

# A Culturally Sensitive Approach to Sustainable Business in Emerging Markets: How to Manage the Challenges and Opportunities in View of the Global Economic Crisis?

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**Abstract:** The global economic crisis has heightened the sensitivity around the race to the bottom in environmental, social and human (organizational) standards, as the industrial market firms strive to gain competitiveness through increased downsizing and offshoring of their operations to the emerging markets where the institutional regulation of these standards is lower. To deal with these stewardship challenges, the leading multinational corporations are seeking opportunities to transmit technological and organizational solutions for sustainable business in the emerging markets. This paper reviews three generations of literature on sustainable business in relation to the emerging markets. The role of culture, as a direct factor as well as a moderating factor, in influencing the sustainability of technological and organizational solutions is investigated. A framework for measuring the role of culture is proposed, comprising of a model of sustainable development, a typology of culturally sensitive sustainable business behaviors in terms of technological and organizational solutions, and a measure of the sustainable development index and its four components – ecological, economic, social, and organizational. The implications for the multinational corporations and for the multilateral organizations are discussed.

**Key words:** global economic crisis, technological and organizational solutions, sustainable business, emerging markets, culturally sensitive business behaviors, sustainable development index

## I Introduction

The current global economic crisis has heightened the sensitivity around the multinational corporations using foreign direct investment and trade as a mechanism for transferring their operations from the higher cost industrial markets to the less costly emerging markets. Recent regional and multilateral negotiations on international trade and investments have put the issues of environment standards, social issues, economic issues (intellectual property rights, transparency in

public procurement and subsidies), and organizations (competition law) in the emerging markets on the forefront of dialogue (Jones & Marti, 2009). These challenges for business in the emerging markets have emerged in the backdrop of a rapid surge of interest in sustainable business in the industrial markets over the recent years.

All major multinational corporations have adopted sustainability principles. And, with the adoption of the practice of sustainability reports, their practices for operations, sourcing, and marketing in the emerging markets

are under heightened public scrutiny. For many leading multinational corporations, the changed environment and the global economic crisis offers an opportunity to transfer their technological and organizational solutions for sustainability to the emerging markets.

As the multinational corporations pursue this opportunity, and address the challenges to their operations and relationships in the emerging markets, it would be desirable for them to have a systematic approach to assess sustainable development in the emerging markets. A scientific assessment methodology will help them gain credibility with their constituencies, and also identify opportunities for not only transfer of their own solutions, but also modification of those solutions to the local context, and to reverse exchange of local solutions for further driving their global sustainability initiatives.

The debate appears to suggest that the emerging markets lag behind the industrial markets in progress towards sustainability, and are dependent for the transfer of efficient technologies and organizational practices in order to catch up and attain world-class levels of sustainability. However, much of this debate is based on subjective claims and presumptions, selective criteria, and a lack of rigorous and systematic cross-national comparisons, giving due regard to the cultural factor. Many scholars have noted how the cultural factors in the emerging markets offer a unique pathway to sustainability. Consider, for instance, the following quote from O'Hara (1998) who noted the sustainability struggles faced by the emerging markets as they adopted the industrial worldviews:

"As the time demands of technological services grow time is no longer available for the caring, support, nurturing, networking and communicative services necessary to sustain families and communities. Nurture/caring services traditionally provided outside the realm of economics in social interactions and institutions like families, extended families, friends, neighbors or extended communities are displaced into the market economy or lost altogether... The economization of the life world ...does not add to but, at best, replaces services previously provided outside the economy. Direct material impacts may include increased needs for transportation, housing, communication and human services. Less visible ones include the effects of increased isolation, stress, crime or health care needs. Least noticed are probably the effects associated with the loss of participation in civil society, public discourse and information."

Over the past fifteen years, I have conducted a series of studies, first focusing on the Japanese mul-

tinational firms during my Ph.D. dissertation at the Wharton School with the support of The Japan Foundation and the University of Tokyo (Gupta, 1998), second investigating the meaning of culture and its relationship with leadership as a principal co-investigator of the 62-society GLOBE research program funded by the National Science Foundation (House et al., 2004), third constructing and analyzing culturally sensitive models of family business within and across ten cultural regions of the world, with a particular focus on gender (Gupta et al., 2008; Gupta, 2009), and finally, several side studies of organizational development and technological growth at corporate, regional, and national levels. Taken together, these studies underline the importance of the cultural factor in sustainable business, and of the cross-cultural variations in explaining differing models of sustainable development in industrial vs. emerging markets. In this paper, I extend the cultural insights based on my research to propose a systematic and rigorous culturally sensitive approach to conducting and assessing sustainable business, and highlight the special situation of the emerging markets. Illustrative examples show how from a culturally sensitive approach, some emerging markets may be at par with – if not ahead of – the industrial markets on sustainable business behavior and sustainable development. Implications for the multinational corporations interested in pursuing sustainable business in emerging markets are noted.

