

**A VIEW FROM THE BOTTOM OF THE PYRAMID: DRIVERS OF CORPORATE  
ENVIRONMENTALISM IN DEVELOPING COUNTRIES**

Sukhbir K Sandhu

*Centre for Accounting, Governance and Sustainability, University of South Australia*

Sukhbir.Sandhu@unisa.edu.au

Clive Smallman

*Commerce Division, Lincoln University, Christchurch, New Zealand*

smallmac@lincoln.ac.nz

Lucie Ozanne

*School of Management, University of Canterbury, Christchurch, New Zealand*

lucie.ozanne@canterbury.ac.nz

Ross Cullen

*Commerce Division, Lincoln University, Christchurch, New Zealand*

cullenr@lincoln.ac.nz

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### **ABSTRACT**

Drawing on perspectives from stakeholder, resource dependence, institutional and resource based theories and using a multiple-case inductive study, this research examines the drivers of corporate environmentalism in developing countries. Based on case analysis of 11 environmentally responsive organizations in India, corporate environmentalism in this research has been operationalized as a two stage construct, involving first and second order responsiveness. First order environmental responsiveness in organizations in India was found to be driven by pressures arising out of internationalization. The drivers for second order responsiveness were found to be distinctly associated with organizational identities rooted in a history of social responsiveness.

## INTRODUCTION

Environmental issues such as climate change and damage to ecosystems have become the predominate concerns of the current decade (Hart, 2007; IPCC, 2007; Millennium Ecosystem Assessment Synthesis Report, 2005). Governments and societies in many parts of the world have singled out business organizations as major contributors to the current state of the natural environment (Dunphy, Griffiths, & Benn, 2007; Hart, 2007). In response to the challenges being posed by the natural environment, many business organizations have started to report the adoption of environmentally responsive practices (Hanson, Finisdore, Ranganathan, & Iceland, 2008; Hart, 2007). In attempting to understand and guide these organizational changes, management scholars have directed their research efforts towards defining corporate environmental responsiveness (Banerjee, 2002; Banerjee, Iyer, & Kashyap, 2003; Menguc & Ozanne, 2005), examining its antecedents, (Bansal, 2005; Bansal & Roth, 2000; Gonzalez-Benito & Gonzalez-Benito, 2006; Henriques & Sadosky, 1999; Sharma & Henriques, 2005), and establishing the business consequences of being environmentally responsive (which have been variously measured) in terms of profitability (Hart & Ahuja, 1996; Menguc & Ozanne, 2005; Russo & Fouts, 1997), market valuation (Klassen & McLaughlin, 1996), market share (Menguc & Ozanne, 2005), market value (Dowell, Hart, & Yeung, 2000), manufacturing performance (Klassen & Whybark, 1999), effect on stock market risk (Bansal & Clelland, 2004), and cost of equity capital (Sharfman & Fernando, 2008). There thus exists a well developed body of literature (both in terms of theoretical and empirical sophistication) that extensively examines various aspects of corporate environmentalism. This literature is however confronted by a major limitation: it draws on, and is applicable only to organizations in developed countries. The perspective of developing countries, where massive industrialization is currently underway (Economy &

Lieberthal, 2007) is largely missing from the current debate on corporate environmentalism (Jeswani, Wehrmeyer, & Mulugetta, 2008).

The inclusion of the developing country perspective into this debate however is very important and needs to be urgently addressed because many of the current environmental problems (such as climate change) are global, both in cause and scope, and are not constrained by national boundaries (Hart, 2007; IPCC, 2007; Worldwatch Institute, 2008). The rapid growth in many developing countries is a major contributor to global environmental damage (Economy & Lieberthal, 2007). Between 2000 and 2007, carbon emissions from fossil fuel combustion worldwide increased by 22 percent to an estimated 8.2 billion tons (Worldwatch Institute, 2008). China and India together accounted for a staggering 65 percent growth in these carbon emissions while the United States and Europe contributed towards seven percent of this increase (Worldwatch Institute, 2008). For any mitigation efforts to be even partly successful, it will therefore necessarily require the participation of governments and business organizations in developing countries especially the emerging economies such as China and India (Hart, 2007).

Furthermore (and distinct from the need for worldwide concerted action on decreasing emissions), the issue of examining corporate environmentalism in developing countries assumes further importance because many developing countries are increasingly becoming the workshops for manufacturers in developed world (Rao, Singh, Castillo, Intal, & Sajid, in press). According to the United Nations Environment Programme (UNEP, 2007), industries which are heavily reliant on environmental resources and are heavily polluting are growing most rapidly in the developing world, where there is both more urgency for growth and less capacity to minimize the damaging side effects. Governments in developing countries are often focussed on increasing economic growth and put environmental issues on a backburner. Consequently environmental damage in developing countries has been escalating, especially

since the last two decades (Economy & Lieberthal, 2007; UNEP, 2007; World Bank, 2007b) and has become a major risk for the well-being of populations in these countries.

Understanding what drives organizations in developing countries to be environmentally responsive (and by extension how can organizations in developing countries be propelled to be environmentally more responsive), thus has implications for both global and local socio-economic welfare.

While the insights obtained from the extensive research in the developed countries can guide an enquiry into the examination of the factors that propel organizations in developing countries to be environmentally responsive (for example in assisting with the initial theoretical framework and to provide a basis for the research questions), the findings of these studies however cannot simply be extrapolated to organizational contexts in the developing countries. This is so because the political, economic, social and technological differences that exist between developing and developed countries suggest that the realities of corporate environmentalism in developing countries can be expected to be very different from that in the developed countries (D'Souza & Peretiatko, 2002; Dasgupta, Huq, & Wheeler, 1997; Dasgupta, Mody, Roy, & Wheeler, 1995; Jeswani et al., 2008; Luken & Stares, 2005; Nair & Menon, in press; Rao et al., in press; Rock, 2002; Stuligross, 1999).

A majority, of the limited number of studies, that deal with corporate environmentalism in developing countries have largely concentrated their research efforts towards either examining the environmental effects of multinationals operating in developing countries (Christmann, 2004; Economy & Lieberthal, 2007; Jeppesen & Hansen, 2004; Ruud, 2002) or on the environmental effects of linkages with multinational corporations (MNCs) (Christmann & Taylor, 2001, 2006). The overall conclusion reached by the above group of studies, is that MNCs do not lead to a race to the bottom but rather MNCs set high environmental standards. However, the evidence for this remains equivocal. Other studies

have found no relationship between multinational ownership and improved environmental performance in developing countries (Dasgupta, Hettige, & Wheeler, 2000; Hartman, Huq, & Wheeler, 1997; Hettige, Huq, Pargal, & Wheeler, 1996). Thus the one theme that has dominated the literature on corporate environmentalism in developing countries is confounded by conflicting results. While this narrow focus on environmental performance of MNCs can be explained by Banerjee's (2003) observation that corporate environmentalism is inherently a Western-centred concept, one consequence of this has been that the domestic firm in developing countries has largely missed being the focus of investigation, independent of MNC interests. A very important issue that these studies do not specifically address (nor intend to address) is the underlying question of what drives corporate environmentalism at the massive base of pyramid<sup>1</sup> (Hart, 2007; Prahalad & Hart, 2002) constituted by organizations in developing countries.

This study addresses this important issue through an inductive approach, using a case study method. The choice of an inductive approach was governed by the lack of adequate existing research in this area. Eisenhardt & Graebner (2007: 26) suggest that under conditions where existing research does not address the research question or does so in a way that is likely to be inadequate, an inductive theory-building approach is an appropriate research strategy. The selection of the case study method as an appropriate inductive strategy was based on its capacity to allow an investigation into a phenomenon where there may be many variables of interest, and where evidence from multiple sources can more effectively investigate the phenomenon. Thus because corporate environmentalism is a complex social phenomenon and the focus of this study was on unravelling 'the operational links' (Yin, 2003: 6) that drive organizations to be environmentally responsive, the phenomenon under

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<sup>1</sup> Hart's original conceptualization of the base of pyramid is in terms of the massive populations in developing countries rather than in terms of organizations in developing countries. The term has however been used here as it effectively captures the scale of environmental challenges (and opportunities) associated with organizations in developing countries.

investigation could not have been examined independent of its organizational context. The choice of an inductive case study methodology therefore was based on the ability of this method to allow the development of constructs, measures and testable theoretical propositions about a real world, context dependent phenomenon (Eisenhardt, 1989a; Eisenhardt & Graebner, 2007; Yin, 2003).

We chose India as a developing country for this study because it is one of the most rapidly growing countries in the developing world. Under the economic liberalization programme introduced in India after 1991, the Indian gross domestic product (GDP) growth rate has more than doubled. From a mere four percent in 2000 it peaked at 9.4 percent in 2006 (current GDP growth is 8.9 percent) and exports were at a record high of US\$ 144 billion in 2007 (The Economist, 2007; World Bank, 2007a). This increase in economic growth has resulted in severe environmental damage (Islam, 2007). India along with China is expected to be amongst the major emitters of green house gases in the next decade (Worldwatch Institute, 2008). It therefore becomes imperative to examine what are the factors that can drive business organizations in these countries to be environmentally responsive.

### **Defining Corporate Environmentalism**

Drawing from the literature on corporate environmental practices (Dunphy et al., 2007; Gladwin, Kennelly, & Krause, 1995; Hart, 1995, 1997, 2007; Shrivastava, 1995) and based on previous definitions (Banerjee, 2002; Banerjee et al., 2003) corporate environmentalism in this research is defined as ‘the recognition of the importance of the natural environment by business organisations and its integration into strategic decision making’. Accordingly, organizations that are environmentally responsive will exhibit some or all of the following criteria (which include but are not limited to): complying with

environmental regulations; having a written environmental plan; communicating this plan to stakeholders; conducting regular environmental audits; encouraging employee environmental training; working towards controlling and preventing pollution; making efforts towards developing environmentally beneficial new products etc. This definition of corporate environmentalism was used as a basis to select organizations in this study.

