social responsibility to uplift and improve the conditions of the rest. The concept of 'Trusteeship', where the spirit of community ownership was considered prime, implies a *caretaker* relationship, where the party to be protected becomes owner and the trustee becomes a protector of the owner's interest. It is supposed to be an alternative to the usual systems of capitalism and socialism (Satyanarayana 1988: 96).

Like many other socialist thinkers, Gandhiji too believed that property or wealth of any form is either a gift of nature, or is the fruit of collective social effort. Therefore, he believed that it should be used for the benefit of all of society. However, being an advocate of non-violence, he did not want the forcible termination of the capitalist system and the seizure of the wealth of the capitalists. Rather, he wanted the exploitation by the capitalists of the labor to end and the conflict between capital and labor to stop. Gandhiji wanted an internal transformation in business community, by which the capitalists, i.e., the business owners, should *voluntarily* act as the *trustees* for the rest of the society, but particularly for the poor and the needy in the society, so that the growth is inclusive and for all (*Sarvodaya*). The upshot is that Gandhiji clearly considered business to shoulder the task of wealth creation, wealth distribution and wealth management as part of its social responsibility. Gandhi's ideal businessmen were true 'corporate citizens'.

The concept of corporate social responsibility thus is not new to India; but its expression and drivers may have been historically different. Mitra (2007) claims that the traditions of engaging in community initiatives and doing philanthropy still thrive in the enterprising business sector of modern India. Till date, philanthropy continues as a dominant trend among the business families and the corporations. However, this trend of philanthropy is neither to be dismissed nor is to be disrespected. Frynas (2009) specifically mentions that although in Europe passive philanthropy by corporations is not considered enough because it does not relate to the everyday operations of the firm, philanthropy as an assistance matters a lot in the developing countries where the governments often fail to do their duties, and corporate philanthropy becomes a much-needed social intervention where the government falls short.

However, with the liberalization of Indian economy in 1991, the CSR practices among Indian businesses have changed to align more with the global best practices (Chahoud 2007). As the trade restrictions were lifted, and with the entry of the multi-national companies (MNCs) as competitors, in the globalized business scenario the CSR performance of Indian corporate leaders, such as Wipro, Infosys, Tata Groups, now are comparable to that of leading corporations of the world.

1.5 Stakeholder theory on obligations of business

A major challenge to Friedman's (1970) conception of role and responsibilities of a business also came from the 'stakeholder theory' (Freeman, 1984a, 1984b). The term 'stakeholder' ordinarily refers to ''a person who holds the stake or stakes in a bet" (Sivakumar 2007). The root of the stakeholder framework can be traced back to the Stanford Research Institute in 1962 (Zsolnai 2006; Sivakumar 2007), and also to systems theorists in the '70s (Zsolnai 2006). However, Freeman popularized the term by his definition of an organizational *stakeholder* in the sense to mean *any group or individual who can affect or is affected by the achievement of the organization's objectives* (Freeman 1984b) and based the stakeholder framework in ethics of duty towards the stakeholders.

Taking up the question 'who and what really counts' in business, Freeman responded that it is stakeholders who really should count to those who do business with ethics, because the stakeholders are moral beings and business operations affect them and are affected by them. In his opinion, a firm's responsibility lies not just to the stockholders but to a wider set of stakeholders in the abovementioned sense (Bruce 1994). As Freeman and Gilbert (1988) explain, a basic tenet of stakeholder theory is respect for stakeholders as Kantian 'persons', i.e., beings who are capable of making free choices and are repository of rights. Freeman and Gilbert argued that once the firm and the management recognize this, a desirable link between ethical values and business principles can be forged.

Subsequently, Freeman brought out the normative dimension in stakeholder concept further and argued that the concept can be used to combine business and ethics effectively (Freeman 1994). A fundamental assumption in Freeman's theory is that business operations and processes are value-laden. The creation of the economic value itself must be an activity that should be shared by business and its stakeholders. As he puts it: "There is always a context to business theory, and that context is moral in nature" (Freeman 1994, 412).

His three basic principles underscore what Freeman saw as fundamental moral obligations for corporations:

(a) **The stakeholder enabling principle**: That a corporation should be managed in the interest of all the stakeholders (customers, employees, community, financiers etc),

(b) **The principle of director responsibility**: Director of a corporation shall have an obligation to direct the corporate affairs according to the previous principle, and

(c) **The principle of stakeholder recourse:** Stakeholders may act against directors in case of failure to perform this duty (Freeman 1994, 417-8).

The first principle directly rejects Friedman's exclusive focus on responsibility to stockholders as the primary and only responsibility of business; and gives primacy to the interest of the stakeholders; while the second one holds the director of a corporation as a party to a moral contract to guide the management of corporate affairs in the interest of stakeholders. The obligation is viewed as one-directional from business to the community of stakeholders. The third principle vests power to stakeholders to demand justice in case this moral contract is not honored by the director of the corporation.