Next, I organize the literature on sustainable business into three generations of scholarship, and discuss their relevance for the emerging markets. I identify two types of cultural influences on sustainable business behavior – cultural geography effects at the system level, and cultural group effects at the attribute level. The system level cultural geography effects are of four types – work culture, workforce, networking, and exchange. Cultural group effects – that may be measured using GLOBE and other typologies of cultural dimensions – moderate the relationship between sustainable business behaviors and sustainable development.

A major challenge faced by the emerging market vendors is exchange rate disadvantage due to an inability to demonstrate sustainable impact metrics. I propose a holistic framework for measuring sustainable development with four domain components – ecological, economic, social, and organizational, each scored on nine functional aspects. Sustainable development requires culturally sensitive sustainable business behaviors – and to assess that, I propose a nine dimensional typology, comprising five technological and four organizational aspects. A short case study shows how culturally sensitive sustainable business

behaviors translate into sustainable development in the emerging markets.

An important insight from the case study is the importance of the corporate mission in appropriate weighting of the four domains of sustainability. Sustainability strategy requires developing sustainability goals, impact metrics, implementation programs, and cost-effectiveness assessment. In conclusions, the importance of sustainability assessment to inform the sustainability debate, and to create authentic awareness about the sustainability dimension of the emerging market operations, is noted.

## 2 Problem Formulation

### 2.1 A Critical Review of Literature on Sustainable Business and Emerging Markets

We can identify three generations of sustainability scholarship pertinent to emerging markets. The first generation of scholarship focused on the market failure hypothesis. The second generation emphasized the business case for sustainability, clarifying how corporate social responsibility translates into private competitive advantages for the corporations. The third generation is concerned with the relationship between the industrial markets and the emerging markets with respect to accessing and sharing sustainability knowledge and the resulting benefits.

#### 2.1.1 First Generation Sustainability Scholarship

The first generation of scholars studied sustainability from the lens of market failure hypothesis (Hartwick, 1977). From a market failure perspective, sustainability is a public good, because it is about larger than the organization health – i.e. health of the environment, economy, society, and the entire organizational system. A public good implies that the costs of sustainability are shared by the entire society, and so are the benefits (O'Hara, 1998). Therefore the free inter-play of market does not produce sustainable results. Since a firm's benefit as well as cost function is truncated because of social spillovers, the incentives for sustainable business are mitigated. The implication is the sustainable business will be more likely in the industrial markets, where the institutions – such as political and legal system, consumer groups, and community groups – impose and enforce penalties for not being sustainable (Gjølberg, 2009). In an early study, the World Bank (1992) found higher national incomes to be correlated with better environmental

quality, based on both cross sectional and time series data. However, in the emerging markets, some indicators of environment quality declined with economic growth. The World Bank also found that in both markets, biodiversity declined with economic growth, and global environmental risks rise.

Investments in sustainability are like a prisoner's dilemma game (Lozano, 2007). If no firm adopts sustainable business characteristics, then all the firms achieve minimal development. If only one firm adopts such characteristics, then other firms may enjoy significant benefits, but it may lose working with those firms. However, if all the firms adopt such characteristics, then all the firms achieve sustainable development. A higher level of education make people conscious of this "problem of commons", and a higher level of income gives them capacity to invest into voluntary action and institutional structures that promote sustainable business characteristics. Again, as an implication, sustainable business is less likely in the emerging markets, where the knowledge about and the capability to address the commons problem is low.

In reality, for a firm in the emerging markets, the issue of sustainability is not necessarily a public goods issue. A major challenge for the emerging market firms is their lack of absorptive capacity for the dominant visible technology of the industrial markets (Forsyth & Solomon, 1977). The technology of the industrial markets tends to be inappropriate to the capabilities of the emerging market firms. Therefore, it is in the private interest of the emerging market firms to invest in transforming these technologies into sustainable ones, and/or in developing alternative sustainable technologies. While the emerging markets face limited education and income, many firms are championed by resourceful entrepreneurial leaders and their leadership teams. Entrepreneurial leadership helps mobilize advocates – including board members, volunteers, and different constituencies – who promote the motivation and the capacity for sustainability even in the face of illiteracy and constraints (Ras & Vermeulen, 2009). Consequently, one may expect and find several important sustainability initiatives to originate in the emerging markets. Nobel Prize Winner Muhammad Yunus and his Grameen Bank and micro finance movement in Bangladesh, and Mumbai Dabbawallas who deliver tiffins (packed meals) using public transportation with clockwise precision and near perfection, are two such examples.

### 2.1.2 Second Generation Sustainability Scholarship

A second generation of sustainability scholars focuses on how sustainability initiatives under the umbrella of corporate social responsibility (CSR) help the industrial market firms achieve distinctive private advantages. Several studies underline the business case for sustainability, from the perspective of both cost savings through greater efficiency and reduced waste, as well as of market premium, loyalty, and reach, due to pro-sustainability shifts in the social, economic, political and technological trends (Brønn & Vidaver-Cohen, 2009).