## **THEORETICAL FRAMEWORK AND PRELIMINARY MODEL**

This study draws upon stakeholder, resource dependence, institutional, and resource based theories to provide a theoretical framework for this research. Previous research in corporate environmentalism has mainly relied on single theoretical perspectives. Researchers have thus been guided by either stakeholder theory (Buysse & Verbeke, 2003; Christmann, 2004; Darnall, Henriques, & Sadorsky, 2006; Eesley & Lenox, 2006; Hart & Sharma, 2004; Henriques & Sadorsky, 1999) *or* institutional theory (Bansal & Clelland, 2004; Hoffman, 1999; King & Lenox, 2000; King, Lenox, & Teralak, 2005) *or* by the perspectives from the resource based view (RBV) (Aragon-Correa & Sharma, 2000; Christmann, 2000; Hart, 1995; Hart & Ahuja, 1996; Klassen & Whybark, 1999; Russo & Fouts, 1997) *or* the resource dependence perspectives (Bowen & Sharma, 2005; Kassinis & Vafeas, 2006; Rowley & Moldoveanu, 2003; Sharma & Henriques, 2005).

One limitation of being guided by singular theoretical perspectives is that the enquiry will of necessity, be constrained and scoped in accordance with the prescriptions of the given theoretical framework. For phenomenon such as corporate environmentalism which are characterized by radical uncertainty (Perman, Ma, McGilvray, & Common, 2003), decision making involves a deliberate interplay between various determinants, which may not necessarily be captured and explained by a singular theoretical framework (Oliver, 1991, 1997). In attempting to address this insufficiency, researchers have brought together



perspectives from distinct theoretical frameworks. Thus Bansal's (2005) longitudinal enquiry into organizational determinants of corporate sustainable development has been guided by perspectives from both RBV and institutional frameworks, and Delmas and Toeffel's (2004) advocate bringing in stakeholder and institutional frameworks to understand the adoption of environment management systems. Drawing from these studies, we use four distinct theories, to develop an integrative framework (see Table 1) to guide the enquiry into the drivers of corporate environmentalism. (INSERT TABLE 1 ABOUT HERE)

### **Stakeholder Theory and Corporate Environmentalism**

Stakeholder theory, especially in its instrumental aspect (Berman, Wicks, Kotha, & Jones, 1999; Freeman, 1999; Jones & Wicks, 1999) suggests that organizations may be driven to be environmentally responsible due to pressures from stakeholders. While stakeholder theory provides a starting point for anchoring an enquiry into the drivers of corporate environmentalism, the inclusiveness of stakeholder theory makes it difficult to determine which stakeholders, amongst the vast range of possible stakeholders are actually important in influencing a business organization's environmental responsiveness (Mitchell, Agle, & Wood, 1997). In an attempt to resolve the issue of 'who or what really counts' (Freeman, 1994: 411) efforts have been made to classify stakeholders as primary and secondary based on their importance to the organizations (Clarkson, 1995). However, although this method of classifying stakeholder importance has been used by researchers (Eesley & Lenox, 2006), it may not be particularly useful. This is because stakeholder attributes are neither in a steady state nor are they an objective reality; stakeholder attributes instead are socially constructed and variable (Mitchell et al., 1997). Stakeholder importance is thus transitory and subject to change. Pressures from stakeholders who were considered secondary in the past (such as fringe environmental groups, scientific agencies like the IPCC

(Intergovernmental Panel on Climate Change), affected farmers in developing countries etc) have now become significant catalysts for environmental change in many organizations (Eesley & Lenox, 2006; Hart & Sharma, 2004; Sharma & Henriques, 2005). Thus although stakeholder theory provides a starting point for guiding an enquiry into the drivers of corporate environmentalism, on its own it is however of limited value.

### **Resource Dependence Theory and Corporate Environmentalism**

In attempting to apply a sorting logic to the complexity of stakeholder theory, Mitchell et al. (1997) proposed that stakeholders with power, legitimacy and urgency will be regarded as salient by managers of a firm. What still remains unanswered is the process by which such stakeholders (with the requisite attributes of power, legitimacy and urgency) and their influence pathways can be identified. Drawing from resource dependence theory (Pfeffer & Salancik, 1978), Frooman (1999) argues that the more dependent an organization is on a stakeholder for critical resources, the greater the extent to which that stakeholder can influence the firm's response. It is this dependence of organizations on stakeholders for critical resources that gives stakeholders leverage over organizations and creates differentials among stakeholders. To assist managers with the process of identifying stakeholder salience, Frooman (1999) has organized stakeholder influences into four strategies (withholding, usage, direct and indirect). Applying the resource based logic to corporate environmental practices provides a theoretical rationale for understanding stakeholder saliency and provides a basis for understanding why secondary stakeholders such as poor and disenfranchised farmers in remote locations of developing countries can become important for driving corporate environmental responsiveness. Since the central research question that this study seeks to address is *what drives corporate environmental responsiveness in business*

*organizations in developing countries*, therefore given the above theoretical rationale this leads to the first sub-research question:

Who are the stakeholders who can leverage business organizations in developing countries into being environmentally responsive?

The first sub question is guided by the stakeholder and the resource dependence theories and seeks to qualitatively explore and identify the stakeholders who can influence a firm into being environmentally responsive by exploiting the firm's dependence on them for critical resources. Organizations however are not just beholden to stakeholders who control resources. As DiMaggio and Powell (1983: 150) point out 'organizations compete not just for resources and customers but also for institutional legitimacy'. Organizations as social actors thus do not always act as rational profit maximizers; their policies also result from a desire to confirm and to seek social approval and legitimacy (Myers & Rowan, 1977; Oliver, 1991; Scott, 1987). This desire for legitimacy has its roots in institutional theory.

### **Institutional Theory and Corporate Environmentalism**

Institutional theory emphasizes the social context in which firms operate and explains the role of institutions in shaping organizational responses (DiMaggio & Powell, 1983; Myers & Rowan, 1977; Scott, 1987, 1995). Institutions can include governments, professional associations, media and public opinion (DiMaggio & Powell, 1983; Oliver, 1991). Institutional theory explains how pressures from these social institutions become 'institutionalized' and accepted as given over a period of time (Myers & Rowan, 1977; Oliver, 1991; Scott, 1987). Through adhering to commonly accepted and institutionalized norms organizations seek to obtain social approval and legitimacy; failure to conform to critical institutional norms can threaten an organization's legitimacy and survival (DiMaggio

& Powell, 1983; Myers & Rowan, 1977; Oliver, 1991). DiMaggio and Powell (1983) attribute the reason for certain norms gaining institutional acceptance to a tendency of organizations (in a given organizational field) to move towards isomorphism. Isomorphism results in an 'inexorable push towards homogenization' (DiMaggio & Powell, 1983: 1480). According to DiMaggio and Powell (1983) coercive, mimetic and normative pressures push organizations towards homogenous responses. These three pressures provide a theoretical basis for understanding legitimacy driven drivers of organizational environmental responsiveness. Coercive pressures stem from political influence. Thus the existence of a common legal environmental framework affects all organizations in a given field similarly and leads to homogeneity of organizational responses. Mimetic pressures result in organizations copying other more successful and legitimate organizations, especially when there is uncertainty in the business environment. Normative pressures stem from professionalization of managers. Professionalization ensures that, to the extent managers that managers have similar educational backgrounds and are members of similar professional and industrial associations, they develop a similar understanding of issues surrounding environment sustainability (Cramer, 2005; Jennings & Zandbergen, 1995).

Institutional theory is therefore helpful in explaining how consensus develops around the meaning of environment sustainability and how shared concepts and practices related to environmental responsiveness are disseminated among organizations (Jennings & Zandbergen, 1995). Such shared environmental norms become embedded in organizations through conformity and passive acceptance of institutionalized norms (Oliver, 1991). Based on the above discussion on institutional theory the central research question is further specified into a second sub-question:

What is the role of institutions in driving corporate environmental responsiveness?

Within an institutional framework firms however aim to ‘meet not exceed’ (Bansal & Clelland, 2004: 94) the social norms. Institutional theory therefore cannot explain why organizational responses to environmental challenges are not always constrained by the ‘iron cage’ (DiMaggio & Powell, 1983: 147) of institutionalized norms. Research suggests that firms operating in similar social regulatory and public policy environments vary in their environmental strategies (Aragon-Correa, 1998; Hart & Ahuja, 1996; Russo & Fouts, 1997). Even in a single industrial context where organizations face very strong and similar institutional pressures, organizational responses to environmental challenges vary from compliance to proactive environmental strategies (Delmas & Toffel, 2004; Sharma & Henriques, 2005; Sharma & Vredenburg, 1998). Thus while institutional theory explains legitimacy driven acceptance of socially sanctioned environmental norms, it does not explain why firms in a given industry facing similar institutional pressures might choose to react differently to environmental issues (Sharma & Vredenburg, 1998). Combining perspectives from stakeholder, resource dependence and institutional theories provides a theoretical basis for understanding drivers of corporate environmentalism insofar as the drivers are explained by a firm’s resource dependence or its search for legitimacy. However these three theories essentially focus on forces that lie beyond the organizational boundaries (Hoffman, 1999). They ignore the dynamics happening inside the black-box; the firm. It must be pointed out that these theories do not completely rule out internal pressures (for example, employees) but as discussed above their explanatory capabilities fall short of explaining why firms with similar kinds of employees (institutional) and with similar level of dependence on employees (resource dependence) might choose different environmental strategies. The resource based theory, with its focus on costly-to-copy, firm specific, internal resource as factors that differentiate the strategic choices of a firm, helps explain the above dilemma.

### **The Resource Based Theory and Corporate Environmentalism**

According to resource based theory (Barney, 1991, 2001; Conner, 1991; Grant, 1991; Oliver, 1997; Sirmon, Hitt, & Ireland, 2007; Wernerfelt, 1984), resources which are valuable, rare, imperfectly imitable, and non-substitutable, can lead to the development of internal competencies which when, applied to the appropriate external environment, can secure competitive advantage. According to Barney (1991) these resources can be physical resources, human capital resources and organizational resources. Having valuable resources is a necessary but not a sufficient condition for securing a competitive edge. Firms have to continuously evaluate choices regarding resource employment with respect to external environment (Collis & Montgomery, 1995). Major transformations are now occurring in the business environment due to the constraints imposed and opportunities offered by changes in the natural environment (Hoffman, 2007; Porter & Reinhardt, 2007; Schwartz, 2007). Under conditions of flux, resource and capability development in organizations is also being driven by the need to adapt to these changes in the natural environment (Porter & Reinhardt, 2007). Hart (1995) has expanded the resource based theory to include the challenges of the natural environment. The natural resource based view (NRBV) has been developed on the premise that businesses will be now increasingly constrained by natural environment (Hart, 1995). Drawing from the resource based view Hart (1995) offers a range of interrelated strategies ranging from proactively decreasing pollution to a visionary commitment to sustainable development. The choice of the strategy that the firm can or will actually adopt, will in turn be dependent on the resource endowments of that firm (Hart, 1995). Thus according to NRBV firms will differ in their environmental strategies depending on the disparity between the organizational resources that they can marshal. The stress in NRBV is on the significance of the internal organizational resources and characteristics in influencing corporate environmental responsiveness. This leads to the third sub-question:

What is the role of firm specific resources in influencing the adoption of corporate environmental responsiveness?