Carroll stated that the concept of organizational stakeholders is a “natural fit” for CSR as the nomenclature enables us to put “names and faces” on those members of society to whom the business must be held responsive (Carroll 1991, 230) A basic assumption in stakeholder theory is that values are integral and explicit part of doing business, and a business is essentially an act of *joint value-creation*, not just for the shareholders but for all the stakeholders. Thus, from the theory of organizational stakeholders, a business has a number of responsibilities to its stakeholders. Freeman and his colleagues argued that concern for profits is the outcome rather than the driver in the process of joint value creation by business for itself and its stakeholders (Freeman, Wicks and Parmar 2004, 364).

In general, Freeman brought to our attention the fact that the business operations not only affect the usual participants in business such as suppliers, employees, stockholders, dealers, consumers, but also the other not- so-obvious important participants such as government, political groups, associations of commerce, trade unions, other corporations, and the society at large. Thus, by identifying the different stakeholder groups and the need to protect their different interests, Freeman’s stakeholder concept has helped to enlarge the scope of corporate responsibility into a multi-stakeholder concept. Rescuing it from a narrow perspective on a firm, the stakeholder theory linked CSR to a much larger network of organizational stakeholders which include customers, suppliers, retailers, wholesalers, trade unions and many others who provide the context within which a business operates and are directly or indirectly affect a business and get affected by the activities of business. The impact of business activities on all those who are ‘affected’ for better or for worse, became an integral part of understanding the social responsibilities of corporations.

1.6 Why go beyond Corporate Social Responsibility and Stakeholder frameworks?

The above discussions show that the issues of responsibilities of a business, and the ethical dimension of these responsibilities, have been systematically approached in the CSR and Stakeholder frameworks. However, for the present study on oil and natural gas sector in India, we preferred the framework of sustainability and sustainable development. So, a justification for this preference is in order.

Lately, there are at least three major concerns that cast their long shadows on any discussion about business-society relationship; namely:

(a) The concerns about *environmental impact*
(b) The concerns about the *global challenges* of underdevelopment and uneven development and
(c) The concerns about *corporate governance*.

Today a discussion on corporate responsibilities must include responsive initiatives about at least these three concerns. The framework that should guide us in our discussion about the ethical responsibilities of a business should accommodate these as well.

Environmental concerns: Over the last three or four decades, greater awareness about large scale environmental problems, such as global warming, spills, deterioration of air and water quality due to pollution, ozone layer depletion, loss of biodiversity, depletion of non-renewable natural resources usage due to indiscriminate usage, have caused a greater and widespread concern about the importance of natural environment and human impact on it.

From the 1960s, the environmental degradation caused specifically by reckless industrial activities and the need to accept the onus by the business has become a prominent public issue. The environmental movement was born, as people became more and more aware of the impact of business operations on environment through the powerful works such as Carson's *Silent Spring* (Carson 2002) or Bookchin's *Our Synthetic Environment* (Bookchin 1962). In 1962, when people were not so environmentally informed, Carson's book brought to public attention the widespread and unregulated use of pesticides such as DDT in agricultural lands in eastern USA, and its dangerous effects on the ecosystem, particularly on the birds; with the probable consequence of a spring season when no birds would be there to sing. *Silent spring* raised public awareness and engendered public debates on environmental responsibility that a business should have to safeguard the balance in natural environment. It successfully brought out the corporate and governmental oversight of environmental impact.

Now, thanks to widespread environmental activism throughout the world, environmental awareness, to some extent, has increased. The world today is more aware than before of the importance of conservation of wilderness, protection of natural resources and the value of biodiversity. Creation of national agencies for addressing environmental issues such as, Environmental Protection Agency in the United States,(EPA or USEPA), National Environmental Agency (NEA) of Singapore, and the formation of intergovernmental agencies such as European Environment Agency (EEA), Intergovernmental Panel on Climate Change (IPCC), United National Environmental Project (UNEP) for collaborative partnerships, are tangible indicators of the political will in different countries to stand by the gamut of responsibilities that present society has to own up in order to adequately meet the environmental problems.

In addition, large scale, serious, and pressing environmental issues prod environmentalists to insist with renewed vigor that a business must accept responsibility to address environmental problems, particularly if some of these problems are caused by the impact of business activities on the natural environment (Greer and Bruno 1996; Dudley et al. 1995; Cairncross 1991). Some of the burning environmental issues of today which are causally attributed to irresponsible business practices are:

- Environmental degradation due to business activities: Deforestation due to rampant cutting of trees for commercial uses is one of the stark examples.
- Environmental health affected by business activities: The Minamata disease (1956), the Bhopal disaster of 1984 are severe reminders of how neglect and irresponsibility of business towards the environment can affect a community's health and well-being.
- Climate change: Rapid, and careless industrialization is claimed to be causally linked to climate change through the emission of Green House Gases (GHGs). Climate change stands for the phenomenon of long duration change in the 'average weather' which includes temperature, wind pattern and precipitation. The examples of outcome of climate change are desertification of arable land, frequency of cyclones, changes in seasonal durations etc. and so on. Similarly, the GHGs, specially carbon dioxide and chlorofluorocarbons (CFCs), the deadly contributors to global warming, i.e., the

increased near-surface temperature of atmosphere of the earth, have been linked to business activities.