For a firm in the emerging markets, potential for cost savings from sustainable initiatives is rather limited because the operations are already sensitive to the conservation of energy and other natural resources, in a context where the cost is the dominant basis for competition. A more important benefit of sustainable business is scalability – sustainability helps alleviate the resource constraints and thereby enables growth without escalating costs (Javetski, 2009). In order to secure these scalability benefits, the emerging market firms face a challenge of managing the costs of sustainability. They can't simply use the logic that the sustainable alternative should reap a market premium. Given the comparatively limited purchasing power of the customers in the emerging markets, such logic will impede capturing of the scalability benefits. Sustainability needs to be cost-effective, not cost-escalating, and that requires a holistic and integrated approach encompassing environmental, economic, social and organizational factors. That is, environmental sustainability initiatives can be sustainable in the emerging markets only if combined with socio-economic and organizational sustainability that empowers and enhances the income of the masses and alleviates the growth constraints. ITC eChoupal initiative in India is an example (Mishra, 2008). Traditionally, farmers in India sold their products through local marketplaces (mandi) as price takers accepting whatever price offered, with limited access to information and education on sustainable farming practices, and enjoying little surplus to be sustainable consumers and producers. ITC developed the eChoupal system to reengineer the supply chain using digital technology in villages, which offered effective method of price discovery, profitable trading, and information sharing and enhanced sustainability for the farmers, for ITC and for the nation in terms of exports of this produce.

### 2.1.3 Third Generation Sustainability Scholarship

A third generation of sustainability scholars is focusing on how the international conventions set the principle of recognizing the emerging nation communities' sovereign rights over their biological resources and traditional knowledge (Firestone, 2003). The conventions facilitate access for environmentally sound uses, in exchange for fair and equitable sharing of the results of research and development based on this knowledge and of the benefits arising from commercial and other uses of biological resources and traditional knowledge, including the issues of fair distribution within the community and the inter-generational and gender dimensions. Sensitivity to the ecological and other traditional knowledge of the local communities, and to their rights to sharing the benefits from this knowledge, offers an opportunity to construct a scalable sustainable business model.

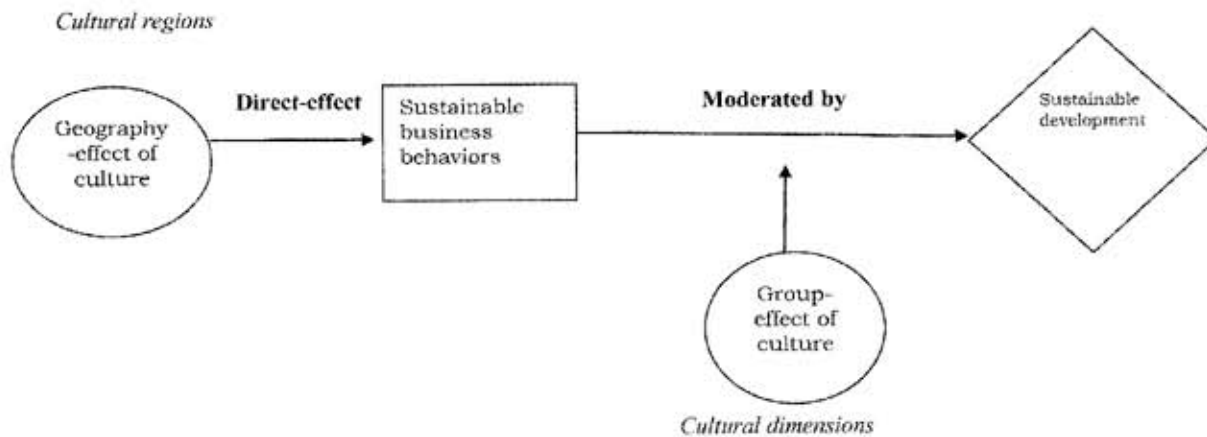
The ecological and other traditional knowledge of the local communities is part of the broader cultural system of a society, and also manifests in the specific cultural attributes of that society. Next, we present a framework for assessing the impact of these two types of cultural influences on sustainability.

## 2.2 Culture and Sustainable Business Behavior

One of the challenges in studying sustainability is to recognize the wide diversity across cultures and over time. Cultures offer multiple possibilities for the businesses to be sustainable – including taking different organizational forms (family-owned, partnerships, publicly held, non-government organizations, public), offering different imperatives (such as bottom of the pyramid, ethnic harmony, ground, air, and water resources, biodiversity, cost and price stability, access and equity), and emphasizing varying approaches (such as harmony with nature vs. mastery over conservation, using traditional knowledge vs. modern technology, present orientation vs. future orientation, environment as business responsibility executed by businesses, possibly with public subsidies, vs. public responsibility funded by businesses).

Cultural influences can be put into two categories: cultural geography effects and cultural group effects. As shown in Figure 1, cultural geography effects are system-wide holistic influences of different nations or regions. Cultural group effects are identifiable and specific influences of the cultural attributes of specific particular nations or regions (Gupta, 2010). Culture is transmitted to and gets manifested in the sustainable

Figure 1: A Culturally Sensitive Model of Sustainable Development



business behaviors through both direct and moderating mechanisms. Direct mechanisms include the role of work-culture, workforce, networking, and exchange, all of which in turn are influenced by other factors such as history, economic development, legal institutions, education, and religion. Moderating mechanisms include different dimensions of culture.