Combining the insights gained from the NRBV (regarding the significance of internal resources) with the importance of the role of external stakeholder (from resource dependence and institutional theories) allows the development of holistic framework for anchoring this research's enquiry into the drivers of corporate environmental responsiveness (Figure 1).

(INSERT FIGURE 1 ABOUT HERE)

## **METHODS**

This research has been designed as a multiple-case, inductive study involving 11 environmentally responsive organizations in India. The choice of multiple cases was governed by the ability of multiple cases to permit replication logic (Eisenhardt & Graebner, 2007; Yin, 2003). Replication logic allows the cases to be treated as a series of experiments wherein each case serves to confirm or disconfirm the inferences drawn from others (Eisenhardt & Graebner, 2007; Graebner & Eisenhardt, 2004: 2; Yin, 2003). The organizations in this study were theoretically sampled from a list of top 500 business organizations (based on revenue). The rationale for focussing on larger organizations was dictated by previous research which suggests that larger organizations are more likely to be environmentally responsive (Arora & Cason, 1995; Darnall et al., 2006; Sharma & Henriques, 2005; Sharma & Vredenburg, 1998). Previous research in the Indian context has specifically indicated that corporate environmentalism in India is limited to the larger organizations (D'Souza & Peretiatko, 2002). Small and medium enterprises in India have been singled out as the worst polluters and have been implicated for paying the least attention to environmental issues (D'Souza & Peretiatko, 2002).

The criterion for further selection of the organizations from amongst the top organizations was an established reputation for environmental responsiveness. To shortlist the organizations on the basis of being environmentally responsive, a detailed content analysis (Malhotra, Hall, Shaw, & Oppenheim, 2006) of organizational websites, annual reports and environmental/sustainability reports of the top organizations was conducted. Initial evidence of environmental responsiveness was determined through the existence of environmental measures such as those detailed in the definition (environmental policy, environmental management systems, environmental reporting, environmental auditing etc). The environmental credentials of the organizations were also inferred from environmental awards and media reports. Deliberate attempts were made to include business organizations across a wide range of industries. This was done in recognition of the fact that certain sectors of the economy may be more exposed to specific pressures (for example from consumers) than others (such as business-to-business activities) and therefore the concomitant reasons for being environmentally responsive may also differ. The sample (as described in Table 2) therefore included firms from a wide range of industries. Furthermore, to prevent the findings being constrained by local conditions, firms were sampled across geographically diverse regions. The sample therefore included organizations from across all the major regions in India. Such industrial and geographic variety enhances the representativeness of the sample and increases the generalizability of the results (Graebner & Eisenhardt, 2004).

### **Data Sources**

Several data sources were used for this research. The main data collection instrument was in-depth semi-structured interviews. Secondary sources (including company websites, business publications, brochures and other material such as copies of presentations made available by the respondents) were extensively used, both as an information source and as a



check against the information provided by the respondents in the depth interviews. The first author spent eight weeks as a management trainee in one of the organizations (Tripax). This allowed her to take part in the meetings, participate in the environmental training programmes and observe the environmental decision making. 51 interviews were conducted over a period of 21 months (from June 2005-January 2007). The first phase of the research included 45 wide ranging pilot interviews with corporate communication directors, managers responsible for environmental issues, environmental engineers, and board level executives across five business organizations in India.

The pilot interviews indicated that decisions regarding corporate environmental practices were made by very small groups of people in organizations, typically including the CEO, a few board members, and a few key executives. This may reflect the sensitive nature of environmental decision making in most organizations. Consequently information about the strategic drivers for corporate environmental responsiveness is available primarily to this select group. The pilot interviews also indicated that other managers and individuals had limited, if any, awareness about the strategic drivers for an organization's environmental responsiveness. This is supported by previous research by Graebner and Eisenhardt (2004) who found that awareness about firm strategy especially about sensitive issues, decreases below the top managerial team. Thus because the pilot interviews indicated that information regarding strategic drivers of corporate environmentalism rested with a few key knowledgeable informants, in senior management positions, the focus in the primary data collection phase was on gathering information from the senior level informants who were central to environmental decision making. In a majority of the cases access was gained through requests to corporate communication directors. In one case request to the CEO and in another case to a senior board member yielded suitable contacts. All the interviews in the primary phase (except the interviews with outside experts) were tape recorded and

transcribed verbatim. For the interviews with outside experts, extensive notes were taken during the interviews. These detailed notes were then written up immediately after the interview. When further clarifications were needed, follow-up questions were normally asked through email and phone. The characteristics of the sample firms are summarized in Table 2 below. The organizations that participated in the research, were promised confidentiality. The names of the organizations have therefore been changed to protect confidentiality. (INSERT TABLE 2 HERE).

The interviews with managers were typically between 60-90 minutes and followed a semi-structured interview guide. The interview guide listed the broad areas to which the questions would be directed during the interviews and was provided to managers on request, prior to the interview. The interviews began with background information regarding the environmental issues that an organization considered relevant and the way the organization dealt with those issues. This was followed by an open-ended enquiry about the drivers of environmental responsiveness. Open ended questioning leads to higher accuracy and richer insights especially in retrospective reporting (Graebner & Eisenhardt, 2004; Rynes, Bretz, & Gerhart, 1991).

While multiple informants reduce bias, it was not possible to include multiple informants for all organizations in this study. This was because of two reasons. Firstly, as indicated by the pilot interviews, information about the strategic drivers of corporate environmental responsiveness is normally available only to a select group of very senior managers, including the CEOs and a few key executives. While interviews could be secured with the key executive responsible for environment affairs, the CEOs of organizations however constituted an exclusive group of elite and influential leaders, access to whom was severely restricted and protected by multiple gatekeepers. Except for one organization (where perhaps because the CEO had a deep conviction for environmental concerns), we did not

succeed in securing interviews with CEOs. In fact accessing even senior managers responsible for environmental issues was extremely challenging. To successfully contact such managers in the top Indian organizations, on an average required more than 30 contacts through multiple combinations of faxes, emails and telephones.

Notwithstanding access issues, the second reason is that most organizations in India regard the natural environment as a very sensitive issue. All the managers whom we interviewed for this research were extremely concerned about maintaining confidentiality of their organization's identity. Managers other than the ones in charge of environmental issues were neither willing to, nor allowed to talk freely about the environmental issues concerning an organization. Thus perhaps because managing corporate environmental issues requires a certain level of specialist technical and legal knowledge, or perhaps because of the sensitive nature of environmental issues, requests for interviews with managers other than those dealing with environmental issues were generally not acceded to. Managers in other functional areas would turn down requests saying they had insufficient knowledge as they were not dealing with the 'environment'. This hindered collecting data from multiple informants.

However even though multiple informants could not be used for all the organizations in this study there are reasons to believe that this has not affected the validity of the inferences drawn from this study. This is because of three reasons. Firstly in the three organizations, (Mayer, Calibre and Tripax) where access to multiple informants could be secured for the phase two interviews, the insights provided by the informants in no way deviated from the information provided by the managers responsible for environmental issues. This provides confidence in the information provided by the primary respondents (senior environment managers) as it is very unlikely that multiple informants will provide

similar information unless that happens to be a close account of reality (Eisenhardt & Graebner, 2007).

Secondly, as suggested by Elsbach and Kramer (2003), interviews were also conducted with four outside experts. These experts had in-depth knowledge of the environmental concerns confronting business organizations due to their long standing professional experience. Information provided by the primary respondents within an organization was compared with the information provided by the experts outside the organization. In a majority of the cases, the views of the experts were in consonance with the information provided by the managers. Where experts offered additional explanations, the managers were interviewed again and requested to elaborate on those issues.

The third insight that indicates that the primary respondents were not indulging in providing socially desirable answers was obtained through a serendipitous but very enlightening experience. The source of this insight was when one of the organizations treated the semi structured interview guide as a structured questionnaire. The interview guide was generally requested by the gatekeepers before allowing access to the senior managers. In the case of this organization (Mayer), detailed written responses were sent back. Compared to the rich details that we were obtaining through the in-depth interviews in other organizations, these written responses were different both in form and content. The written responses were staid, reserved and clichéd. The answers appeared to be aimed at delivering an acceptable and 'a technically correct response' and had none of the novel and interesting revelations that we were gaining through the intense discussions and interviews with other managers. To explore this issue further we requested an in-depth interview with the appropriate manager at Mayer. The responses that were provided in the interview were starkly different from the responses that had been given in writing. While the responses in the depth interviews were open and candid admissions about the factors that drove their organizations to be environmentally

responsive, the written responses were devoid of those insights and were merely aimed at being 'politically correct'. The drivers that emerged from the written responses and the in-depth interviews were thus vividly and remarkably different. Furthermore the quality of the responses gained through the depth interviews at Mayer closely mirrored and replicated the insights being gained from other organizations through the interviews. Previous research in context of recruitment in job choices by Rynes et al. (1991) found that allowing job seekers to explain their choices through in-depth interviews produced a truer picture of the applicant's search and choice process. They suggest that there is a potential for significant insights being gained if respondents are allowed to speak in their own words. Thus the richness and the closer-to-truth quality of the responses offered through in-depth interviews in this research as compared with the reserved written responses, lends support to the argument that the managers interviewed were not engaging in sense-making and providing unreliable answers during the interviews. Had the managers been indulging in deliberate impression management during the interview, these differences would not have existed and certainly not as vividly. Therefore, even though practical constraints prevented interviews with multiple informants in all the organizations, the above discussion indicates that the information provided by the primary respondents in this research is reliable.