- Depletion of Biodiversity: The sad fact of extinction or loss of habitat of biotic and abiotic species has been causally attributed often to the reckless behavior of businesses, such as the timber industry, the fashion industry, the real estate business. They have been routinely held responsible for deforestation, overhunting and the consequent habitat loss of hundreds of species.
- Depletion of non-renewable natural resources: Depletion of fossil fuel, groundwater etc due to over consumption and injudicious use has been causally linked to over mining by business.
- Dumping of toxic chemicals and pollution: Irresponsible dumping of hazardous waste by companies is well known. In 2006 British oil trader *Trafigura* dumped hundreds on tons of highly toxic oil waste products in the capital city of Ivory Coast, knowing fully well the toxicity level of the waste (Leigh 2009).

The biocentrism approach in environmental ethics has taught us that the well-being of the living and the non-living elements in nature are all interconnected. This overall web of survival and welfare relationships encompasses a business and its surrounding also. The recognition that a corporation is embedded within its social and natural surrounding has deep implications for the way a business sees its role and responsibilities in those surroundings. We can no longer say that the actions and decisions taken within the corporation have no bearing on the world outside; just as we can no longer claim that events unfolding outside the company will have no impact on the internal functioning of the company. Consequently, a societal expectation has emerged that businesses should also be active partners in resolving the burning environmental problems. Integration of eco-friendly measures in the business process are thus expected to show up in programs and policies of firms; and those corporations should live up to environmental objectives in addition to their traditional profit related objectives. For example, since energy consumption by businesses is a known cause for global warming and industry-caused pollution is a major cause of degradation of environmental quality, environmental lobby now expects a corporation to have a clear environmental policy that explicitly tries to seek out ways to reduce energy consumption and pollution. There is a general increase in awareness in world to encourage both the consumer and the producer towards energy-efficient, environment friendly products. Studies claim that that business of present day should be pro-social, future respecting and should contribute to (a) the conservation and restoration of nature, (b) to the development of human capabilities and (c) to the enhancement of the freedom of future generations (Laszlo 2006).

Social concerns about underdevelopment and uneven development: Similarly, as Frynas (2009) point out, companies are increasingly expected to assist in addressing many of the global challenges such as poverty alleviation. In the globalized world, the enormity and persistence of poverty and other related developmental problems, such as disparity between the health outcome, particularly in the developing countries of Asia and Africa, has led many to believe that companies, specially the large MNCs, should shoulder at least some of these public responsibilities. In fact, lately the United Nations (UN) has proposed CSR *as a tool for international development* (UN Millennium Development Goals 2010). The logic behind that is based on equity as is explained below.

In 1980s, the largest MNCs contributed to about 40% of world trade (Hopkins 2003, 3), but in 1996 they grew larger to account for 2/3 of the total world trade. WTO trade statistics (WTO 2010) show that while the growth, and accumulation of wealth, have benefited the largest companies enormously, benefit to the society in general has been minimal. During the most liberalized business policy period, i.e. since the 1980s, the number of people living on less than US$ 2 has risen by almost 50%. Hence, it is only fair to ask the MNCs to engage themselves to address the social inequities. Moreover, the governments in different countries have achieved little success so far in eradication of the global developmental problems, such as hunger, poverty. On the other hand, businesses, specially the MNCs, enjoy enormous financial and organizational clout. It has been argued that it is only fair that businesses should assume more responsibility than before towards overall development. (Hopkins 2008)

Accordingly, we find that the UN has come up with the ten principles of *Global Compact* (GC) (UN Global Compact 2010), which are about human rights, labor standards, anti-corruption, environment, etc, to urge the business world to adopt these principles and align their operations and strategies accordingly. Many businesses around the world have become GC members to show compliance. In 2000, eight *Millennium Development Goals* (*MDGs*) (Millennium Development Goals 2010) were announced as developmental targets to be fulfilled by 2015. *MDG*s in particular showcase very pertinent international developmental issues, such as malnutrition, HIV/AIDS, poverty, status of women and minorities, and, of course, environment. The *Global Compact* (*GC*) and *Millennium Development Goals* (*MDG*) together evince the already existing UN efforts to make the international business community partner in the concerted effort needed to address these global challenges.

