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# **Enterprise and Sustainable Development: Role,**

## **Challenges and Opportunities**

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In memory of Professor Dennis Pantin 1948-2010

#### **Abstract**

This paper critically reviews the role, challenges and opportunities of business enterprises in the context of sustainable development (SD) with some emphasis on the Caribbean. Using the literature, observations, and judgment, the paper reiterates the triple role of a typical or ideal business enterprise in SD: contributor to economic growth, contributor to job creation and contributor to environmental protection or conservation. Naturally, the attainment of these goals is affected by how business enterprises deal with challenges and take advantage of opportunities. The paper examines these challenges and opportunities. Except for some singularities, the Caribbean is not too different from the rest of the world. The paper uncovers five gaps in the literature and makes recommendations for business enterprises' effectiveness in the pursuit of SD.

Keywords: Enterprise, Sustainable development, Challenges, Climate change, The Caribbean

#### 1. Introduction

Nowadays, in international as well as national arenas, the pure development discourse has given way to the sustainable development(SD) discourse. Not surprisingly, sustainable development is a topic being well researched in a wide range of fields. Although the practices of sustainable development have been present in many communities for many centuries, its official formalization or conceptualization took place only in 1987 in the famous Brundtland Report. Sustainable development is defined in the Report as "a development that satisfies the needs of the present generation without compromising the satisfaction of needs for future generations." The original emphasis of SD was the preservation or conservation of the environment. Since then, the focus has evolved to encompass economic, social and environmental or ecological considerations. These three considerations were particularly emphasized in the second Earth Summit of Rio in 1992 (3-14 June) where "the States officially adopted the concept of SD and its principles were translated in action programmes" (see the famous Agenda 21). These three objectives of SD are also known as the triple bottom line, which consists of economic progress or development, social justice/equity or social development and environmental preservation or protection.

Although the concept SD has been questioned by many authors, our analysis assumes that SD is a good framework for the attainment of a harmonious development, and its realization requires the contribution and commitments of each stakeholder. Among the numerous stakeholders, the present paper targets business enterprises whose importance has been underlined in the Agenda 21 of the Earth Summit in Rio,1992 as well as the Johannesburg Earth Summit in 2002.

The paper critically reviews the role, challenges and opportunities for business enterprises in the context of sustainable development with some emphasis on the Caribbean. The primary focus of our analysis is small business enterprises.

The quest is important to the extent that the typical or ideal business enterprise is nowadays an important stakeholder of sustainable development as a contributor to economic growth, a job provider and a user of

natural resources. Put differently, reexamining the role, challenges and opportunities of an enterprise in the context of SD is worth undertaking as it might throw light on how an enterprise could better contribute to the realization of SD.

While there is a rich literature dealing with sustainable development in general (see Luke 2005; Pearce et al. 1990), there is, however, a paucity of writings linking enterprise and sustainable development, especially in the context of small states such as the Caribbean. In fact, the rare studies linking enterprise to sustainable development deal mostly with the relationship between tourism and sustainable development. Using data from Slovenian companies, Kovacic (2007,1) showed that the implementation of business sustainability increases the interaction among business and society. ILO (2000a) analysed a cross section of Caribbean countries in order to come with proposals for growth and employment potential of small enterprises as well as microenterprises in the Caribbean. The environment dimension is totally missing in this study and many similar ILO studies. Elkington (1994) researched on the ways firms could develop "win-win-win strategies" that benefit them, their customers and the environment. Leslie(2009) gathered some texts that dealt with the response/action of tourism enterprises to the greening agenda in a sample of countries. Using data from a survey of owner managers of small tourisms in the Yorkshire Dales National Park, Horobin and Long (1996) examined the relationships between issues of sustainable development and the operations of small tourism businesses. They pointed out the great confusion surrounding the term "sustainability" or "environmental concerns." They suggested, however, the possibility of identifying the characteristics of those business owners who are sympathetic to the principles of sustainable tourism.

The present paper, which is based on Mamingi (2009), contributes to the literature in two meaningful ways. First, this is a rare study which deals simultaneously with the role, challenges and opportunities of business enterprises in the context of SD, singularly for the Caribbean. Second, and more importantly, it underlines the gaps in the knowledge which, if taken into account, can impact on business enterprises' strategies for SD.