### **Data Analysis**

As is recommended in inductive case study research (Eisenhardt, 1989a, b; Eisenhardt & Graebner, 2007; Miles & Huberman, 1994; Yin, 2003) the first step in data analysis was analysing each case individually. Within case analysis involved developing detailed case histories for each of the organizations. This rich familiarity with each individual case, allowed the unique patterns for each individual case to emerge fully without being influenced and constrained by the patterns of other cases. The individual case histories were prepared

through synthesizing the data from the extensive field notes, the interview transcripts and archival data. This ‘triangulation’ of data sources is central to data analysis in case studies (Yin, 2003) and creates more reliable and richer case histories. NVivo 7 qualitative analysis software was used to assist with developing individual case histories. To provide a check on the emerging case histories, an independent researcher who was not engaged in data collection and thus had not been sensitized to the data, read the original interviews and the documents and formed an independent view. This view was then incorporated into each case history to provide a more accurate view of each organization. In the within case analysis, the focus was on understanding the drivers that propelled individual organizations to be environmentally responsive. Although similarities and differences among cases were noted, any further comparative analysis was not done, till the detailed individual case write ups had been completed.

The second stage consisted of cross-case analysis and involved examining the cases for similarities and differences across various dimensions. A second stage of coding was then done using NVivo 7. The initial free codes for each individual organization were organised into clusters based on similarities and differences between the various cases. Using the matrix query function in NVivo, 2 X 2 cells designs were also used to compare several categories across the cases. This further brought out the similarities and the differences in the drivers of environmental responsiveness across the various cases. If the findings and explanations were consistently replicated (literally or theoretically) across cases, tentative propositions about the emerging phenomenon were then developed. The analysis process was iterative and took eight months to complete.

## **FINDINGS**

The data analysis revealed that corporate environmental responsiveness, as observed in this study, could be differentiated into two distinct levels; first and second order responsiveness. Organizations were categorized as being at first order responsiveness in the cases where they were starting to recognize the importance of the natural environment and were exhibiting attempts to decrease their impact on the natural environment through adopting programmes aimed at pollution reduction and prevention. Organizations at second order responsiveness were observed to be exhibiting a higher order commitment in integrating environmental issues into their strategic decision making. This involved strategies such as green product development and initiating projects aimed at industrial ecology.

Although all the 11 case study organizations were observed to have state of art environment management systems in place, eight of the organizations (Valiance, Cottex, Tripax, Organochem, Mayer, Pharmachem, Sun and Raj) did not proceed beyond the first order responsiveness. Three of these organizations (Cottex, Mayer and Organochem) were observed to be making initial efforts at life cycle analysis of the products. However these efforts had not yet resulted in the introduction of new environment friendly product development or in products with reduced environment impacts. So these organizations while in a transitory stage had not yet qualified for being classified at second order responsiveness.

Three other case study organizations (Cosmos, Calibre and Endeavour) however had successfully extended their environmental responsiveness to the next order. For these three organizations their environmental responsiveness went beyond the first order to include activities aimed at industrial ecology and/or sustained efforts towards reducing the environmental impact of their products. Table 3 below classifies the case study organizations as first and second order based on their environmental responsiveness. (INSERT TABLE 3 HERE)

### **Drivers of Corporate Environmental Responsiveness**

As discussed above all the case study organizations in India were observed to have made substantial capital investments in developing beginning of pipe solutions and in sophisticated effluent treatment plants. These proactive responses and the state of art effluent recycling facilities were way ahead of local regulatory requirements. Additionally all the organizations had chosen to be ISO 14001 certified. Interestingly while all the organizations in this study reported their environmental responsiveness as being beyond compliance, none of the organizations credited their environmental responsiveness to local environmental regulatory requirements. This is despite the fact that there are comprehensive environmental regulations (for example, Environment Protection Act, 1986) in place in India. The case analysis reveals that the problem lies, not with the lack of existence of regulatory framework, but with an utter and a glaring lack of implementation of those regulations. This trenchant quote from the chief environmental officer at Organochem reflects the views of the majority of the managers interviewed:

India is the most enacted but the least acted upon country.

Thus although there is an elaborate environmental regulatory framework in place in India, but the lack of a very important component; implementation of the enacted regulations, prevents regulations from becoming a driving factor. This is further illustrated by the following observation from the environmental director at Endeavour:

The environmental regulation is very comprehensive. The problem lies only in terms of implementation and the lack of will on the part of enforcement agencies that enforce it.

Furthermore because of ineffective monitoring of regulations there were no penalties associated with non compliance. This lack of an effective implementation regime was experienced as a de-motivator as the following extract from the interview with the manager at Cottex elaborates:



Regulations should motivate or reward to industries which are going beyond the mandatory norms. Instead of that what is happening, in absence of effective implementation, if we are doing recycling and our competitor is not doing the recycling, not even the basic requirements of the local laws then he definitely is much more cost effective than us. This becomes quite de-motivating factors some times.

Thus a decoupling between two important components of coercive institutional elements (the existence of regulation and the enforcement of regulations) has lead to regulatory compliance not becoming an institutionalized norm in India. There was perceived to be no legitimacy being bestowed due to conformance nor was a loss of legitimacy perceived due to non compliance with regulations. Table 4 provides illustrative examples of the responses regarding the lack of implementation of environmental regulations in India (INSERT TABLE 4 HERE). Unlike coercive pressures which were conspicuous because of the prominent decoupling between two important constituents, mimetic and normative institutional pressures were not mentioned by any of the organizations as factors that drove them to be environmentally responsive. Neither did any of the case study organizations cite pressures from stakeholders such as consumers, employees, local community, the civil society or environmental NGO's as drivers that propelled them to be environmentally responsive. In absence of these pressures, what drives organizations in India to be environmentally responsive?

### **Drivers of First Order Responsiveness**

An in-depth case analysis revealed that first order responsiveness in the case study organizations is driven by pressures emerging from their international linkages. The majority of the case study organizations, at first order responsiveness, were both trading with multinational organizational customers and also had global ambitions, which involved setting up international subsidiaries (in both developed and developing countries). Corporate environmental responsiveness in these organizations was observed to result from the

pressures of their multinational organizational customers in developed countries (who demanded an environmental commitment of at least the first order as a necessary condition for doing trade with their suppliers in India) and from the institutional pressures that emerge when firms set up global subsidiaries (especially in developed countries).

It must however be pointed out that international linkage was not the basis for selecting the case study organizations in this research (being environmentally responsive was the basis). But as a consequence of economic liberalization in India (in 1991) a majority of the top 500 organizations now report some kind of international linkages. These near ubiquitous international linkages of the top Indian organizations reflect the changing economic policies in India. The current business environment in India (in 2007 India crossed the trillion dollar economy mark) involves growth through competing internationally. This is a dramatic shift from the earlier policies aimed at self sufficiency. One indicator of this growing trend towards internationalization is that 25 percent of India's current GDP comes from exports (The Economist, 2007). In this era of economic liberalization most of the bigger Indian firms are keen to exploit the resulting business opportunities in the international arena. The case study organizations have thus incidentally but successfully captured the broader scenario in the Indian business environment. Therefore while the theoretical sampling focussed on selecting environmentally responsive organizations in India, the reality of the current economic environment in India however dictates that most of the larger organizations (which as discussed earlier are also the only ones engaged in environmentally responsive activities) are currently actively exploring international opportunities.

In order to be able to exploit these international business opportunities, the organizations in India had to be environmentally responsive at least to the requirements of the first order. The managers at the first order case study organizations clearly stated that their

multinational organizational customers (e.g. Sony, Philips, Nike, Gap, Bayer, etc) demand a certain level of environmental responsiveness (often manifested through ISO 14001 certification).

Our customers, from Europe and Japan, they want their suppliers like us to follow their environmental requirements. That is number one. To satisfy the norms of our customers, we take lead in protection of ecology and our environment. Like Sony and Philips (two of their main customers) they go for the green partner certificate as well as green purchase.

Manager (environment, health and safety) at Mayer (an electronic equipment manufacturer):

This is further elaborated in the following extract from the interview with the manager at Organochem (which makes intermediate products for major international chemical companies):

Most of our valued international customers who are looking for long term partnership come to the plant sites for detailed auditing before they finalize their long term orders. Much of this auditing is in the area of environment health and safety.

The manager at Tripax (manufacturers by license for foreign pharmaceutical developers and exports to 125 countries) explains that being compliant with international environmental requirements (of organizational customers) is an essential requirement. He also provides an interesting perspective wherein he elaborates that it would be difficult to invest in similar levels of environmental investments if Tripax was competing in the Indian market:

For example the environmental treatment that we are having, apart from the biological treatments we have nano filtration, iso filtration, ultra filtration, reverse osmosis, two stage reverse osmosis. It costs money to install these equipments and it costs money to operate these equipments.

We can do this because nearly 80 percent of our products are exported. Our main aim is to comply fully as an international player. So whatever cost comes into that we do take that cost on our product cost and because we place our products internationally, we do get prices internationally which can support that additional expenditure on environment and we are quite happy to continue that.

If we try to follow what we are following in terms of environment and also try to be competitive in India, it would be difficult.

Additionally the case study organizations also had international subsidiaries in both developing and developed countries. These international subsidiaries had to comply with the strictly enforced environmental regulations of the host countries. Over a period of time this has resulted in these organizations benchmarking the environmental performance of their operations in India against the international best practices. This has resulted in first order environmental improvements in their domestic operations. This is illustrated in the following response by the environmental manager at Valiance:

India today is in a global market and our business is globally driven. We have global ambitions. We like to create our benchmarks at a global stage and today in the global world environment is one of the most important factors. So becoming global has been a major factor.