Several theories predict geography-effects in the factors associated with sustainable development (See Table 1 for a partial list). For instance, Environmental Kuznet theory predicts that the sustainability standards differ between the industrial and the emerging markets (Grossman & Krueger, 1995). The human capital theory predicts geographies with greater human capital to encourage balancing of personal rights with collective responsibilities towards natural resources (Etzioni, 1995). Park et al. (2007) find that when Hofstede's (1980) cultural measure of power distance is controlled in predicting environmental sustainability, human capital and income level variables become non-significant. This indicates that the geographies with authoritarian cultures have low human capital, low income, as well as low environmental standards.

Similarly, theoretical rationale exists for the cultural group-effects on the factors associated with sustainable development. Value-belief theory, for instance, predicts that societal culture shapes normative ethical beliefs about what is morally appropriate, and these beliefs influence the perception of environmentally responsible behavior, common business practices, and government regulation of business (Hofstede, 1980; Vitell, et al., 1993; Cohen & Nelson, 1994). One of the cultural values is harmony vs. mastery (Schwartz,

2004). In harmony cultures, emphasis is on environment protection, social peace, and unity with nature, so people strive to appreciate their environment, rather than change it. In mastery cultures, emphasis is on mastering, directing and changing the natural and social environment to attain personal or group goals. Therefore, institutional environmental activism may be perceived positively and be more effective in the mastery oriented cultures, where individuals are recognized to have a tendency to disregard sustainability; but perceived negatively and not be as effective in the harmony oriented cultures, where individuals are believed to be sustainability conscious.

Cultural attributes moderate the relationship between sustainable business behaviors and sustainable development. For instance, in high in-group collectivism cultures, the boundaries among different members of the community tend to be thin and collective group goals are salient (Hofstede, 1980). Here, the firms relying on the community-embedded capability will realize more sustainable development. Conversely, in low in-group collectivism cultures, the boundaries among different members tend to be thick and individualist goals are salient. Here, the firms with proprietary capability will realize more sustainable development.

Cultural change and exchange might encourage a shift in what business behaviors are sustainable. For instance, the Confucian Asian businesses – such as in Japan, China and South Korea – traditionally sought community-embedded technological capability in order to realize sustainable cost-effective development. With cross-cultural competition, the group bonds have loosened, and these firms have put greater priorities on proprietary technological capability in order to sustain

Table 1: Selected Theories and Schools of Thought on Sustainable Development

Theory & School of thought on sustainable development	Sample Citation
<u>Pollution haven theory</u> - Open markets, trade liberalization, foreign direct investment, and multinational corporations encourage the flow of low-technology and polluting industries to emerging markets, and promote a race to the bottom in sustainability standards	Xing & Kolstad, 2002; Goldsmith, 1997; Gersh, 1999; Tonelson, 2000
<u>Pollution halo theory</u> - Open markets, trade liberalization, foreign direct investment, and multinational corporations encourage the flow of efficient technology and management practices to emerging markets, and elevate the world standards of sustainability.	Gentry, 1998; Blackman & Wu, 1998; Ekseland & Harrison, 2002
<u>Environmental Kuznet Curve theory</u> -For low income nations, income growth is at the cost of environmental quality; for high income nations, income growth promotes environmental quality.	Grossman & Krueger, 1995; Stern & Common, 2001.
<u>Environmental Malthusian Curve theory</u> -For low and high population growth nations, population growth will heighten the sensitivity for environment protection; for medium population growth nations, population growth will result in greater exploitation of the environment.	Peng & Lin, 2009
<u>Human and Social capital theories</u> -People in nations with higher human and social capital will be more conscious of balancing their personal rights with collective development and natural resource rights.	Etzioni, 1995; Pretty & Ward, 2001; Park, Russell, & Lee, 2007; Peng & Lin, 2009
<u>Social trust and spirituality theories</u> -In low trust societies, it will be more difficult to organize cooperative action for managing public resources, such as environment. -In high spiritual societies, there will be greater integration of the matter with the spirit, resulting in greater concern and focus on sustainability.	Baland & Platteau, 1998; Kinsley, 1995
<u>Power &amp; Justice theories</u> - In high power distance cultures, power holders seek to appropriate private rent by deliberating mitigating sustainability, disregard social and environmental justice of the non power holders, and receive unchallenged obedience.	Lopez & Mitra, 2000; Husted, 2005; Park, Russell, & Lee, 2007; Ringov & Zollo, 2007
<u>Feminist theories</u> - In feminist cultures, needs of others and the quality of life are valued more, resulting in higher levels of environmental sensitivity. In masculine cultures, the emphasis is on swiftly achieving material goals, even if that requires negotiating and sacrificing sustainability.	Jackson, 1993; Husted, 2005; Park, Russell, & Lee, 2007; Ringov & Zollo, 2007

their advantage. Further, as internationally, there has been an increased focus on proprietary capability, empirical studies have found individualist cultural orientation to be associated with more sustainable development (e.g. Husted, 2005).