Concerns about corporate governance: There is also a global concern about the state of governance in corporations. Since 2001, there has been spectacular collapse of a number of large firms, such as Enron, Worldcom, Tyco, due to a reckless management of the funds. As a result, massive bankruptcies were declared leaving the investors high and dry. Subsequently, there has been an erosion of public trust in the way the top executives of large corporations run a business without any regard for the welfare of the shareholders and of the society in general.

We need to remember that there is nothing wrong *per se* about the pursuit of profit in business. The stability, strength and vitality of a business organization depend on its profit-making ability. However, what business ethics demands is that certain standards of ethical correctness can and should be maintained in the overall conduct of business, and specifically in its choice for the means to achieve the profit and the purpose for which that profit would be used. Recent scams and collapses of corporations are prime examples of what happens when these standards of ethical correctness are flagrantly violated.

There is increased public demand today for more integrity and transparency in the way in which a corporation and its internal functions are administrated. There is also demand for accountability; public has increasingly high expectations that a business should act responsibly enough to have certain mechanisms by which misdemeanour, if any, can be attributed to certain individual or individuals.

Given the large and global scale of these expectations, the usual theories of CSR and organizational stakeholder are capable of fulfilling these larger responsibilities. Our general contention is that although the theories of CSR and organizational stakeholder have some potential in dealing with large scale environmental and developmental issues by business, there are some theoretical and practical problems for which they may not be the most appropriate choices.

Let us consider the CSR framework first. Traditionally the CSR framework has clearly identified the economic and the socially expected responsibilities of a business. However, traditionally it has not given much importance to environmental responsibilities of business. The common refrain in these theories and approaches has been the 'social giving' or the contribution to the society in conformity to the changing social expectations. In comparison, natural environment, as an area of concern and commitment, does not feature very prominently. If we look at Carroll's work, we find that in his first introduction to the three dimensional model of CSR, Carroll (1979, 503) briefly mentioned environment as one of the 'social' issues that a business must address, but it was only a passing comment. In his organizational responsibility matrix, however, Carroll (1991, 230) mentioned owners, customers, employees, community and several other groups as stakeholders, but did not specifically mention environmental responsibilities in the matrix. This omission may be unintentional; nonetheless it reflects the relatively stronger emphasis on the 'social' aspect of organizational responsibility.

One might argue that the traditional notion of CSR may be *extended* to include environmental and wider social responsibilities that include the responsibility of maintaining socially responsible employee relations. Moon (2002) has named such extension efforts the 'third wave' of CSR in the progression of changes that have taken place in the concept. In EU, for example, environmental responsibilities and social obligations of a business are visualized as two sides of the same coin. For example, we find that in its 2006 policy communication entitled "Implementing the Partnership for Growth and Jobs: Making Europe a Pole of Excellence on CSR ", European Union (EU) has defined CSR as:

> …a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. (EU Business 2002).

Similarly, EU 2006 CSR policy has highlighted that CSR is a voluntary, proactive policy adopted by businesses to integrate not just the social obligations but also the responsibilities to employee relations and environmental concerns in the business processes and in the relationship with the stakeholders (EU business 2002). With the recent deep recession in USA, UK and other European countries, employee welfare and larger social issues loom larger on the CSR agenda.

However, although such extensions and reinterpretations are possible within CSR framework at the conceptual level, at the implementation level the CSR agenda has mostly failed to address the governance, the environmental, and the large scale developmental issues. Though there are several reasons why a business should adopt CSR (Garriga and Mele 2004), studies show (Frynas 2009) that CSR has emerged mostly as a strategic business approach to address the social and environmental impact of the activities of the business. Better community relations, social initiatives are carried out mostly because they pay dividend for attaining the corporate objectives without the resistance from the community. It has been also claimed that CSR tools usually fail to transform the business in its everyday routine. Frynas (2009) contends that even among the corporations that are considered CSR leaders, CSR initiatives run parallel to 'usual' activities such as tax evasion, continued financial engagement with countries accused of human rights abuse, corporate lobbying.

Moreover, CSR is supposed to be a purely business-driven initiative. It expects a business to take up *further* responsibilities aligned with the organizational objectives. In the framework, there is the sanction to treat these responsibilities as additional, and not as core, for a business. That is, within the CSR framework there is no mechanism to acknowledge these wider goals as business *priorities*, or to integrate them with the core operations. This allows the possibility that a business will be interested in the objectives of the society at large, such as poverty alleviation, as long as these are aligned with the organizational objectives. For this reason, the theory of CSR seems to be a bit weak to frame the injunction for a business to address large scale environmental, developmental and governance issues.