The response of the manager at Tripax elaborates this point further:

Though it is an Indian company, it is a multinational company. We have manufacturing operations in 7-8 countries including US, UK and Europe and presence is there in more than 100 countries. So it has to follow the international environmental and other regulations

The case study organizations in India that were environmentally responsive at the first order thus had very pragmatic reasons. International organizational customers had a mandatory requirement for environmental measures corresponding to at least the first order responsiveness. Additionally when these Indian organizations set up subsidiaries, especially in developed countries, they were forced to comply with the strictly enforced environmental regulations prevalent in those countries. These environmental improvements then were also manifested in their domestic operations both due to supply chain pressures and because of legitimacy reasons. Thus to be able to avail the global opportunities, the case study organizations in India complied with what were deemed as essential environmental requirements. The responses of the case study organizations pertaining to internationalization as driver of first order responsiveness have been summarized in Table 5.

## Drivers of Second Order Responsiveness

*Is internationalization a driver for second order responsiveness?* The three case study organizations (Endeavour, Calibre and Cosmos), at the second order of environmental responsiveness also had strong international linkages. Cosmos is among the top five steel manufactures of the world, and has manufacturing operations across 15 countries. Calibre outsources, exports, and has manufacturing operations in Europe, North America and Australia. Endeavour exports to Europe and developing countries in South East Asia. Endeavour's international linkages also arise out of it being a subsidiary of a prominent multinational which has operations in 150 countries. However while these three organizations had definite international linkages, their environmental responsiveness exceeded the first order responsiveness demanded by international linkages.

The environmental responsiveness at these three organizations thus went beyond the pollution control, pollution prevention, waste reduction, and initial attempts at recycling that characterize the organizations at first order responsiveness. These organizations were actively engaged in new product development and had advanced projects aimed at industrial ecology. The manager at Calibre explained that while they do have to meet the necessary conditions for being able to export (for example ISO 14000) however the environmental responsiveness at Calibre (unlike the organizations at first order) is not driven solely by the pressure to meet internationalization requirements:

For example we are very big in paperboards. So we are the only people in the country who at this moment have the environmentally chlorine free technology for bleaching. But there is no export pressure. Because our exporters have not required it nor do the country people require it. But we still do it since this is environmentally very friendly thing to do.

We have built the largest green building in India. It has been rated platinum rated by the US Green Business Council under their LEEDS programme-Leadership in Environmental and Energy Design. It is the largest platinum rated building.

There is no pressure, regulatory or otherwise on Calibre to make a green building. It has cost us may be 10-15 percent more than a normal building. We went in for that

because we wanted to put an example in the country that – look how good buildings can be made and how they would save energy and give wonderful place to work.

The manager at Endeavour further explained that while slight modifications to the existing EMS had to be sometimes made, due to specific export requirements, however the pressure from multinational organizational customers was not a driving factor:

We are for example also in the business of making shoes and exporting shoes. So if we are exporting shoes to Germany for example, they will come and would like to see whether our facilities are not only environmentally safe but our people are also environmentally safe. Although we are conducting the whole operation in an environmentally safe manner, they would like to see the results of that. Until they see they will not give the order to us. We are completely geared up for that.

However it is not an additional pressure on us because it is a part of our job, part of our routine. We have been doing it. Everybody knows that. Maybe once or twice there was some requirement which was additional to what we are doing, for which we had to set up some additional facilities but in every other case we found that we already do it, nothing great in that. It is not something which will give us sleepless nights.

Therefore while these organizations had to incorporate certain environmental measures as an internationalization requirement, but unlike the organizations at the first order, the environmental responsiveness at these organizations was not dictated solely by their international linkages.

*So what drives higher order responsiveness at these organizations?* Our findings reveal that higher order environmentalism in the case study organizations can be traced back to internal resource based competencies arising out of unique organizational history and culture. Cosmos, Calibre and Endeavour thus all have a long history, dating back to more than 100 years. All three organizations share a distinctive identity of being socially and environmentally responsive. They enjoy immense goodwill because of the pivotal role they have played in the development of the Indian industry and also because of their contributions to philanthropic and social development endeavours. All three organizations trace their current environmental responsiveness to an organizational history of being social responsive.

For them being environmentally responsive has been a natural progression towards doing the responsible thing. Thus under changing circumstances, resulting from issues surrounding climate change and global warming, their social responsiveness has over the last few decades extended to include environmental responsiveness. This environmental responsiveness is of a higher order than meeting the pragmatic market requirements of their organizational customers. As the following discussion elaborates, the unique organizational culture and history of each of these three organizations, propels them to go beyond first order responsiveness.

*Cosmos Steel* was established in the first decade of 1900 and is widely acknowledged as the most environmentally and socially responsive organization in India. In the interviews with experts Cosmos Steel consistently ranked as the number one environmentally responsive organization in India. As the manager at Cosmos steel summarizes '*Cosmos has a different kind of reverence in India*'. In India the organizational name, Cosmos, has become synonymous with honest and socially responsible business practices. Cosmos Steel pioneered social auditing in India in the 1970's (when it was unheard of in India). Since its inception in the early 1900 Cosmos Steel has independently developed infrastructure and cities around its factories. It has also built schools to provide free education to the workers children. In addition it has built charity hospitals and invested in non profit higher education and advanced research centres. These social endeavours at Cosmos Steel have always been guided by the philosophy of its founding father for whom '*wealth was not the end but a means to an end; the increased prosperity of India*'<sup>2</sup>. Cosmos Steel is a founder member of the United Nations Global Compact and has also been hailed by the United Nations as an exemplary organization for its work in environmental and social responsibility. The case analysis of Cosmos Steel links its social and environmental responsiveness to the vision of its

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<sup>2</sup> As explained by the environmental manager at Cosmos during the interview conducted on February 6 2007.

founding father and the unique organizational culture arising out of a distinctive organizational history. The following quote from the environmental director at Cosmos further elaborates this:

Even 100 years ago Mr Cosmos said ‘build roads, build hospitals’. The reason I mention our vision to build roads, build hospitals is so you know that it is from about 100 years back what this man was thinking of developing societies. It has been always the cornerstone of our philosophy.

For us environmental responsibility is a part of social responsibility. We have been commended by the UN for our environmental and development programmes. Our social responsibility extends to environmental responsibility. A commitment to preserve the environment is now integral to the way we do business.

We have completed 100 years and this has not happened because of a focus only on profit making. For the last 100 odd years, social responsibility has played a very important part. An important element of our vision is that when we are looking into the next hundred years, environmental and social, they play an equally important role.

Higher order environmental responsiveness at Cosmos Steel is thus driven by a unique identity rooted in an organizational history and culture of social responsiveness:

Our motivation comes from our values and our founding father’s philosophy. **The moment it becomes externally motivated then we will do things which are by selection, which will be by design, not by default. To invest in the environmental projects that we are, it has to be an integral part of the value system.**

*Calibre* is one of India’s oldest private sector companies with its origins going back to early 1900. It is currently one of India’s foremost private sector companies with a market capitalization exceeding US\$ 18 billion and has consistently been ranked amongst the world’s most reputable companies. Like Cosmos, Calibre is regarded as a pioneer in the emergence of the Indian industry and has been active in social issues since its inception:

This plant was set up in 1906 and towns have grown up around the factory. So in such cases especially since you are the only big unit and the employer, a lot of expectations do emerge from the society. We are known here as a ‘Thali’ company, which means the farmers, would say that we are a mother company. ‘Thali’ is the word for mother.



Calibre is actively engaged in social forestry programmes which apart from making it a carbon neutral company have had very positive social and environmental spin-offs both for the marginal farmers and economically deprived tribal people in those areas:

There is a lot of wasteland in this country which is called tribal private wastelands. What we have done is developed better clones, which give very high yield and very short felling cycles and which can grow in these wastelands. The eucalyptus that Calibre has developed gives more than 100 tonnes of wood for every hectare in a four-year cycle. The felling cycle has also been shortened by development. So the small farmers find this very useful. The model that Calibre has developed is that 20 percent of this is social forestry on tribal wastelands to support the tribals and the balance is private small-scale forestry for marginal farmers.

The manager at Calibre expresses a very similar sentiment to the one expressed by the manager at Cosmos, indicating that environmental sustainability at Calibre is deeply interwoven with economic and social sustainability:

As a corporate if you are operating on such a large scale and you are also operating in so many businesses you have to take a much larger view than just the finances. It has always been the fundamental wisdom at Calibre. As a company we have always known to be very responsible.

For Calibre making profit is not enough. Although we have always been socially active but when we started towards sustainability platform, we realized that we have to address the triple bottom line. We now consider our ecological, environmental, social and economic affects now.

**Endeavour** is one of the largest fast moving consumer goods company in India. It is a subsidiary of a prominent multinational and has been operating in India since early 1900's. Currently Endeavour is owned 51 percent by the parent multinational and the remaining by 380, 000 individual shareholders and financial institutions in India. Endeavour has a consumer base of more than 600 million and '*touches the life of two out of three Indians*'<sup>3</sup>. Although Endeavour is a multinational, but the manager at Endeavour emphasizes that their long history in India sets them apart from other recent multinational entrants (who have often been criticized by the media for their lack of social and environmental responsibility):

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<sup>3</sup> As communicated by the manager at Endeavour in the interview conducted on January 14 2006.

I can give you a number of examples of why we are different – from a number of (multinational) businesses such as Coca-Cola, Pepsi and McDonalds. Our reputation in India, it has been build over years, over decades of work; it cannot be regained within a short time. And that is something, which is most valuable for us.

Endeavour is widely acclaimed for its projects in social and environmental responsibility.

One of the social projects at Endeavour has created more than 30,000 women entrepreneurs in 100,000 villages. This project, which has emancipated many uneducated rural women from the vicious circle of grinding poverty and subjugation, is the subject of many business school case studies. Another major social project at Endeavour involves improving hygiene practices in rural India. Currently this project is spread over 15000 villages in 8 states and touches 70 million rural Indians. Like Cosmos and Calibre, the environmental responsiveness at

Endeavour originates from its long history of social responsiveness in India:

We have been here since early 1900. We have always believed that we must take them (the communities) along and we must make sure that their economic and social development is not affected, because of our operations. We are not here only to do business just for ourselves. Our products have always been used by a lot of people. We have always been conscious of the fact that there are a lot of people and a lot of communities whom we affect.

For example we have a huge programme on the rural upliftment of women and women empowerment. The project is a part of the corporate social responsibility and is not related to environment as such. But what I am saying is we see social development, economic development, environmental up gradation, they go hand in hand with that. Our sustainable development approach encompasses all three things.