The paper is organized as follows. Section 2 deals with the role of business enterprise in sustainable development. Section 3 targets challenges of business enterprise in the context of sustainable development. Section 4 centers on opportunities for business enterprise. Section 5 introduces gaps in knowledge concerning the subject matter. Section 6 contains concluding remarks.

#### 2. Role of Business Enterprise in Sustainable Development

What is the meaning of SD for a business enterprise? The following connotation seems suitable:

For the business enterprise, sustainable development means adopting business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, sustaining and enhancing the human and natural resources that will be needed in the future (International Institute for Sustainable Development *et al.* 1992).

In this context, some authors prefer to use the concept corporate social or societal responsibility (CSR) instead of SD (Ebner and Baumgartner 2006).

It is well known that the business enterprise, especially the large one and/or multinational one, has not always been perceived as a good partner in the quest for development, let alone sustainable development, at least in developing countries. Indeed, the enterprise was perceived as the major source of social injustice and environmental degradation. However, the Earth Summits of Rio de Janeiro (1992) and Johannesburg (2002) have gone a long way to temper this negative view.

What role if any can one attribute to the typical or ideal business enterprise in the context of sustainable development? What are the determinants of that role? What is the Caribbean experience? These are the main questions that this section attempts to answer.

Although some authors believe that the role of a business enterprise in SD is indeterminate or rather multiple (see, for example, International Institute for Sustainable Development *et al.* 1992), with a handful of authors we see the possibility of confining its role in three compartments.

Our main proposition is that the role of a typical or ideal business enterprise in SD should match the concerns of the three pillars of the triple bottom line or corporate societal responsibility. This proposition indicates that a business enterprise should be a contributor to economic growth through the pursuit of its own financial or economic sustainability, a contributor to social justice through the development and promotion of its own human resources, a contributor to environmental or natural resources preservation through its judicious uses of natural resources and energy, among others

There are numerous factors which may affect the degree of realization of the business enterprise's role. Of the many factors, we target five. First, the manager's conviction and willingness to be involved in SD scheme is primordial for the effective concretization of the role of business enterprise in SD. Schaper (2002) speaks to the importance of green entrepreneur in the pursuit of SD and confirms the view above. Second, the framework in which the enterprise evolves is an important determinant of the success of an enterprise in the pursuit of SD. This framework is generally provided by the government, the key stakeholder of SD which dictates regulations and laws governing not only economic and social matters but also environmental endeavors. If these regulations and laws are indeed conducive of SD, then any enterprise's behaviour deviation from these regulations and laws puts the enterprise in an unsustainable path. Third, the extent to which consumers and other stakeholders do matter in shaping the enterprise's behaviour is nowadays another important determinant. Thus, for example, in an environment dominated by green oriented people and green ONG, the firm will most likely adopt a green agenda. Fourth, the size of business enterprise dictates how far it can go in the fulfilment of its theoretical role. Indeed, there is a need to distinguish large corporations from medium, small enterprises and microenterprises. True, large corporations and/or multinationals have the capacity to contribute significantly to SD. Indeed, by benefiting from economies of scale, by absorbing relatively easily transaction costs, by largely benefiting from government regulations and laws, by having a large market, they are in a better position to contribute to long-term economic stability, employment generation and the preservation of the environment. However, some data and evidence reveal that small and medium enterprises (SMEs) and microenterprises are also important contributors to economic growth and job creation all over the world. "In OECD economies SMEs and microenterprises account for 95% of firms, 60-70% of employment, 55% of GDP and generate the lion's share of new jobs. In developing countries, more than 90% of all firms outside the agricultural sector are SMEs, and microenterprises, generating a significant portion of GDP"(WBSCD 2007,4). In addition, they are an "important source of local supply and service provision to large corporations" (WBSCD 2007,4). It can be argued that in general while the environmental endeavor is usually included in large corporations agenda, it is not often the case for SMEs which really focus on economic growth and job creation. This implies the fulfilment of the environmental pillar of SD becomes rather dubious for SMEs. Fifth, the type of sector in which the enterprise evolves matters in the equation of its contribution to sustainable development. In other words, the type of sector may dictate the priority in terms of the three pillars of SD.