Apart from these, there is also a problem in the usual conceptualization of CSR. The four-part CSR model or the CSR pyramid of Carroll does not help us in setting priorities among the social responsibilities of a business, in case they are in conflict. Carroll was keen to point out that the four groups of responsibilities should be *simultaneously* attempted by a business. He did not, however, tell us how to resolve the situation if, in the process, a set of responsibilities, for example the economic, clashes with another set, such as the philanthropic. In general, the CSR framework is silent on the act of balancing that is a necessity for achieving simultaneous performance in various spheres of business responsibilities.

Similarly, the stakeholder theory also appears to have less potential to address the environmental and large developmental issues. While the motivation behind the inclusion of environmental protection and conservation into the ethical obligations of business is clear, it is not clear whether there is the theoretical provision in the framework to include the non-human elements, such as both living (e.g. plants) and non-living (e.g. water bodies) elements of natural environment, into the circle of stakeholders. This is not to say that natural environment has not been conceived of as a stakeholder that a business must accept responsibility of. In fact, it is easy to cite such attempts from the literature. For example, in his argument to include large, multinational business as a partner in development, Hopkins (2003) clearly considers natural environment as a stakeholder. He writes: "Stakeholders exist both within a firm and outside-*the natural environment is a stakeholder* (Hopkins 2003, 1). Jacobs (2003) too has argued that a firm must acknowledge environment and the future generation as the *voiceless stakeholders*. Zsolnai (2006) has also tried to reinterpret normative stakeholder theory to expand it further to consider ecosystems, and non-human creatures as stakeholders. The recent climate change debate has further fuelled the trend to broaden the definition of stakeholder to count natural environment in as a primary stakeholder in organizational context. However, what we wish to submit is that this conceptualization of natural environment as an organizational stakeholder theoretically may not be controversy-free. Scholars have argued that it is problematic for the stakeholder theory to permit natural environment to be treated as an organizational stakeholder. Bazin (2009), for example, argues in the following way.

Bazin maintains that the characterization of a stakeholder in the theory has two important features:

(a) A mutual or reciprocal interest has to hold between the firm and its stakeholder.

(b) The stakeholders of a firm may be diverse but essentially they are all human beings, and in their collective demands and expectations to the firm they represent a human aspect.

Bazin contends that neither of these two conditions is successfully met by natural environment to be considered as an organizational stakeholder. For, first of all, we cannot justifiably ascribe human aspects to nature. Second, a stakeholder is supposed to have some interest in the firm. However, we cannot meaningfully claim that natural environment, as a biotic and abiotic community, has an *interest* of its own. Third, there certainly is no scope for a mutual or reciprocal interest between a firm and the nature. The firm may have its own interest in nature, but nature cannot be said to have an interest in any business organization. Interests are driven by underlying needs and desires, but no such need and desire can be meaningfully attributed to nature. At least, we, the humans, cannot identify any needs, interests and desires to support such a claim (Bazin 2009, 638). So, we are forced to admit that no reciprocal interest exists between an organization and natural environment. Thus, according to Bazin, the attempt to include nature as an organizational stakeholder is not defensible within the framework of the standard stakeholder theory.

Similarly, others, Orts and Strudler (2002) for instance, too have argued that the. Stakeholder theory has its limits and runs into intractable philosophical difficulty in providing credible ethical principles for business managers in dealing with topics that do not directly involve human beings within a business firm. On their view, the stakeholder theory does not provide a reasonable platform for involving natural environment as a stakeholder.

One might try to meet the objections raised by Bazin and others about the limits of the standard organizational stakeholder theory to include natural environment by reinterpreting the term 'organizational stakeholder' and giving it a more expansive definition. For example, Gray (1996) defined a stakeholder as"any group or individual that can be influenced by, or can itself influence, the activities of the organization" (Gray et al. 1996: 45). Starik (1994) too distinguishes between a narrow definition and a broad definition of stakeholder. The *narrow* definition includes only those individuals as stakeholders who have a stake or vested interest in the firm. .The *broad* definition, on the other hand, defines a stakeholder as any naturally occurring entity which affects or is affected by organizational performance (Ibid. 92). This broader definition may be used to accommodate not only the living, but also the non-living elements and ecosystems in nature.

However, as Ort and Strudler puts it, this broadening of the relevant stakeholders also "tend easily to become so broad as to be meaningless and so complex as to be useless" (Ort and Strudler 2002, 218). On the one hand, the broad definition allows any entity, group or individual to become an organizational stakeholder even if it is the result of accidental or unintended consequences of some organizational activity, and thus renders the actual intent of the stakeholder theory pointless. On the other hand, since the stakeholders can have their stakeholders and the expanded definition does not provide us a clear answer about where to draw a line when a stakeholder perspective has to be operationalized within an organization, the task of implementation becomes enormously challenging. Moreover, Ort and Strudler mention (Ibid.) that Freeman himself concedes that since stakeholder theory does not have an ordering of interests, it does not provide us any way to resolve conflict between the conflicting interests of the multiple stakeholder groups, e.g., between the interests of the business owners and that of the customers.