The manager also further elaborates how environmental responsiveness at Endeavour is intricately woven with its culture of social responsiveness:

Similarly we are involved with women's education and children education. In many places we have adopted ... what you call the special children homes. We have seen that we should actually adopt these special children's homes. Our managers actually spend some time with those children so that they understood how the life is lead by those children, how hard is surviving.

Our factory manager for example has compulsorily to spend some time in the community there, with the schools or with the hospitals, with environmental bodies or local NGO's. He has to do that.

We thus have a very integrated approach to the social and environmental issues.

Thus for all the three organizations at the second order of environmental responsiveness, the drivers for corporate environmentalism, emanated from organizational history and organizational culture of being socially responsive. Unlike the organizations at the first order whose strategies were directed at capitalizing on the *opportunities* presented by globalization, these three organizations exhibited a deeper understanding of the *broader issues* surrounding environmental changes. Drawing from their unique organizational competencies (which result from their century long history of social responsiveness) they have now extended their social responsiveness to include environmental responsiveness.

## **DISCUSSION AND EMERGENT THEORY ABOUT THE DRIVERS OF CORPORATE ENVIRONMENTALISM IN DEVELOPING COUNTRIES**

Corporate environmentalism in developing countries has been reported to be largely nonexistent (Jeswani et al., 2008) or if present, it has been characterized as being confined to a few large organizations (D'Souza & Peretiatko, 2002; Hartman et al., 1997; Hettige et al., 1996; Jeswani et al., 2008; Rock, 2002; Stuligross, 1999). For long, the prevailing perception has been that lax enforcement of environmental regulations in developing countries leads to a race to the bottom and this in turn has resulted in developing countries becoming pollution havens for multinational operations (Castleman, 1987; Gladwin, 1987; Lepkowski, 1987; Pearson, 1985, 1987; Shrivastava, 1992). The case for severe regulatory failure in developing countries (especially in regards to implementing pollution control laws) is widely supported (D'Souza & Peretiatko, 2002; Dasgupta et al., 1997; Rugman & Verbeke, 1998b; Stuligross, 1999). For example Dasgupta et al (1997), in their study regarding compliance with pollution regulation in China, concluded that local regulators apply considerable discretion in judging

non compliance and often are reluctant to impose penalties. Under-reporting, and under-assessment of environmental contraventions is a common practice in China and rules are often bent at the discretion of the regulators (Dasgupta et al., 1997; Economy & Lieberthal, 2007). Similarly in India, it has been reported that lack of enforcement and corruption prevent effective regulation of pollution laws (D'Souza & Peretiatko, 2002; Stuligross, 1999).

Yet despite the ineffective enforcement of environmental regulations in developing countries, the evidence presented by recent studies (Christmann, 2004; Christmann & Taylor, 2001, 2006; Jeppesen & Hansen, 2004) not only contradicts the pollution haven viewpoint but in fact lauds the multinationals for 'creating islands of environmental excellence in a sea of dirt' (Ruud, 2002: 103). And yet other studies have found no link between multinational linkages or ownership and environmental improvements (Dasgupta et al., 2000; Hartman et al., 1997; Hettige et al., 1996).

The findings of this study inform this debate through suggesting that corporate environmentalism in developing countries is not solely limited to multinationals or to multinational linkages. The findings specify that it is only first order corporate environmentalism that benefits from multinational linkages and even there the drivers are better specified as internationalization (rather than just multinational linkages). This study thus suggest that as business organizations in developing countries become more integrated with the global economy (be it through linkages such as outsourcing for, or exporting to, organizational customers in developed countries, or through opting to open subsidiaries in other developed countries), in all these cases they are forced to improve their environmental standards such that they correspond to the environmental standards prevalent in their chosen markets. For organizations that go beyond these first order requirements, the drivers are rooted in their history of social responsiveness.

### **Emergent Theory about First Order Responsiveness and Internationalization**

The findings of this study suggest that first order environmental responsiveness, in organizations, in developing countries, is driven by international linkages, and is manifested through ISO 14001 certification. The literature pertaining to the greening of supply chain (Darnall, Jolley, & Handfield, 2008; Sharfman, Shaft, & Anex, in press) suggests that when buyers and suppliers are separated by large cultural, physical and institutional distances, the buyers often demand that suppliers be ISO 14001 certified. While ISO 14001 certification is not restricted to organizational suppliers in developing countries and is fast becoming a favoured environmental standard, even when suppliers and buyers are located within developed countries (Darnall et al., 2008; Potoski & Prakash, 2005), it however assumes a greater relevance when the suppliers are in distant developing countries (Christmann & Taylor, 2001, 2006). This may be attributed to three reasons. Firstly ISO14001 is one of the few environmental management standards that are characterized by compulsory third party audit (Potoski & Prakash, 2005). Secondly, the annual recertification requirement comes with an inbuilt threat that ISO 14001 certification can be revoked. Thirdly the credibility of ISO 14001 has been further enhanced by research which suggests that ISO 14001 adoption results in actual improvements in environmental performance as compared with other standards that lack third party verification (Potoski & Prakash, 2005). ISO 14001 certification thus provides an assurance of compliance with the requisite environmental standards and also checks against free riding. It therefore assists in reducing information asymmetries and opportunistic behaviour between supply chain partners (King et al., 2005; Potoski & Prakash, 2005).

Therefore in developing countries characterized by lax environmental implementation, ISO 14001 certification not only bestows a symbolic legitimacy, but also guarantees the conformance with actual environmental standards. Thus even though the costs of ISO 14001 are not trivial; it can cost over US\$100,000 to certify just one facility (Potoski

& Prakash, 2005; Prakash, 1999), the legitimacy bestowed by ISO 14001 makes it a worthwhile investment for suppliers in developing countries (Christmann & Taylor, 2006). Accordingly, an increasing number of business organizations in developing countries are adopting ISO 14001 certification (Nair & Menon, in press; Rao, 2002, 2004).

Furthermore prior literature in context of internationalization of organizations, support the finding that internationalization of firms can under certain conditions (such as regulatory differences between host and home nations) be associated with improvement in environmental performance (Bansal, 2005; Bansal & Hunter, 2003; Kostova & Zaheer, 1999; Nehrt, 1998; Rugman & Verbeke, 1998a, b).

Institutional and stakeholder theories thus provide a framework for understanding what drives organizations in developing countries to be environmentally responsive at the first order. While resource based competencies developed during internationalization (managers with international experience, capital management experience, organizational slack as a result of increased revenues etc), were not observed to be a driving factor, they do however appear to provide a platform that facilitates the development of capabilities needed for first order environmental responsiveness.

The findings of this study thus suggest that even under conditions of lax enforcement and an institutionalized regulatory failure, the demands of multinational organizational customers in developed countries and the institutional pressures for legitimacy arising as result of the liability of foreignness (Kostova & Zaheer, 1999: 76) ensures that the large business organizations in developing countries adopt and confirm with at least the first order environmental responsiveness. Formally:

*Proposition 1: First order corporate environmentalism in business organizations in developing countries is driven by the demands of multinational organizational customers in developed countries and by institutional pressures that rise when they set up subsidiaries in developed countries.*

### **Emergent Theory about Higher Order Environmental Responsiveness as an Extension of Social Responsiveness**

The organizations in India that were at the higher order responsiveness shared a commonality with the organizations at the first order responsiveness in the sense that like the organizations at the first order, these organizations were also an integral part of the current vibrant phase of economic growth in India. They were thus actively involved in exporting, outsourcing, etc and also had a rapidly growing portfolio of international subsidiaries in both developed and developing countries. But while the organizations at both the first and second order faced similar internationalization and stakeholder pressures yet the environmentally responsive measures at the second order organizations were not limited to the demands imposed by external institutional or multinational organizational requirements. Consequently while the demands posed by internationalization explains the drivers for first order corporate environmentalism, it however does not explain why some organizations in a developing country go much beyond what is expected or required of them in terms of environmental responsiveness. This is especially intriguing considering the absence of regulatory or societal requirements for higher order responsiveness in developing countries.

The findings of this study indicate that each of the organizations at higher order responsiveness in India had at least a century long history of being prominently socially responsive. These organizations accordingly have built schools to provide free education<sup>4</sup>, built specialist hospitals, assisted the United Nation's in combating HIV, have contributed towards women's education and emancipation, taken up the cause to make illiterate farmers computer savvy and opened up schools for physically and mentally challenged children (to name but a few of the vast range of their socially responsive activities). They thus have a firmly established organizational identity of being socially responsive. With the challenges

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<sup>4</sup> Unlike in developed countries, the government in India does not provide universally free primary and secondary education. While the state schools have lower fees than private education providers, the much better infrastructure and higher quality education provided by the private schools makes them the preferred option.

being posed by the natural environment becoming better understood, these organizations have responded in a manner that is consistent with their organizational identity and have extended their deep rooted social responsiveness by adopting higher order environmentalism.

The idea of environmental responsiveness as an extension of social responsiveness has long been a part of the literature on corporate social responsiveness (Carroll, 1979; Frederick, 1978; Gardberg & Fombrun, 2006; Margolis & Walsh, 2003; Matten & Moon, 2008; Wartick & Cochran, 1985). For these organizations higher order environmentalism was a continuation of their long history of prominent social responsiveness. The findings further explain that social responsiveness in these organizations had its roots in the vision of the respective founding fathers and is reflected in the policies of the current top management. Whiteman and Cooper (2000: 1267) use the term '*ecologically embedded*', to describe such organizations which are characterized by top managers with a strong personal identification with local social and ecological systems. According to them such organizations exhibit a higher order commitment to social and environmental practices. The literature on leadership provides further support for ecologically embedded organizations being guided by the vision of transformational founding fathers which then is carried forward by strong charismatic leaders (Agle, Nagarajan, Sonnenfeld, & Srinivasan, 2006).

But what happens with changes in leadership (or a change in priorities of leaders)? Is higher order environmental responsiveness fickle to the whims of leadership changes? The literature on organizational identity suggests that an identity that has been chalked out over a century cannot be easily disowned (Dutton & Dukerich, 1991). It instead tends to deepen through the years (Margolis & Walsh, 2003). Galaskiewicz (1997) in his study on corporate philanthropy concluded that once established the charitable contributions continued at the same rate irrespective of who was leading the firms. Recent research in organizational identity by Brickson (2007) further reiterates the viewpoint that organizational identities



(while not immutable) are stable and are resistant to change. One consequence of a stable identity is that it can lock in organizational behavioural patterns (Brickson, 2007). Thus identities not only situate and define organizations but also provide the moorings for future organizational vision (Albert, Ashforth, & Dutton, 2000; Dutton & Dukerich, 1991; Scott & Lane, 2000).