### 2.3 Cultural System and Sustainable Business Behavior

Emerging models of sustainability are influenced by several aspects of the cultural system – both at the global level encompassing the industrial markets,

as well as at the local level peculiar to the emerging markets. Four salient aspects of this cultural system include work culture, workforce, networking, and exchange and exchange rate. These are discussed below.

#### 2.3.1 Work Culture

The global work culture is undergoing a massive transformation (Loza, 2004). The customers are becoming green focused. The communities are adopting participatory action norms, and demanding greater

accountability for accessing the community-based resources. The societies are introducing stricter legal codes for environmental stewardship. Sustainability equation has come out of closet from being an optional feel good factor to a critical business imperative.

The emerging markets offer a different challenge than do the industrial markets – in the industrial markets, the thrust is on identifying non-sustainable activities, and investing to transition that to sustainable ones. The sustainable initiatives allow the firms to earn a brand and reputation premium in the marketplace, e.g. in terms of attracting investors and customers, and avoiding legal and community penalties. In the emerging markets, the gains from transitioning non-sustainable activities are more modest. A majority of the population lacks purchasing power to bear the premium for sustainable initiatives, even if it values them. The legal codes, even when present, lack implementation wherewithal, often due to more pressing priorities facing the governments.

The benefits of sustainable initiatives in the emerging markets are not as much in the higher unit revenue realization, as in the greater cost-effectiveness of resource utilization. The effective cost of resources in the emerging markets, even if they are rich in those resources, tends to high. Most resources in these markets require investments to bring them up to the quality required by the mass market. And their quality resources are in strong demand from even the industrial markets that seek to specialize in adding innovative value to the resources and have ability to put higher bids on access to those resources. The challenge for the emerging markets is to meet the need for replenishing resources, and to maintain a sustainable level of resource consumption and trade. The winners are the firms with capability to reduce the unit revenue realization through a more cost-effective resource development and utilization system, and expanding the base of the consumer pyramid served by the business (Prahalad & Hammond, 2002).

The consumers in the industrial markets love to pay a premium for sustainable businesses and their products and services. The consumers in the emerging markets love those businesses that develop sustainable equations, and are able and willing to pass on the savings from this sustainability to them.

Even in the industrial markets, some firms have used sustainability initiatives to reduce their costs. According to Esty and Winston (2006), chipmaker AMD modified a “wet processing” tool to use fewer chemicals and less water to clean silicon wafers. The process, which once used 18 gallons of water per minute, now uses fewer than six. Shoe manufacturer

Timberland – that ships more than 25 pairs of shoes per year – redesigned its shoe boxes to eliminate 15 percent of the material used in them. However, the cost of effort to plan, design, and implement these initiatives often outweigh the cost savings, so that sustainability still implies higher costs for the consumers.

### 2.3.2 Workforce

The workforce system globally has shifted dramatically over the recent years (Rossi, Brown & Baas, 2000). The distinction between the thinkers and the doers has blurred. The workforce is demanding professional empowerment and co-participation in management and governance. The organizations are recognizing that an average worker can also make an important contribution moving them toward sustainability. Sustainability is not just about fair trade, positive work climate, ecology sensitive practices, or social philanthropy. Rather, sustainability permeates each and every function and activity of the organization, where each member of the workforce has a creative role to play. This is true for human resource, health and safety, supply chain, research and development, finance and accounting, operations, information technology, marketing, management, governance, as well as public relations.

In the emerging markets, a vast majority of the workforce is struggling with the basic needs of security and necessities of life. For this workforce, sustainability is first and foremost about ensuring a security of tenure, as well as assuring a challenging work environment with continuous skill upgrading and healthy regular growth in compensation levels. In addition, this workforce aspires to be part of a bigger vision and endeavor of making a difference. Therefore, a healthy expansion of the organization, generating additional employment, is also valued by this workforce.

All this can be achieved by the organization only if the sustainability equation is core to its business model. There exists significant scarcity of quality resources in all functions, and other functions can support the growth in human resource budget only if they are each founded on sustainability. Further, a growing workforce itself can be managed sustainability only if it is based on the principles of empowerment, positive work climate, and fair wages.

### 2.3.3 Networking

Networking is a critical aspect of contemporary organizations. Sustainability movement got an early impetus during the 1980s and 1990s with the issues around globally supply chain networking, particularly

involving offshoring and importing by the industrial markets (Marsden, Murdoch, & Morgan, 1999). Globally, supply chain network sustainability has replaced monetary cost, value, and speed as the dominating factor in supply management. Supply sustainability has become a key driver of profitability. More generally, networking allows businesses to measure and manage the economic wastage, business risks, social impact, and ecological footprint of the entire value chain, extending out from their business operations to include their suppliers and the customers also. Networking also offers opportunities to connect with other like-focused organizations, to help build and share influence, motivation, information, knowledge and resources for sustainability.

In the emerging markets, sustainable networking has a much stronger social inclusion element – and cannot be exclusionary in its spirit (e.g. network only with like-focused organizations). Successful organizations are the ones whose networks are able to access, cultivate, qualify, and advance resources at the base of the pyramid.