1.7 The framework of *sustainability* and sustainable development (SD)

For the above mentioned reasons, for accommodating environmental, societal, developmental and governance issues together as business responsibilities and with the ethical dimension, we are of the opinion that the sustainability and sustainable development framework appears to have more potential. The present study is on oil and natural gas sector in India, and we are trying to gauge what would count as responsible practices in that sector. The very nature of the sector and its operations, which will be introduced in details in the next chapter, makes the sustainability and sustainable development framework more appropriate for framing the research question. In what follows in the present chapter, we shall present the basic normative principles of the sustainable development framework.

The term 'sustainability' may be understood as the ability to 'sustain' i.e. to subsist or support for a period of time (Onions 1964; Reboratti 1999) .In ecology, *sustainability* means how ecosystems can remain functional over time.

The term is claimed (Ebner and Baumgertner 2006) to have come originally from forestry, where the 'maximum sustainable cut' meant how many trees in the forest can be cut while the forest remains functional for continuous use. That is, maximum sustainable cut refers to at least two things: (a) It refers to the capacity of the forest system to absorb the damage done by tree-cutting, and (b) it refers to a maximum limit upto which the cutting of trees is tolerable without hampering forest growth for continuous usage. However, the term has gained wider usages over time. For example, sustainable agriculture stands for the farming practices that are in consonance with the principles of ecology and which satisfy the human needs, and the financial viability of the farming operations without damaging the environment irreparably. Similarly, sustainable society or community is understood as that society or community which is capable of sustaining the well-being of its members over a period of time in various domains such as economic, social, psychological and environmental. Thus, we may also understand sustainability as a *capacity-building* exercise to maintain a state or a process indefinitely so that the benefits could be carried forward with no loss.

Sustainability and sustainable development are not the same or synonymous concepts. As a concept, sustainability properly belongs to environmental ethics, whereas sustainable development is a challenging, alternative developmental paradigm which includes sustainability concerns about many other domains besides that of the natural environment.

In 1972, with computer modeling the Club of Rome report entitled *The Limits to Growth* (Meadows et al 1972) predicted dire consequences of the combined effect of high consumption rate and unchecked world population growth on the limited natural resources. It caused enough international discussion to bring about a new developmental paradigm; one that emphasized that human well-being should not lead to the destruction of the natural resources and environment. The idea of sustainable development is the outcome of those deliberations. As Baker (2006, 5) puts it, by adding the notion of development to sustainability, the focus shifted from pure environmental concerns to the society and to the way the economy functions in that society. Sustainable development model is a challenge to the more conventional development model, which merely prioritizes economic growth through heightened consumption patterns without realizing that such high consumption rate threatens the very resource base on which future development depends, and thus endanger social stability and cohesion in future. The sustainable development model, on the other hand, speaks of a harmonious growth, which is aimed at reconciling economic activities with social development and environmental conservation. It insists that the economic growth of humans must be socially inclusive and must not be at the cost of the environment. It seeks to integrate three key dimensions of development:

1. The economic
2. The social
3. The environmental (Baker 2006)

There are many versions available of sustainable development. However, the UN appointed Brundtland Commission played a central role is shaping and mainstreaming the concept. In its 1987 report, entitled *Our Common Future* and more popularly known as the Brundtland report, the World Commission on Development and Environment presented the notion of sustainable development, which has gained an authoritative status. The report offered a sustainable kind of development as an alternative, and perhaps the only acceptable kind, of paradigm for development and resource usage that should protect the interest of the future generation also, while meeting the needs of the present. The famous definition clearly states that a sustainable development:

> …meets the need of the present without compromising the ability of future generations to meet their own needs (WCED 1987)

The overall aim of the sustainable development approach is to create a balanced approach so that quality of life for humans is sustained without compromising quality of environment and its elements, and between the needs of the present and the future generation. This definition points out that though resource mobilization and consumption would be obviously driven by human needs, the present need alone cannot be the sole consideration. Hence, in the name of justice and fairness, the demands of the future generations must be factored in, as far as resource usage in concerned. It also directs our attention to two basic concepts: *needs* and *ability to meet the needs*. The world's *needs*, specially the basic needs of the needy, must be met; but there are limitations imposed on the ability to meet the needs by resource constraint. The definition also draws our attention to the importance of distinguishing between the needs of the present generation and the needs of the future generation. The needs of the present generation for economic and social development should be delimited by the concern for the ability of future generation to meet their needs; for, all of the countries, developed or developing, have a *common future*. Clearly, this calls for judicious use of limited resources at the present time.