Thus for organizations in this study that were at higher order environmental responsiveness, social responsiveness has been a defining feature of the organizational identity for the last 100 years. Under threats posed by environmental changes these organizations have responded in concordance with their organizational identity and have included higher order environmental responsiveness as an integral part of their social responsiveness. The literature on corporate citizenship, through suggesting that organizations which have been rooted in a community for a long time tend to contribute more and at higher levels than other industries (Gardberg & Fombrun, 2006) further supports this viewpoint. The resource based view also strengthens the contention that organizations with a strong corporate identity (in this case of higher social/ environmental responsiveness) will not ‘digress from the founder’s vision’ (Oliver, 1997: 702). According to the resource based view, resources (such as an organizational identity of being socially responsive) result from unique path dependent capabilities which in turn are rooted in organizational history and culture. According to Oliver (1997: 702) these resources derive ‘their value from time compression diseconomies, that is from development over a long period of time’ and the embeddedness of these competencies in history ensures their perpetuation (Barney, 1991; Conner, 1991; Oliver, 1997). Thus such organizations which are ‘culturally attuned to responsible behaviour’ (Basu & Palazzo, 2008: 113) and have deep rooted resource based capabilities for successfully implementing socially responsive strategies are not subject to the rapid

disengagement that might occur with change in the top management priorities in other less committed organizations (Basu & Palazzo, 2008; Galaskiewicz, 1997).

Additionally unlike in western cultures wherein a mastery of nature orientation prevails (exemplified by the belief that nature can and should be controlled by technology), the underlying culture in most developing societies stresses on harmony and interdependence between natural environment and humans (Gardberg & Fombrun, 2006). As an example, Hinduism (the dominant religion in India) promotes collectivism and congruence with nature (Gardberg & Fombrun, 2006). In such societies organizations that extend their social responsiveness to protection of the natural environment beyond the call of pragmatic necessities are widely respected. Accordingly organizations that commit to continuous corporate social and environmental responsiveness benefit through being bestowed with long term moral legitimacy (Basu & Palazzo, 2008; Margolis & Walsh, 2003; Suchman, 1995). While moral legitimacy is extremely difficult and elusive to obtain, it is also very profound and self sustaining once established (Suchman, 1995). The stock of social capital created resulting from moral legitimacy creates a reservoir of goodwill and stands the organization in good stead in isolated reversals (Bhattacharya & Sen, 2004; Sen & Bhattacharya, 2001; Suchman, 1995).

Thus the self sustaining virtuous circle of intangible and tangible benefits, which result from an organizational identity based in social responsiveness, ensures that such ecologically embedded organizations in developing countries respond to environmental challenges through higher order environmental responsiveness. Formally stated:

*Proposition 2: Organizations in developing countries that have over a period of time developed an identity based on deep rooted capabilities in social responsiveness will respond to environmental issues at higher order responsiveness.*

## **CONTRIBUTIONS TO THEORY DEVELOPMENT AND IMPLICATIONS OF THE RESEARCH**

The major theoretical contribution of this research is in extending and reframing the existing theory about the drivers of corporate environmental responsiveness in developing countries. Through operationalizing corporate environmentalism as a two level construct this research enables a sharper probe. Thus while previous research in the context of developing countries has indiscriminately attributed environmental improvements to linkages with multinationals, this research however clarifies that this holds true only for first order responsiveness (and then too only partly). This research thus refines the currently prevailing theory (Christmann & Taylor, 2001, 2006; Rao, 2002, 2004; Ruud, 2002) that it is the stakeholder pressure arising from the supply chain linkages that drives corporate environmentalism in developing countries. The theory proposed in this research extends this viewpoint firstly through proposing that the institutional pressures (arising out of a more comprehensively defined internationalization) are also instrumental in driving first order responsiveness in organizations in developing countries ( $P_1$ ). Secondly existing research has not examined the drivers in organizations in developing countries that go beyond the requirements of internationalization. The findings of this research indicate that this higher order responsiveness cannot be attributed to the stakeholder pressures arising from the supply chain demands or to the institutional pressures of internationalization. Instead this higher order responsiveness arises from resource based capabilities and organizational identities rooted in a history of social responsiveness ( $P_2$ ). Table 6 summarizes how this research extends and reframes the existing theories about drivers of corporate environmentalism.

This research thus reframes and refines existing conceptualizations about drivers of corporate environmentalism and therefore has important public policy and managerial implications. It helps policy makers to identify not only the drivers but also the barriers that prevent organizations from being environmentally responsive. This study thus sends clear signals to the regulatory authorities in developing countries that lack of effective

implementation regimes prevents organizations from being environmentally responsive even at the minimum levels (unless there are other motivations). It is thus primarily the rewards promised by internationalization (first order) and the desire for continued moral legitimacy (second order) that drives organizations to be environmentally responsive in developing countries. Thus this promise of mutual blessing (improving the environment and also being rewarded for it; either through greater profits or through continued moral legitimacy) ensures that the larger organizations in developing countries are adopting environmental responsiveness even in the absence of social or regulatory pressures. However for those (numerous) organizations in developing countries that do not meet either of these threshold conditions, the scenario as regards adopting environmental responsiveness is bleak. The policy makers in developing countries seriously need to re-examine the weaknesses in the implementation regime. Furthermore as observed in this study, the absence of external pressures did not prevent organizations in India from adopting higher order responsiveness. The implications of this value based environmental responsiveness points towards the limited (though important) role that external change acts can play in pushing organizations towards being environmentally responsive. For organizations to move beyond the stages where external drivers can take them the role of enlightened leadership assumes paramount importance.

### **LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH**

The first major limitation of this study is that although India provides a very suitable context for examining the factors that drive organizations in developing countries to be environmentally responsive, yet we recognize that a single country cannot be representative of all developing countries. However according to the United Nations Framework Convention on Climate Change (2008) which classifies nations into industrialized (termed as

developed in this study) and developing countries, nations in each group share key similarities, such as GHG emissions per capita, ability to adapt to climate change, sources of emissions, etc with the other nations in the same group. Furthermore nations in the same groups also share other factors such as enforcement of environmental regulations, societal involvement with environmental issues etc, (Jeswani et al., 2008). Therefore while India cannot be fully representative of all developing countries, it shares underlying similarities with others developing countries and should thus be seen in light of being indicative and evocative of conditions in other developing countries. Consequently the knowledge gained about the drivers of corporate environmentalism from this research can be used to inform policy makers in India and other developing countries about factors that could motivate business organizations to be environmentally responsive.

This study is also limited by the fact that although interviews are regarded as a highly efficient way to gather rich empirical data, especially about sensitive issues (Eisenhardt & Graebner, 2007; Yin, 2003), they remain subject to criticism on the grounds of social desirability bias (Podsakoff & Organ, 1986). While it is true that social desirability bias can lead to impression management by image conscious informants (Eisenhardt & Graebner, 2007), even so, there are reasons to believe that social desirability bias was not a problem in this research. This is so because of two reasons. Firstly assuring respondents of confidentiality has been reported to reduce the risk of social desirability bias (Konrad & Linnehan, 1995). Consequently all the respondents in this study were promised confidentiality as regards both the organizational name and also as regards the name of the managers being interviewed. These dual screens of anonymity did appear to put most respondents at ease as is evident in their responses (for example senior environment directors at board level in India openly admitting that regulations were not an important driver for their organization and that 'regulations could be managed'. Thus the fact that self report in this

research did not appear to be biased towards enhancing the corporate image indicates a low degree of social desirability bias. Secondly triangulation of the findings through corroboration by independent panels, verification from secondary sources and where possible through multiple informants, provides further assurance of the low risk of social desirability bias in this study. Nevertheless social desirability bias as a result of self reported data remains a methodological weakness for much of the research examining corporate strategies (Sharma & Vredenburg, 1998). Further studies that empirically examine the theoretical propositions would add confidence in the theory proposed in this study.

**Table 1 Summary of theoretical frameworks used in this study**

<b>Theoretical perspective</b>	<b>Contribution to framework</b>	<b>Issues the theory does not address</b>
Stakeholder theory	Pressure from environmental stakeholders can contribute towards corporate environmental responsiveness.	Who amongst the wide range of environmental stakeholders will be considered important?
Resource dependence theory	Stakeholder salience can in part be explained on the basis of a firm's dependence on stakeholders for critical external resources.	Firms however compete not only for resources but also for legitimacy. Resource dependence does not explain legitimacy based reasons.
Institutional theory	Explains how desire for social legitimacy leads firms to conform to institutionalized environmental norms.	Does not explain why firms facing similar institutional pressures differ in their environmental strategies.
Resource based theory	Focuses on the role of internal resources of a firm as a source for differentiating environmental strategies.	The combined perspectives from the above four theoretical perspectives provide a holistic explanation of the internal resource based dynamics and external institutional and resource dependence factors.

