

## INTRODUCTION

The emphasis and reference to “Women Empowerment” in this volume, should not infer that men assume insignificant roles as role models for the authors.

In fact my greatest heroes have always included Abraham Lincoln and John F Kennedy – which is why in part, I have always admired figures such as Jackie Kennedy and great institutions – such as the United States Congress.

The Congress is assuming an ever greater and more formidable position of significance in terms of accountability mechanisms – with particular respect, more recently, to the Executive branch and Government.

It is perhaps in view of my male heroes, as well as male role models who have played such uplifting and inspiring roles in my life, that I have been inspired to commit some sections – as well as highlight the importance of the need for women to empower each other – as well as others.

At times when we particularly encounter our moments of deepest “valley experiences”, there is greatest need for sources of empowerment.

“.....looking back at the wonderful journey of life

I turned round, and so far,

What has struck most has not been the number of mountains or peaks experienced,

Or the valleys crossed,

But that, for every mountain,

There is a valley,

And what has resounded most, is not just how important the length of time spent in the valley may significantly differ from that experienced on the peak,

But what experiences and lessons have been taken from such times spent – particularly, during those times in the valley.”

Marianne Ojo

8<sup>th</sup> February 2019

Definition of topic:

Through a consideration of issues related to accountability and gaps in literature related to free trade arguments and environmental issues, this volume aims to address such issues as

- Why anticipated and expected success was not generated as expected in previous protocols, conferences and climate conventions such as the Kyoto Protocol;
- Major and fundamental challenges to environmental sustainability – expanding beyond the scope of traditional concerns which are affiliated to free trade.
- How the concepts and definitions attributed to the term “ sustainable development” has expanded over the years to embrace more concepts and actors which were not catered for in original concepts and definitions – as well as their relevance to the evolving need to embrace non governmental actors and organisations in achieving sustainable development.

It will also consider “inconsistencies and inadequacies of policy prescriptions” – as highlighted by Lele, S. (1991). “Sustainable Development: A Critical Review” World Development, Vol 19 No 6 pp 607-621.

This volume aims to contribute to the literature on the preservation of the environment and sustainable development. It will do so by:

- Highlighting why the engagement of non governmental organizations and actors is essential and necessary in efforts aimed at facilitating sustainable development.
- Accentuating the relationships between environmental agreements – as fora/platforms for facilitating goals of sustainable development – as well as trade relations, and finally,
- Proposing regulations and standards whereby sustainability can be initiated and achieved.

Baekstrand adds (2008:486-487):

- With respect to accountability and stakeholder dialogues, the multilateral process lacks

representative and electoral mechanisms of internal accountability.

Further, she adds that if this were even not the case, that the numerous varieties of groups with different internal structures – as well as lines of communication and operating cultures, would make formal and consistent mechanisms of internal accountability difficult to establish – as well as to enforce. In this respect, she thereby advocates external accountability mechanisms as being more suitable, in many ways, to the process of UN sustainability governance and that in view of increased demands by non state actors for external accountability of governments and intergovernmental organizations in this age of globalization – with internal accountability of various stakeholder groups (which claim to represent public interest), the critical question “ to whom are these different stakeholder spoke persons responsible?”, needs to be addressed.

Lele (1991) highlights the following as reasons attributed to such inconsistencies: adding why “the Sustainable Development debate and policy prescriptions regarding international trade continue to be fundamentally flawed”, he lists the following (1991:616, 617):

- The need to ensure a truly equitable basis for exchange by restructuring the international monetary system is completely ignored
- That there seems to be a wide consensus across all political and intellectual boundaries that free trade is crucial to promoting Sustainable Development – to which he adds that the WCED report cites protectionism as a major impediment to sustainable development (WCED, 1987:83).
- With reference being made to McRobert (1983) and the Free Trade Agreement between the United States and Canada, it is also added that, “ economics research on trade policy has studiously ignored the massive hidden environmental externalities (in the form of pollution and climate change of ) transportation” inherent in international trade.

Hence he advocates the need for greater emphasis and focus on sustainable agriculture and tropical forests (addressing tropical deforestation).

## Chapter One

### *ENGAGING NON GOVERNMENTAL ORGANIZATIONS AND ACTORS IN SUSTAINABLE DEVELOPMENT: The Role of Environmental Accountability*

*Professor Marianne Ojo and Prof Jim Di Gabriele*

Amongst several initiatives aimed at contributing to current and present literature on the topic of sustainable development, this section of the volume aims to highlight why anticipated and expected success was not generated as expected in previous protocols, conferences and climate conventions such as the Kyoto Protocol. Major and fundamental challenges to environmental sustainability – expanding beyond the scope of traditional concerns which are affiliated to free trade.

Further, it aims to illustrate how the concepts and definitions attributed to the term “sustainable development” has expanded over the years to embrace more concepts and actors which were not catered for in original concepts and definitions – as well as their relevance to the evolving need to embrace non governmental actors and organizations in achieving sustainable development.