Thus, conservation of non-renewable resources, recycling of resources, use of economically and environmentally viable and renewable resources instead of non-renewable, conventional ones are the mandates. The overall aim of the sustainable development approach is to create a balanced approach so that quality of life for humans is sustained without compromising quality of environment and its elements. A newer definition of sustainable development refers to the 'carrying capacity' of natural ecosystems as the limit to quality of human life on earth:

> …improving the quality of life while living within the *carrying capacity* of the supporting ecosystems" (Jacobs 1996, 26).

'Carrying capacity' may be roughly understood as the maximum load that an ecosystem can bear before it starts to disintegrate. It is a time-oriented and posterity-oriented concept. Consider a green pasture as a 'common' resource, which belongs to no one in particular but belongs to all. However, if too many cows are allowed to graze in it, as a result the pasture may be overused, grassless in near future, leading to soil erosion followed by less vegetation in the subsequent years. This diminishes the *carrying capacity* of the pasture. Moreover, by eating the grasses that they like, the herbivores tip the balance selectively towards the weeds and shrubs that they do not find good to eat, thus in the process they tend to diminish the *carrying capacity* of the 'common' pasture for themselves and for their future generations in subsequent years. Hardin (1968) mentioned about the *tragedy of commons,* or the scenario in which multiple individuals acting out of self-interest can eventually destroy a shared limited resource, even though it is not in anyone's long-term interest. Injudicious treatment by too many of the natural environment as a 'common' good may only lead towards going beyond the *carrying capacity* of the biosphere.

This newer definition of sustainable development draws our attention to the fact that there are limits to growth imposed by the carrying capacity of the planet, in particular by the capacity of the biosphere to absorb the negative impact of human activities. While economic development is always desirable for the improvement of our present quality of life, we must re-conceptualize development keeping the 'carrying capacity' of natural ecosystems in mind for the sake our own long-term well-being. Consumption cannot be blind, or for short gain.

The sustainable development paradigm brings out the need for a carefully thought-out balancing act in developmental goals. It asks for efficient and judicious management of both (a) quality of life and that of the environment, and (b) present needs and future needs.

There has been general recognition (Holmberg 1992; Reed 1996) that there are three basic aspects of sustainable development:

(a) Economic sustainability

(b) Social sustainability

(c) Environmental / ecological sustainability

In 1992, the first United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro, brought forth the necessity of fostering a link between economic development and environment goals. The conference formulated the Agenda 21 as an action mechanism for worldwide practice of sustainable development. The 1997 Copenhagen Summit and with the Treaty of Amsterdam framed the "three-pillar model of sustainability", which avers that sustainable development rests on three basic pillars: Ecological, economic and social. The United Nations 2005 World Summit report further clarified that these are "interdependent and mutually reinforcing pillars" (UN 2005). That is, neither of the three is supposed to be separately sustainable; they are three strands inextricably intertwined. The environmental, social and economic dimensions of development must be reconciled in such a way that the development is contained "within the carrying capacity of the planet, and is socially just and economically inclusive" (Baker 2006, 5).

Baker explains (Ibid, 7) that the economic sustainability refers to the fair allocation and distribution of scarce natural resources. The idea of economic system that accommodates concern for ecosystems and their limits is the pivot of economic sustainability. It is characterized by the human innovation and ingenuity to use minimal resources from nature to meet our needs, and *not* to exploit nature and people to meet our created *wants*. Ecological or environmental economics is the offshoot of such thoughts, which gives directions on systems of production and commerce every step of which is sustainable. Similarly, the social sustainability refers to the sustainable choices that we make that affect other humans in today's global community. It refers to creating quality of life for people, and upholds human values as are evinced, for example, in the proclamation of human rights, labor rights, participatory governance and decision-making, creating inclusive growth opportunities, social and communal harmony. It also extends to issues such as health equity, livability, and social inclusion in a society. The environmental sustainability refers to the sustainable choices that we make to maintain ecosystems for long-term subsistence and in deference to the needs of the future generations, while minimizing the human impact on the environment and its resources (Ibid.).

The principles which emerge from this tripartite but integrated understanding of sustainability have been summarized as follows (Harris 2000, 18; Harris 2003):

1. Conservation and judicious usage of natural resources for equity: Traditional market mechanisms tend to deplete and degrade "natural capital", but conservation of natural capital is essential. Thus, the industrial societies must practice sustainable production, which aims to reduce the resource intensity of production. Otherwise, the unjust outcome will be a depleted world for our future generation. For the sake of intergenerational equity, natural resources ought to be conserved and used sustainably. .
2. Controlling resource demand: Population and total resource demand must be in balance with the ecosystems and must be limited in scale. Also the diversity of species must be given foremost priority. Hence, instead of mass-consumption, equitable usage of resources without negative impact on natural environment is the mandate. Industrial and affluent societies should undertake the practices of sustainable consumption which reduces the level of consumption, and consciously and judiciously monitor what and how much is consumed by whom.
3. Addressing social, environmental and economic concerns together: Sustainable practices must rectify social inequities, disparities between the developed and the developing world, and environmental damage while upholding a good economic base.
4. Link between ecological sustainability and social equity: Social equity is a major concern, which includes the fulfillment of basic human needs such as health, education, through participatory democracy. Social development must be merged with environmental sustainability.