**Table 2 Profile of case study organizations in primary data collection stage**

Organization	Sector	Revenue in US \$ millions (2006)	Employees	Designation of the main respondent in the primary interviews
Valiance	Petrochemicals	30,100	25,000	Senior Vice President Centre for Health Safety and Environment Excellence
Cosmos	Steel	7,000	39,000	Director Environment Health and Safety
Calibre	Pulp & Paper	3,100	21,000	1. Executive Vice President Environment Health and Safety 2. Director Corporate Communications
Endeavour	FMCG	3,000	16,000	Director Environment Health and Safety
Tripax	Pharmaceutical	1,700	11,000	1. Director Environment Health and Safety 2. Corporate Communications Manager
Pharmachem	Pharmaceutical	1,000	9000	Senior Director Corporate Safety Health and Environment
Sun	Fertilizer	900	100,000	Divisional General Manager Total Quality Management and Environment
Cottex	Textile	470	4000	Director Central Utilities and Engineering
Organochem	Chemical	460	4300	Chief Environmental Officer
Mayer	Electronics	460	4500	1. HOD Environment, Health and Safety 2. Senior Manager Total Quality Management 3. Chief Executive Officer 4. Managing Director
Raj	Hotel Chain	400	7000	Senior Vice President Centre for Health Safety and Environment Excellence

**Table 3 Classifying organizations in India into first and second order of environmental responsiveness**

	First order				Second order	
	Pollution					
Organization	control	prevention	Decreased resource consumption	LCA	Develop new product	Industrial ecology
Valiance	√	√	√			

Tripax	√	√	√			
Pharmachem	√	√	√			
Sun	√	√	√			
Raj	√	√	√			
Cottex	√	√	√	√		
Organochem	√	√	√	√		
Mayer	√	√	√	√		
Endeavour	√	√	√	√	√	
Calibre	√	√	√	√	√	√
Cosmos	√	√	√	√		√

**Table 4 Illustrative examples of implementation of environmental regulations in India**

<b>Organization</b>	<b>Abridged illustrative quotes regarding existence of regulatory framework but lack of implementation in India</b>
<b>Calibre (Diversified businesses)</b>	In India- (laughs) there is regulation in India, which does help. It gives you a basic premise to base yourself on. But it is known in India that even this can be managed. This means that you can manage the regulations (laughs). And you can take ... if you want, one can take calculated risks.
<b>Tripax (Pharmaceutical)</b>	The legal requirements are at par with any international requirements. But environmental compliance in general in India is not of very high order. Implementation is lacking.
<b>Cottex (Textile)</b>	The regulations are quite appropriate. What is lacking is proper implementation of this. What is important is how much of this is being implemented and monitored properly. That is not done. That is one of the biggest lacuna of our system. Implementation is the weak link.
<b>Organochem (Chemical)</b>	The laws are very well made but I think there is a lot of scope for improvement in area of implementation.
<b>Sun (Fertilizer)</b>	The regulations are okay. The implementation is the issue.
<b>Pharmachem (Pharmaceutical)</b>	They (environmental regulations) are very well defined, but implemented... well... The administrative machinery cannot reach every nook and corner. There will be always some sort of a lacuna.
<b>Raj (Hotel chain)</b>	The implementation is an issue.

**Table 5 International linkages as drivers of first order responsiveness**

<b>Organization</b>	<b>Abridged illustrative quotes regarding international linkages as drivers of environmental responsiveness</b>
<b>Cottex (Textile)</b>	These customers (Nike, Levi, Gap, etc) are quite conscious. They demand environmental performance and EMS. They audit our plants and in many cases their demands or their expectations are higher than what local norms there are. Definitely they are playing a positive role
<b>Mayer</b>	In European countries there is requirement of good packaging material,



<b>Organization</b>	<b>Abridged illustrative quotes regarding international linkages as drivers of environmental responsiveness</b>
<b>(Electronics)</b>	<p>so earlier we were using Methyl Bromide for the fumigation of the wooden packaging material but now we have switched over to heat treatment of wooden pellets and completely eliminating the use of Methyl Bromide.</p> <p>We have been awarded for a green partner certificate from Sony Japan. So as a part of our liability as well as part of their requirement we have to fulfil whatever good practices there are for long term sustainability</p>
<b>Organochem (Chemical)</b>	Our multinational customers include major chemical companies. They conduct environmental audits before finalizing their orders.
<b>Tripax (Pharmaceutical)</b>	Nearly 80 percent of our products are exported. Our main aim is to comply fully as an international player and also whatever cost comes into that we do take that cost on our product cost and because we place our products internationally, we do get price internationally which can support that additional expenditure on environment and we are quite happy to continue that.
<b>Pharmachem (Pharmaceutical)</b>	<p>60 percent of our turnover comes from export to the US and Europe market.</p> <p>Whenever we export our customers who come and look at our plant and then they certify – that it is okay- we are doing it as per the requirement.</p> <p>Also we have development centres in more than 100 countries so for most of the things then we follow the international approach, including environment.</p>
<b>Valiance (Petrochemical)</b>	<p>Valiance is driven by a desire to be number one. And the desire is to be number one in every parameter of performance measurement. There is a continuous push to benchmark against world standards not with Indian standards and also there is a continuous pressure to see where are we and why are we not in the top 2 –3.</p> <p>We therefore benchmark ourselves against the best practices in the world, and environment management is a very important part of that.</p>

**Table 6 Alternative view of drivers of corporate environmentalism**

	<b>Prevalent view</b>	<b>Viewpoint proposed in this research</b>
Constructs	Corporate environmentalism largely treated as an undifferentiated construct (especially when empirically examining the drivers for corporate environmentalism).	The reality of corporate environmentalism is better reflected when operationalized as first and second order responsiveness.

Theoretical frameworks	Mainly stakeholder. But also institutional, resource based and resource dependence perspectives. However they have been considered in isolation.	Isolated theoretical frameworks are not sufficient to explain perspectives. Combined perspectives from all the four theoretical viewpoints provide a more holistic theoretical framework for an enquiry into the drivers of corporate environmentalism.
Organizations in developing countries	Supply chain pull results in corporate environmentalism in developing countries	Supply chain pressure <i>and</i> the broader process of internationalization (setting up manufacturing subsidiaries in developed countries) explains (but only) level one responsiveness
		Second order responsiveness in organizations in developing countries was observed to arise out of a long history of social responsiveness

Figure 1 Theoretical framework used in this enquiry

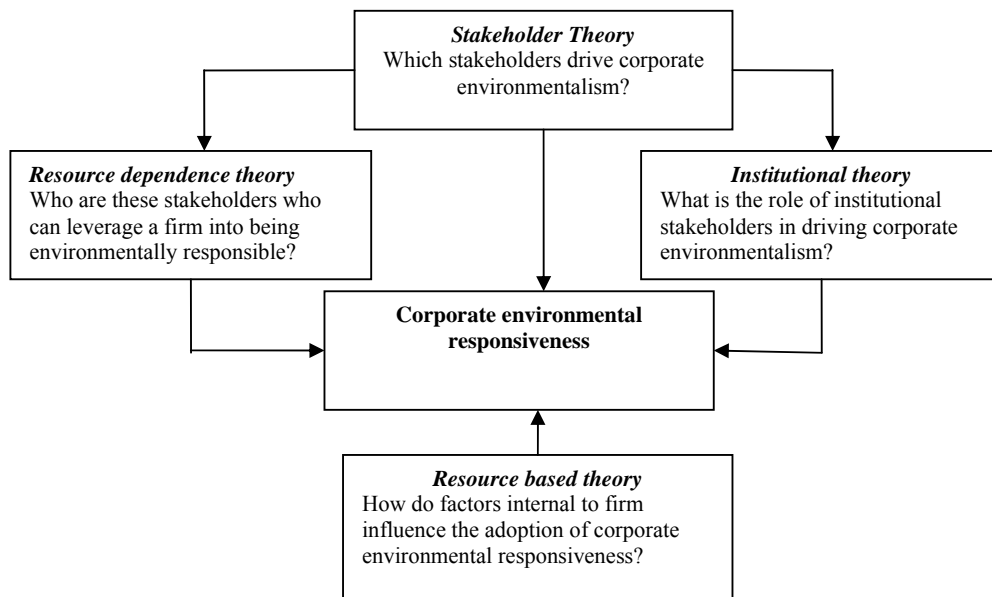
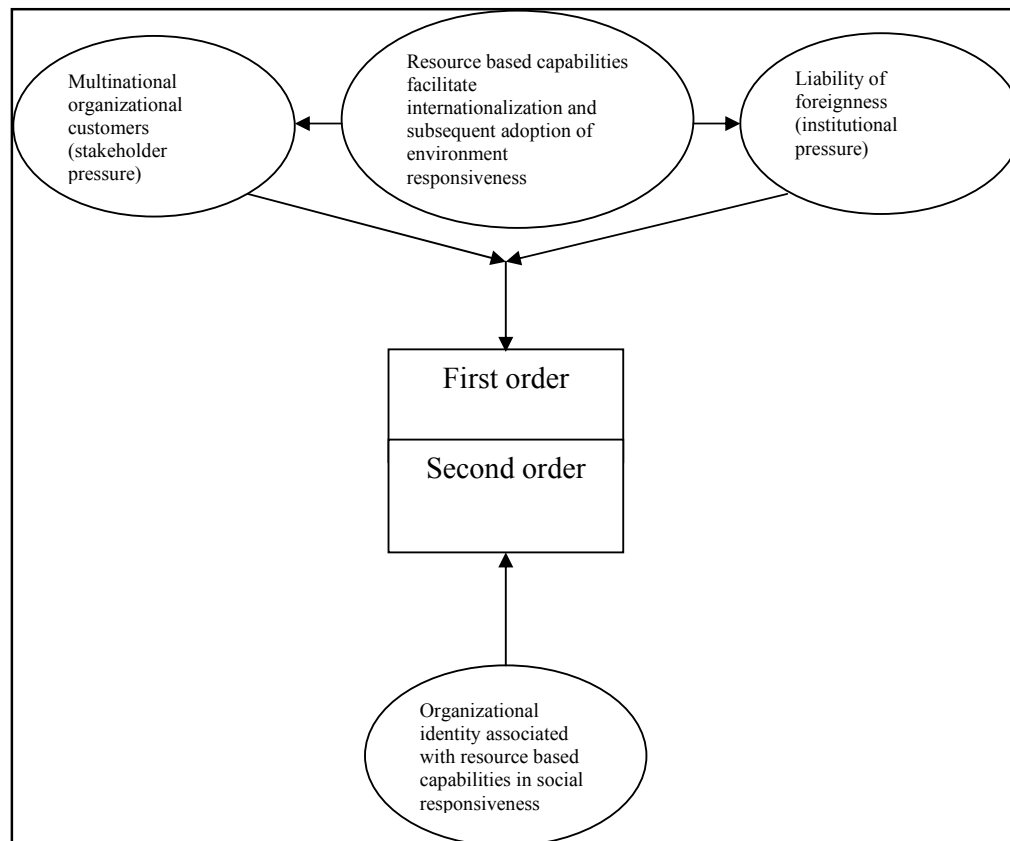


Figure 2 Drivers of corporate environmentalism in developing countries



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