The factors alluded to above can be reclassified in the general context of challenges/threats and opportunities/benefits of business enterprise. That is, in final analysis, the fulfilment of the theoretical role of business enterprise in quest of SD largely depends on challenges and opportunities.

A useful question is whether there is really a possibility of "win-win-win" situation (simultaneous realization of the three pillars) for the enterprise. It is well known that the primary objective of a business enterprise is to make a profit. While some credit can be given to business enterprise for job creation (social and economic aspects of SD), the debate is whether the pursuit of the economic/financial objective impedes the realization of the environmental/ecological sustainability; put differently, whether there is a tradeoff between the two types of sustainability, namely, economic and environmental sustainability. A

resolution of the win-win situation has not reached a consensus yet. For example, the results of a survey conducted in 2006 by the councilors of sustainable development of Chambers of Commerce and Industry in France indicate that numerous managers highlight the possible existence of a duality between the requirements in matter of SD, and the objective of financial or economic return. The survey also showed that SD can be realized only after the economic responsibility has been satisfied. In fact, although large corporations and SMEs are mandated to pursue SD, we can argue that the win-win-win situation might take place most likely in large corporations given their economies of scale and pressure on them from diverse agencies including governments, communities and NGOs, to behave environmentally responsible. This is true in the short term as well as in the long term. The analysis of the opportunities and challenges (see sections below) points to that direction. On the other hand, in general SMEs are ill-placed to see this happens, this for two reasons, at least in our view. First, SMEs have generally a short-term focus which in practice does not suit well SD goals. Second, in many instances, while the economic objective is the main focus of SMEs' activities, the environmental endeavor is simply a footnote. Worse, in many cases, the environmental dimension is missing. Even if the environmental dimension were there, it would be doubtful that the realization of SD would take place in the short term for reasons such as high operating cost and high market risks. It is, however, worth acknowledging that the possibility of realization of win-win is enhanced if large corporations incorporate SMEs in their equations.

At this juncture, it is legitimate to enquire about the measurement used to gauge business enterprise's sustainable development performance. At least two instruments seem to be competing: green accounting (see Dick-Forde 2005) and indicators of sustainable development. For several reasons researchers seem to lean more on indicators than on green accounting. In this connection, a number of indicators of sustainable development in the context of enterprises have been suggested (Staniškis & Arbačiauskas 2009; Bossel 1999). Basically, these are business performance indicators, social performance indicators and environmental indicators. Although attempts have been made to combine them in tandem such as eco-efficiency indicators (see Anite Systems 1999), difficulty in interpretation of the overall SD performance persists. Can one build a single meaningful indicator which encompasses all three dimensions of SD? That is the question.

What about the Caribbean business enterprise record? The Caribbean countries are in general islands characterized by a rather limited and small domestic market, high degree of openness of economies, high labour and financial costs, high cost of major raw materials, high degree of environmental and natural vulnerability and noticeable domination of small and microenterprises over large corporations. Concerning the latter characteristics, ILO (2000b) particularly underlines the following:

In the Caribbean, and other parts of the world, the small enterprises sector has gained recognition among government, donor and other organizations. Since the 1980s, it has become apparent that structural adjustment programmes, trade liberalization, privatization and particularly high levels of youth unemployment have created a need for more concentrated activities to promote and develop the small enterprise (ILO 2000b, 1).

Williams (2006,2) in turn writes

In addition to the contribution of SMEs to economic growth, SMEs broaden the base of participation in society, decentralize economic power and give people a stake in the society's future. Small-business ownerships encourage personal freedom and individual empowerment and contributes to social and political stability.

As elsewhere, we can state that in this region the small enterprise sector has the role of contributor to economic growth, job provider and input supplier to large corporations. Indeed, the results of several studies and surveys show that enterprises employing less than twenty-five persons account "between 70 per cent and 85 per cent of all business activity in the Caribbean. Even though their individual levels of activity may be comparatively small, collectively their importance to the general economic activity of the entrepreneurial class cannot be overemphasized" (ILO 2000a, 11). These small enterprises are in the

following sectors: food and agro-processing; marine and fishing; wood work and furniture; light engineering and electronics; garments; handicrafts; tourism and service related activities; emerging technologies (ILO 2000a, 11).