#### 2.3.4 Exchange and Exchange Rate

As the value of sustainability has grown, the risks and costs of non-sustainability have also increased. These developments become a basis for negotiating lower exchange value for the resources that lack sustainable properties (low ecological footprint, high social impact) of their own or of their source (sustainably minded organizations, economic value adding networks). The firms in the emerging markets are most vulnerable to the adverse terms of exchange if they lack sustainability capacity. The adverse terms impede their already precarious financial and competitive capability.

However, sustainability need not be a challenge for the firms in the emerging markets. Sustainability is a huge opportunity for them to negotiate favorable exchange terms. The emerging market firms enjoy an edge in social impact – their activities frequently make a visible and identifiable difference to the lives of the workforce, investors, partners, vendors, and customers. They should assess their functions for sustainability impact, so that the invisible sustainable properties of their business become visible and can be translated into a negotiation advantage.

Next, we discuss how a sustainability index may be constructed for the purposes of assessing sustainable development, and using that for communication and negotiation purposes in exchange encounters.

## 3 Problem Solution

### 3.1 Sustainable Development

From an organizational perspective, a useful index of sustainable development is one that can be correlated with the existing responsibility centers. Every organization has functional responsibility centers, either embedded within business or geographical divisions, or superseding them. In general, most organizations must perform nine functions, which may be captured using the 9 M model (Gupta, 2009). The 9 M's include manpower for human resource function, material for supply chain function, method for R&D function, monetary for finance and accounting function, manufacturing for operations function, machinery for information technology function, marketing for sales and services function, motivating for leadership function, and manipulating for stewardship function.

A holistic model of sustainable development includes four types of domain components – ecological, economic, social, and organization. As noted by the World Commission on Environment and Development (1987), poverty, particularly in emerging market nations, is the main cause of environmental degradation. Concerned development efforts for economic, social and organizational impact are essential in order to make possible worldwide environmental protection/conservation.

Each of the 9M's offers a mechanism for the development effort, and has a measurable impact on the four sustainability domains. A sub-index captures the impact on each domain of sustainability, and applying appropriate weights, we can construct an overall sustainability index. The sustainability index can help the emerging market firms identify their true sustainability equation, and clarify how this equation may be strengthened by investing in various stakeholders to help them also become more sustainable. And, the resources for investment can be generated through improved negotiation capacity based on authentic data on each component of sustainability. Let's discuss these domain components.

#### 3.1.1 Ecological Sustainability

Ecological sustainability includes eco-efficiency (i.e. low wastage and resource consumption) and eco-design (i.e. products and system designed for low carbon footprint). The 9M assessment, and its auditing by trusted independent agencies, can help the firm secure a negotiation advantage, by showing how the overall value added by it has a positive ecological



footprint. And, the negotiation gains then improve the financial and organizational capability of the firm to help its vendors also reduce their own ecological footprints.

### 3.1.2 Economic Sustainability

Economic sustainability includes income and technological growth. A firm contributes to income growth by employing workforce in productive activities, and offering advancement opportunity. Income growth also accrues through other functions, such as managing supply chain to support vendor growth, managing sales and services to support enhanced customer purchasing power and productivity. Similarly, technological growth accrues by investing in research and development, and motivating the workforce to be innovative and creative. It is also driven by other functions, such as empowering the vendors and stewarding the community to discover their under-recognized capabilities and traditional knowledge, and then to capitalize on this through the firm's complementary assets.

### 3.1.3 Social Sustainability

Social sustainability includes community development and social inclusion. Many firms are the primary engines of development in their communities – they are co-evolving and co-developing with their local, regional or national communities. Their community development role is not just a philanthropic element in the stewardship function. It also encompasses their contributions to the development of other functions, such as innovative information technology base, creative sales and services channels, and transparent and trusted finance and accounting function. A byproduct of many community development initiatives is the inequity in the opportunities offered to members varying by their prior capabilities. These inequities eventually engender social tensions and frictions, and produce a non-sustainable community where the risks for business are higher. Social inclusion initiatives are focused on engaging the members of the community that are under-represented because they fall in particular categories of race, religion, gender, age, social class, ethnicity, education, and geographical origin. Social inclusion is relevant not only for the manpower function (i.e. inclusive HRM policies), but also for the other functions, such as the vendors from the under-represented groups, the under-served customers, and the under-recognized investors. Social inclusion on each of these functions helps contribute towards the creation of a sustainable business.

### 3.1.4 Organizational Sustainability

Organizational sustainability includes rights-sensitive governance and management, as well as rights-sensitive stakeholder engagement. The ecological, economic, and social sustainability initiatives can't happen by osmosis. Firms need to put in place governance and management structures and processes that are sensitive to the development rights of different communities in which they participate or do not participate, and to the human rights of different members they include or exclude in their organization. Their decision to participate in one community and not others, or to have a higher-order participation in that community, also implies that they are putting their vote on the development rights of that community vs. others. It is difficult to put a value on these votes, especially on sustainability criteria. How would one quantify whether investing in an affluent urban area of South India makes for a more sustainable world, or investing in an impoverished rural area of Northeast India?