Though each of the three aspects of sustainable development is crucial, as has been explained above, according to certain activists of sustainable development, however, it is the social element that clearly starkly separates this new developmental paradigm from the previous dominant 'wealth maximization' paradigm. Baker (2006, 20) reminds us that the Brundtland report also insisted that the 'needs', specially the basic needs of the world's poor, must be given priority while the 'wants' of the affluent world need to be reduced. This envisages an overall and inclusive human growth in the world. A *human development* approach insisting on separate indices on non-monetary well-being of people (Human Development Index) now argues for meeting the basic human needs through development and for equitable distribution of the developmental outcomes among the developed and developing countries and among the different segments of a society (Anand and Sen, 1994). Thus, sustainable development not only has to cater to societal issues but also must ensure that the endeavors undertaken are *inclusive* and *equitable* in nature. Hence, to the abovementioned principles of sustainable development, a fifth principle may be added as follows:

> 5. Human development and inclusive growth: The sustainability practices need to ensure that the growth enables overall human flourishing in all dimensions, and that the growth is inclusive,

Taken together, these principles clearly suggest new guidelines for development, one that is claimed to be holistic and sustainable. It is economic growth limited by capacity of ecosystems and ramifications for social cohesion. It is moderated by controlled consumption patterns, restrained resource usage, respect for human rights, concern for ecology, and social values such as equity and justice. The Brundtland report suggested seven initiatives for sustainable development, one of which was to merge economic and environment in developmental decision-making.

Sustainable business practices: Taking this new paradigm for growth as the present day authoritative imperative for all, we have tried to position the discourse of the responsibilities of business within the purview of this framework. The ethical responsibilities of a business, therefore, may be understood as the responsibilities of a business to simultaneously address the challenges of sustainable development in all three mentioned dimensions: economic, ecological and social, and pursue the goals such as sustainable production, sustainable consumption, and sustainable workplace.

1.8 Scope of the study

The present study brings this discourse to the oil and gas sector in India and poses the question: What responsibilities should the sector have towards the society at large? Globally the oil and gas sector is a high turnover sector, but the sector is also known for large scale risks (e.g. oil spills, greenhouse gas emission) that it poses to the society and environment. It is only fair to investigate if the companies are taking responsibility for their positive and negative impact. Moreover, the sector, by the very nature of its operations, is a risk to non-renewable natural resources.

The study has investigated the sustainability initiatives and practices in the Indian oil and gas sector. There are around 175 companies in the sector, with a combination of public or government owned, private, joint ventures and MNCs. Both upstream and downstream sector are dominated by the government-owned companies. This study has selected 45 companies on the basis of their dominant presence (turnover, market share, activity) to investigate the sustainability initiatives and practices currently prevalent in the companies.

The study is based on company disclosures in the form of the available sustainability reports, CSR reports, Health Safety and Environment (HSE) policies, and website statements by the companies. Oil and gas industry in general is internationally known to participate more than other sectors in CSR reporting, environmental and sustainability reporting (KPMG 2005) of their various initiatives towards renewable energy, climate change, and community development initiatives (Frynas 2009), particularly if operating in less developed countries (Moser 2001). However, researchers also have pointed out that this reporting by oil companies is often partial and is almost silent on actual social and environmental impact and is often "highly superficial" in the developing economies (Frynas 2009). This calls for the need for a closer scrutiny of the company sustainability disclosures or reports in a developing economy such as India. Petroleum Federation of India spearheaded an initiative in 2005 to adopt the practice of sustainability reporting by the Indian oil and gas companies (Petrofed 2006). As a result, for the past 4-5 years, gradually the oil and gas companies are adopting the voluntary disclosure practice. In India, however, the practice of reporting, be it CSR, environment, or sustainability, is still at a nascent stage among oil and gas companies. Still, on the available reports and disclosures, a systematic content analysis of the available reports and the website disclosures has been done.

1.9 Objectives

Accordingly, the following objectives were set for the present work.

- **(a)** To investigate the current sustainability practices in the Indian oil and gas sector
- **(b)** To assess the current practices using the related norms, regulations, policies, and sustainable development principles as the normative benchmark
- **(c)** To propose the outline of a conceptual model of sustainability performance for Indian oil and gas sector

1.10 Conclusion

In this chapter, we have tried to explain the theoretical framework that will be used as the backdrop of our study of sustainable practices in the oil and gas sector in India. After discussing the dominant frameworks of CSR and organizational stakeholders, we have tried to show why in this case the framework of sustainability and sustainable development would be a more appropriate choice.