### 3. Business Enterprise Challenges and Sustainable Development

The contribution of a business enterprise to SD largely depends, among others, on how it deals with challenges including threats and constraints. These challenges and threats may be of an international or national origin, general or specific to the size or type of activity, or sector.

Globalization and trade liberalization can generate at the same time opportunities and challenges; all depending mainly on the size of the enterprise. Indeed, while, in general, large corporations and multinationals find their account in globalization and trade liberalization, their size allowing them to achieve the benefits of economies of scale, SMEs being generally inward looking do not fully benefit from globalization and trade liberalization. Their smallness makes it difficult for them to benefit from economies of scale. Further, the negative bias of regulations and laws prevents them from penetrating the international market. These factors along with their inward looking nature, are the major threats and challenges faced by SMEs or by microenterprises and small enterprises (MSEs) at the global level. This largely tempers their contribution to SD. At the local level, different types of constraints including financial, inputs, outputs, managerial and so forth, regulatory markets, higher unit costs are major challenges that SMEs have to confront. Note that as just pointed out, although it is publicized that SMEs create most new jobs, it is also the case they destroy jobs. This begs for further exploration as the empirical evidence is rather sketchy.

Large corporations and multinationals have to deal with quite a number of challenges of their own. These include "consumer protests, negative media publicity, potential legal costs, home country environmental regulations, host country environmental regulations and accidents at their firms and accidents at other firms" (Gleckman 1995,99). According to a Gallup Survey (Gleckman 1995,99), home country environmental regulations seem to be the leading challenge. True, but other factors are no less important. In particular, informal regulations such as communities pressure and stock market reactions are as important as formal regulations. Indeed, quite a number of researchers have shown that the disclosure through the print and broadcast media of (negative) environmental events such as violation of environmental standards, has a negative impact on the market value of firms (Dasgupta et al. 2006; Dasgupta et al. 2001; Lanoie et al. 1998; Klassen & Mclaughlin 1996; Hamilton 1995). Hamilton (1995), for example, showed that in USA the listing of polluting firms in "Toxics Release Inventory" led on average to a 0.3 % decrease in firms' value. Dasgupta et al. (2001) found that in Argentina, Chile, Mexico and the Philippines the publication of negative events (citizens complaints and environmental accidents) in the media led to a decrease in firms' value in the order of 4 % to 15 %. The negative reaction is more pronounced in developing countries than in developed countries. This might possibly explain why, in many instances, it is difficult to substantiate empirically the "pollution havens" hypothesis. Mamingi et al. (2008) used Korean firms data to show that the publication of a firm's environmental news in printed media (newspaper) and the firm's awareness of this news publication are important predictors of firm's environmental performance, irrespective of the reaction of stock markets. World Bank Research Report (2000) summarized well all the above by devising a new model for greening industry. The model suggests new roles for communities (informal regulations), markets (informal regulations) and government (formal regulations).

As mentioned above, in the Caribbean most enterprises are of MSEs type. The challenges these enterprises face in the context of small countries are quite numerous. Across the region, one of their major challenges is the lack of reliable and relevant information for the sector. If, indeed, governments really believe that this sector is important in the sustainable development equation then the creation of database is welcome. The usefulness of a database depends on the extent to which it contains reliable and relevant data. This usefulness is determined by the users who are governments, citizens, various organizations and researchers.

A consultation with these different stakeholders may help determine what types of information should be part of the database. More importantly, data must be made available to the public. In that case the challenge for an individual firm is whether the release of information will affect or not its future activities and competitive position. It pertains to governments to provide the appropriate framework. It goes without saying that all countries are not at the same stage as far as the database is concerned. Countries like Trinidad and Tobago, Barbados and Jamaica are in advance compared to the other English-speaking Caribbean countries.