But one can still use a scientific approach to assess if an organization casts its votes being sensitive to their development rights and human rights implications. In other words, to what extent the governance and management is sensitive to the organizational activities being sustainable, on ecological, economic and social parameters, without externalizing the non-sustainable impacts. For instance, if an organization projects an image of a responsible company in one community, while discarding all its hazardous waste, placing all its energy-intensive operations, or deputing all its authoritarian leaders, in other communities or nations, then it cannot really claim to be rights sensitive. Similarly, the firms should also seek to engage different stakeholders in a way that is sensitive to their rights. For instance, hard selling a product to an illiterate income constrained customer, by sharing partial information, on the plea of 'let the consumer beware', does not give consumer rights sensitive brownie points. Or, forcing a small vendor to give up rights to its intellectual property and to sign exclusive agreement for gaining access to the firm as a customer is also not sensitive to the vendor's rights.

### 3.2 Sustainable Business Behaviors

In order to secure sustainable development, culturally sensitive sustainable business behaviors are required. Sustainable business behaviors include both appropriate technology as well as appropriate organization. Culture is transmitted and gets manifested through both technological and organizational mechanisms in the behavior of the businesses. We

propose a nine dimensional typology of sustainable business behaviors – five related to the technological aspect of sustainable business, and four pertaining to the organizational aspect. These dimensions are summarized in Table 2.

Consider the example of Pratham, who with the support of UNICEF and several local Mumbai industrialists, set the goal in 1994 to ensure that every Mumbai child between three and ten years went to school. In

the West, a multinational corporation will typically donate at least \$30,000 as a start-up investment to open a pre-school for 30-50 students. The same model, if implemented in Mumbai, would have cost \$75 per child per year in operating costs. Pratham, however, designed a model costing only \$7.50 per child per year in operating costs that was more appropriate and effective in the local culture. First, it recruited housewives as teachers who could conduct classes at their own

Table 2: A Culturally Sensitive Typology of Sustainable Business Behaviors

Dimension	Characteristics	Description
<b>Technological sub-dimension</b>		
Capability	Communal vs. Proprietary	The extent to which technological capability is a communal property shared by all members of the community, past, present, and future, vs. is a proprietary property of the selected members of the business.
Investment	Evolutionary vs. Revolutionary	The extent to which technological investments have evolved cumulatively to promote an enduring sustainability-sensitive system, vs. a revolutionary response to new found consciousness and strategic intent about sustainability.
Servicing	Diffused vs. Specific	The extent to which technological servicing is diffused (covering both cost sensitive as well as differentiation sensitive groups) vs. specific (focused on a specific segment of the population, on the cost-differentiation frontier)
Trading	Inclusionary vs. Exclusionary	The extent to which technological trading is oriented to be inclusive of all members – within and without the organization, vs. excludes those who lack capacity to be sustainable.
Growth	Exogenous vs. Endogenous	The extent to which technological growth is an exogenous process (based on technological inputs developed outside organization) vs. endogenous process (based on technological options constructed within organization)
<b>Organizational sub-dimension</b>		
Planning	Unconstrained vs. Constrained	The extent to which the organizational vision for sustainability planning is unconstrained (belief in human potentiality) vs. constrained (qualified by social processes and institutions) [cf. Sowell, 2002]
Programming	Generalist vs. Specialist	The extent to which the organization's sustainability programming is generalist oriented (pervades all functions, hierarchical levels, business units, geographical contexts, partnerships, and periods) vs. specialist oriented (emphasizes sustainability in specific, but not all, functions, levels, business units, geographical contexts, partnerships, and periods)
Performing	Ascending vs. Descending	The extent to which the organization's sustainability initiatives are driven in an ascending manner (members acting on their own volition and values) vs. descending manner (members acting in response to the hierarchical mandates and incentives)
Profiting	Immanent vs. Transcendental	The extent to which the organization deems benefits from sustainability to be immanent (offer meaning and manifest throughout its operations) vs. transcendental (be a criteria existing independent of other goals)

homes for only \$5/ month by publicizing the social import and impact of the program, and thus offered accessible neighborhood classrooms to bottom of the pyramid children and gained buy-in from their parents happy with the community orientation of the classroom. Those teachers who had no spare room at their homes obtained space in neighborhood community centers, mosques and temples, schools, and corporations, thereby mobilizing the support of the community. Second, it built partnerships with local universities and corporations to offer volunteers to perform a variety of administrative and support roles, including teacher performance reviews and training, and children learning assessment, and to donate equipment such as computers. Third, it created a health program with the support of a local hospital, and administered through the teacher network, which dramatically improved the child health. This model was highly scalable, and by 2006, had been expanded to 50 cities, with an annual budget of \$10 million serving 100,000 children a year with the help of 4,000 employees.