As elsewhere, globalization and trade liberalization present serious challenges to SMEs or MSEs in the Caribbean. The arguments developed in the general context still hold here. It is, however, worth adding that since a substantial number of small enterprises in the Caribbean are really microenterprises, the challenges are even bigger. The solutions are well known. Among others, governments must enact regulations and laws that may allow MSEs to compete internationally and penetrate the international market. Microenterprises have to merge to boost their sizes in order to enable them to absorb transaction costs, hence to enhance their international competitiveness and exploit economies of scale. The blending of firms can even take a regional dimension.

At the local level, the major challenges and constraints facing the Caribbean MSEs include unfavorable legislation and regulation, poor co-ordination and support, limited access to finance, inadequate training, deficient marketing and sales policy, poor networking, deficient infrastructure and inappropriate technology (ILO 2000b, 4). For Williams (2006, 4), "improving access to finance is deemed to be the major challenge to the development of small and medium-sized enterprises all over the world."

In any case, the key question is how to transform these challenges into opportunities for economic and social growth while at the same time protecting the environment. Entrepreneurs' creativity, easy credit access, help from governments in terms of favorable regulations and laws, co-operation with larger corporations are important ingredients.

The section cannot be closed without raising the issue of climate change. Indeed, in the context of islands, climate change presents a challenge that all the enterprises have to deal with (see Mamingi 2007). To recall, although the Caribbean as a whole is not a major source of greenhouse gas emissions, the region is, however, affected negatively by the emissions of these gases originating most often from elsewhere. This is within the realm of global pollutants.

The threats and challenges to business may be general or specific to the type of activity. Moreover, the threats may be immediate as a result of past actions or future as a result of today's action or inaction. In any event, any substantial rise of sea level resulting from climate change may threaten most businesses as most of them are located in coastal zones. Dasgupta *et al.* (2007,12-16) provide us with a quantitative appraisal of sea level rise impact. In the context of the Caribbean countries included in their sample, they noted that a 1 metre and 5 metre sea level rise would impact 11 % and 60 % of land, respectively, in the Bahamas. Cuba and Belize would also face a serious land loss. With a 5 metre rise in sea level, almost half of population of the Bahamas, Suriname, Guyana, and French Guyana would be affected. GDP would be affected by 5 % with a 1 metre rise in sea level for the Bahamas. Most likely quite a number of Caribbean countries not included in the sample would not fare better. In case of inaction (business as usual), Bueno *et al.* (2008) estimates GDP would drop by 22 % for the Caribbean as a whole by 2100.

Each sector might have extra or specific threats apart from the general ones. The Caribbean region is known as the region of the sun, sand and sea. That is, tourism is perhaps the most important activity across the region. Countries like Barbados, the Bahamas, Dominican Republic, Jamaica, and Cuba rely very much on tourism. Climate change by altering either the sand (beach erosion and so on) or the sea itself (destruction of coral reef) is a recipe for tourism destruction. The threats would mainly manifest by a sensible reduction in the demand for tourism (Attzs 2009). Another possible threat is the high travel cost

despite the decrease in the demand. This will occur with the switch to a more costly low-carbon fuel. The same phenomenon might also occur if many airlines companies close their doors or merge. In case of inaction, the overall impact on the tourism sector would amount to a \$6.4 billion loss by 2100 (Bueno *et al.* 2008).

Businesses in the transport sector would in general be definitely affected by climate change. A substantial sea level rise or a high frequency of violent hurricanes would result in the destruction of the basic infrastructure. The air travel threat would come in the form of low demand and probably airline bankruptcy as underlined above.

Business prospects in the agricultural sector might be under serious threats. For recall, agriculture business such as food and beverage is a serious contributor to emissions of greenhouse gases. The threats to agriculture from climate change include flooding and drought depending on the region. For the Caribbean, flooding is the key threat. As a consequence food insecurity might arise with the worsening of climate change. Naturally, food insecurity might lead to other types of insecurity.

The insurance sector is a very vulnerable sector in a region prone to the vagaries of weather and possibly to sea level rise. The simultaneous demand for reimbursement in the case of disaster is a nightmare (threat) that every insurance company in the region has to deal with.

It is now established that the "business as usual" approach is not the appropriate approach to deal with climate change, as it leaves humanity worse off, the question is then what are the challenges generated by greening the business in the Caribbean. To put it differently, since greenhouse gas emissions are the culprit and since each entity has the duty to contribute to the abatement of these gases, the question is then how to do it. Mitigation and adaptation actions need to be taken to face the challenges.

Greening businesses or entire economies is accompanied by costs occasioned by emissions cuts. The Stern Review (Review 2007) indicates that "the annual costs of stabilization at 500-550 ppm  $CO_2$  to be around 1 % of GDP by 2050." Indeed, "the real challenge is to reverse the historical trend—in emission growth and achieving a cut in the order of 25 % or more against today's levels (Review 2007)." These costs will be occasioned by switching from high-carbon to a low-carbon as well as adopting high-efficiency technologies to name few.

To repeat, for business and possibly other entities, the real challenge is how to cut emissions without incurring a higher cost. To recall, the profile of these costs might differ considerably according to a certain number of factors. To name few of the paths at least for fossil fuel emission cuts, business can target demand reduction for emissions-intensive goods and services. This is basically the production of environmentally friendly goods and services. Another area is efficiency. Indeed, boosting efficiency can result in money saving and emissions reduction. Using the right technology that is a low carbon technology for power, heat and transport (see Review, 2007, Xii) may also help reduce the costs in the long run. The Review also points out that the power sector around the world will have to be at least 60 % or 75 % decarbonised by 2050 to stabilize at or below 550ppm. Although in the short term deep cut in the transport sector is difficult definitely it needs to be done.

#### **4.** Opportunities for Business

What are the opportunities for business enterprise in the context of sustainable development? At the international level, globalization and trade liberalization offer enterprises the possibility to expand their activities, boost their competitiveness level, use the best technology to reduce their costs at least in the long term. The realization of these benefits/opportunities depends on the size of the enterprise, how the enterprise deals with challenges, and its resilience. At the local level, opportunities are generally size and/or sector specifics. As a general rule, the bigger the enterprise the more opportunities in hand. This is a serious incentive for the small enterprises to be part of the supply chain of large corporations. Note that

SMEs being labour-intensive are beneficial to low-skilled workers; they provide the latter with more opportunities to work. In other words, SMEs have an important role to play in the solution of income distribution and inequality.

There are benefits for business enterprises to behave environmentally friendly. Indeed, the greening of their activities might provide them with benefits which in the long run outweigh costs. More importantly, the beneficial effects of greening may often go beyond the realm of a given business as they may touch the nation as a whole including its social and economic fabric.

The market for low-carbon is an important market which can bring substantial benefits to businesses and other entities. As noted by the Review (2007,XVI) "the transition to low-carbon economy will bring challenges for competitiveness but also opportunities to growth." Indeed, this is a promising huge market. Worldwide, "Markets for low carbon energy products are likely to be worth at least \$500bn per year by 2050" (Review 2007, XVI). Naturally, companies must position themselves to materialize these gain opportunities

The reduction in energy use and the adoption of new technologies may give rise to important savings and benefits to business. In this connection, the use of solar photovoltaic (PV) energy, as a clean and reliable source of energy, is a big plus in terms of solving environmental concerns including pollution due to the over-reliance on fossil fuels, dealing to some extent with high rising oil prices, and reducing energy use. Some authors such as Borenstein (2008), however, argue that the cost of solar PV is far greater than the value of the power it produces. In reality, the cost just alluded to is decreasing over time meaning most likely the world is better off with solar PV than otherwise, at least in the long run.

Concerning the Caribbean business, the potential higher costs businessmen can incur due to adoption of new forms of energy such as solar photovoltaic energy, low-carbon and new technologies can be reduced by going regional, among others. Indeed, this will enable them to reap the benefits of economies of scale. This is perhaps the Caribbean Community Single Market and Economy (CSME) in action.

Attzs (2007) speaks to the experience of successful greening businesses in other regions. Such are the cases of green beer in Germany with a substantial reduction in energy use and important saving, Taco Burrico King, Chicago with use of solar energy, HBSC and Barclays (UK) the first carbon neutral banks, New York State Policy of greening transportation through the use of hydro.