Pratham was able to achieve sustainable development, because it effectively leveraged communal technological capability, based on evolutionary technological investments, inclusionary technological trading, and exogenous technological growth. Its technological servicing, however, was focused specifically on the bottom of the pyramid, given its mission to bring about a cultural change in that segment. Further, it adopted an unconstrained organizational planning, a generalist programming that was scalable and replicable in other geographies, an ascending performing calling upon the will power and values of the members, and an immanent profiting where sustainability permeated in each and every function and action of the organization. The key to the success of Pratham was its mission-sensitive alliances and action that created a range of opportunities inherent in the Indian cultural system, and also helped remove various impediments to their exploitation.

### 3.3 Sustainable Business Behavior and Sustainable Development

We have discussed how sustainable business behaviors are culturally sensitive – the best practice technology and organization in the industrial markets may not be appropriate to the culture of the emerging markets and therefore be non sustainable without a corresponding initiative to bring about a cultural change within and without the organization. Moreover, it is not necessary that the cultural change takes place only in the emerging markets. GLOBE, a 62-society

landmark study of societal cultures based on a survey of nearly 17,000 middle level managers, demonstrates that the asymmetry between actual and aspired cultural attributes is pervasive in the industrial markets also. Therefore, it is important that the multinational firms do not blindly seek to transfer their cultural practices, and the associated business practices intended to support sustainability, to the emerging markets. The results otherwise can be costly and counter-productive to sustainable development.

To guide the sustainability initiatives of the multinational corporations operating in the emerging markets, we offered a framework for evaluating nine sustainable business behaviors, in terms of both technological as well as organizational aspects. We also offered a methodology for measuring sustainable development through a weighted sustainability index, based on its four domain components.

What still remains is an approach to decide the weights among these four domain components – ecological, economic, social and organizational. As suggested by the case study of Pratham, these weights will vary by the strategic priorities of each organization, and should be mission sensitive. Sustainability strategy should derive from the mission statement. Based on its mission for the corporate as a whole and for the operations in specific emerging markets, the multinational corporation should articulate its key sustainability goals in each of the four domains. For each goal, appropriate sustainability impact metrics should be identified, and specific sustainability programs should be designed and resourced. Finally, appropriate checks should be instituted to ensure that these programs remain cost-effective given that emerging market's context. If the costs are not in line with the goals, that indicates a need for making corrections in the program, and if necessary, substituting and replacing it with another program logic.

## 4 Conclusion

This paper started with the accountability challenges being faced by the multinational corporations in the face of global economic crisis, as they try to design a more effective configuration of their value chain, and as they seek to forge stronger cooperation with the emerging markets. Another face of these challenges is the opportunities to transfer technological and organizational solutions for sustainable development in the emerging markets.

A larger issue around managing these challenges and opportunities is the extent of validity of the assumption that the emerging markets are deficient in

sustainability consciousness. Low levels of sustainable development in the emerging markets do not necessarily imply low levels of sustainability consciousness. Our framework showed that prior technological and organizational solutions from the industrial markets could be responsible for impeding sustainable development in the emerging markets. Selected case examples underlined how alternative technological and organizational solutions indigenous to the emerging markets have translated into remarkably sustainable development. The missing link explaining this paradoxical result is the cultural factor. Lack of cultural sensitivity of the business behaviors transplanted from the industrial markets, and not the lack of sustainability consciousness, can be the dominant factor impeding sustainable development in emerging markets.

Over much of the 20th century, studies suggested how the industrial market firms sought to change environmentally, socially, economically and organizationally sustainable indigenous technologies and techniques, and replace them with their "modern" technologies and techniques. The debate was on how the cultural, political, human, and social forces in the emerging markets had a heightened sense of concern about the environmental and community appropriateness of Western know-how. The emerging markets were labeled as irrational and laggards in adopting modern know-how. Now, in the 21st century, the new debate is labeling the emerging markets as laggards in sustainability. According to the critics, the emerging markets are over-occupied with economic advancement, at the cost of social, human, and environmental sustainability.

Just like over the 20th century, the critics failed to appreciate why the emerging market communities were concerned with supra-economic sustainability, the present day critics show a lack of appreciation about the deep and widespread roots of sustainability consciousness in the emerging markets. Therefore, there is an urgent need to assess how the technological and organizational dimensions in the emerging markets are focused on realizing multi-faceted sustainability. This paper demonstrates how such an assessment should take place. It also cautions against introducing technological and organizational solutions in the emerging markets, without sensitivity to their cultures. The industrialized solutions could in fact hinder sustainable development in the emerging markets, if their unique cultural factors are overlooked. Conversely, the current technological and organizational approaches in the emerging markets may, if used scientifically, in fact translate into sustainable development.

The multilateral agencies, such as USAID, EU, and UN, should sponsor and encourage assessment studies

to document the hitherto untold stories of sustainability in the emerging markets. These studies should include an explicit consideration of the gender and other diversity factors, because women and men, and different cultural sub-groups, usually have distinctive sub-approaches to sustainability. Global dissemination of these stories can help the emerging market firms get the respect they deserve for the challenges tackled and the difference made by them, and also help recognize the unique and distinct role of women and men and other diverse subgroups. The resulting exchange system would allow a fair, reciprocal trading of the sustainability solutions, and promote a positive cultural exchange to allow plurality and diversity of effective approaches to sustainable development.

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