#### 5. Gaps in the knowledge

This section deals with the gaps in the knowledge of the subject matter. The following five gaps are worth underlining. First, although SMEs or MSEs are in general users of natural resources, quite often they do not have an environmental focus, except to some degree when there is question of links between climate change and business as well as between tourism and sustainable development. It is well known that SD rests on three pillars: economic, social, and environmental. That is, economic and social endeavors without environmental consideration do not lead to SD. Second, the literature on SMEs emphasizes the social virtue of SMEs to the extent that they are supposed to be important job creators. This is true for the Caribbean and other regions. However, in our view, as much as they create jobs as much as they can potentially destroy jobs. With the exception of Mead and Liedholm (1998), this very important aspect is largely overlooked in the literature. There is a need to reexamine carefully both job creation and job destruction to have a true picture of job implications of SMEs in the context of SD. Third, the link between the informal sector and SMEs needs to be fully explored. Are they complements, substitutes or competitors in terms of fulfilment of SD goals. Fourth, a single indicator of SD for business enterprises that encompasses economic, social and environmental elements, has yet to be built. It is our belief that such an indicator will give a better picture of win-win situation of a business enterprise as it complements the "disaggregate indicators." Fifth, there is the issue of data availability and reliability that begs for a credible solution. Indeed, without credible data, it is difficult to disentangle reality from fantasy or speculation.

#### 6. Conclusion and Policy Implications

The aim of this exploratory study was to critically review the role, challenges and opportunities of business enterprises in the context of sustainable development with some emphasis on the Caribbean. Using the literature, observations, and judgment, the paper reiterates the triple role of a typical or ideal business enterprise in SD: contributor to economic growth, contributor to job creation, and contributor to environmental protection or conservation.

Naturally, the attainment of these goals is affected by how business enterprises deal with challenges and take advantage of opportunities. While some challenges are quite general, others are specific to the size of the enterprise and perhaps the sector. Large corporations have to deal with informal regulations and formal regulations. SMEs with, among others, their small size and their lack of economies of scale, are to a great extent disadvantaged by globalization and trade liberalization. In addition, at the local level, they have to deal with challenges and constraints including unfavorable legislation and regulation, poor co-ordination and support, limited access to finance, inadequate training, deficient marketing and sales policy, poor networking, deficient infrastructure, and inappropriate technology. Climate change presents a challenge that all have to deal with. The opportunities and benefits are multiple in the context of sustainable development. At the international level, globalization and trade liberalization offer firms the possibility to expand their activities, boost their competitiveness level, use the best technology to reduce their costs at least in the long term. The realization of these benefits/opportunities depends on the size of the enterprise, how the latter deals with challenges, and its resilience. At the local level, opportunities are size and/or sector specifics. As a general rule, the bigger the enterprise the more opportunities in hand. This is an important incentive for small enterprises to be part of the supply chain of large corporations. Further SMEs are labour-intensive and contribute to the alleviation of income inequality or poverty. Climate change also opens new opportunities to enterprises.

Turning to the Caribbean, it is worth pointed out that the Region is dominated by small firms, precisely microenterprises. Challenges and motivations alluded to above apply to the Caribbean region too. Maybe here, it is worth underlying the serious challenges of data availability and climate change.

The study contributed to the literature or debates on sustainable development by pointing out the following gaps in the knowledge. (i)The win-win situation is difficult to realize with SMEs since the latter are short-term centered with high average costs and weak or non-existing environmental agenda. (ii) Second, the literature on SMEs emphasizes the social virtue of SMEs to the extent that they are supposed to be important job creators. This is true for the Caribbean and other regions. However, in our view, as much as they create jobs as much as they can potentially destroy jobs. (iii)There is no single indicator of SD for business enterprises which encompasses the three dimensions of SD. (iv) There is no serious analysis concerning the link between the informal sector and SMEs. (v) The issue of data availability and reliability for MSEs in the Caribbean is not given due attention.

The existence of some of the gaps questions further the contributions of small businesses to the realization of SD. It seems that small and medium-size businesses need to be "retooled" to make them useful for the realization of the three pillars of SD. The golden rule for a successful business is flexibility, creativity and openness to change. In this connection, among others, boost in entrepreneurs or managers' willingness to embrace SD agenda, investment in the generation of reliable data, long-term focus instead of short-term focus, and size increase are more than necessary.

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