According to a report by the Economist (2006:53), the practice of offsetting carbon emissions is not only increasing, but also becoming popular amongst various groups which include charities, non governmental organizations, firms, community groups, and international agencies such as the World Bank. It defines offsets as a process which occurs where “one individual or organization pays another to reduce the emission of green house gases (methane and carbon dioxide accounting for the greater degree of the entire composition) on their behalf.” However, the practice of offsets are also opposed – particularly in relation to their levels of effectiveness. In particular, forestry offsets – considered to be highly controversial, have been subjected to independent standards which have been developed by NGOs, to determine whether they really reduce carbon emissions (2006:54).

As already highlighted under the introduction to this section of the volume , the section aims to

address such issues as:

Why anticipated and expected success was not generated as expected in previous protocols, conferences and climate conventions such as the Kyoto Protocol;

Major and fundamental challenges to environmental sustainability – expanding beyond the scope of traditional concerns which are affiliated to free trade.

How the concepts and definitions attributed to the term “sustainable development” has expanded over the years to embrace more concepts and actors which were not catered for in original concepts and definitions – as well as their relevance to the evolving need to embrace non governmental actors and organizations in achieving sustainable development.

This section (parts 1 and 2) aims to contribute to the literature on the preservation of the environment – as well as sustainable development. It will do so by:

Highlighting why the engagement of non governmental organizations and actors is essential and necessary in efforts aimed at facilitating sustainable development.

Recommending other means, in addition to those indicated (for example, offsetting of greenhouse gases), whereby sustainable development can be facilitated by non governmental organizations and actors, namely entrepreneurship programs.

More specifically, it aims to propose more effective measures whereby non governmental actors and organization can be efficiently engaged in reducing carbon emissions, as well as

To accentuate the relationships between environmental agreements – as fora/platforms for facilitating goals of sustainable development – as well as trade relations, and finally, Propose regulations and standards whereby sustainability can be initiated and achieved.

In consolidating on previous literature on the topic and with particular reference to these chapters

which can be found in the above mentioned volume (Lafferty, W.M. (2006). *Governance for Sustainable Development: The Challenge of Adapting Form to Function*. Edward Elgar Cheltenham UK , Edward Elgar Publishing Inc, USA):

Management by objectives and results: comparison of Dutch, Swedish and EU strategies for realizing sustainable development L. J., Lundqvist

From Environmental Protection to Sustainable Development: The Challenge of Decoupling through Sectoral Integration, W.M. Lafferty,

This section of the volume also aims, through a consideration of issues related to accountability and gaps in literature related to free trade arguments and environmental issues, will also consider “inconsistencies and inadequacies of policy prescriptions”

– as highlighted by Lele, S. (1991). “Sustainable Development: A Critical Review” *World Development*, Vol 19 No 6 pp 607-621.

Baekstrand adds (2008:486-487):

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Further, she adds that if this were even not the case, that the numerous varieties of groups with different internal structures – as well as lines of communication and operating cultures, would make formal and consistent mechanisms of internal accountability difficult to establish – as well as to enforce. In this respect, she thereby advocates external accountability mechanisms as being more suitable, in many ways, to the process of UN sustainability governance and that in view of increased demands by non state actors for external accountability of governments and intergovernmental organizations in this age of globalization – with internal accountability of various stakeholder groups (which claim to represent public interest), the critical question “to whom are these different stakeholder spoke persons responsible?”, needs to be addressed.

Lele (1991) highlights the following as reasons attributed to such inconsistencies: adding why “the SD debate and policy prescriptions regarding international trade continue to be fundamentally flawed”, and he lists the following (1991:616, 617):

The need to ensure a truly equitable basis for exchange by restructuring the international monetary system is completely ignored

That there seems to be a wide consensus across all political and intellectual boundaries that free trade is crucial to promoting SD – to which he adds that the WCED report cites protectionism as a major impediment to sustainable development (WCED, 1987:83).

With reference being made to McRobert (1983) and the Free Trade Agreement between the United States and Canada, it is also added that, “economics research on trade policy has studiously ignored the massive hidden environmental externalities (in the form of pollution and climate change of ) transportation” inherent in international trade.

Hence he advocates the need for greater emphasis and focus on sustainable agriculture and tropical forests (addressing tropical deforestation). However, the second part to this article will highlight and illustrate why the engagement of entrepreneurship start-ups are not only considered a more effective means of engaging non actors in the sustainable development process but also its relevance in contributing to a broader scope of the meaning to be attributed to the concept of sustainable development. Such a concept being frequently regarded as embodying, primarily, measures aimed at addressing deforestation and environmental pollution.

### Main Issues and Focus of Study

The following areas were identified as areas constituting new issues and elements – as well as contrasted to agriculture being an area which had previously generated issues (see Kleen: 2008 page 10) in trading and negotiating rounds.

Uruguay Round	Doha Round
Framework for trade in services	Trade and investment (dropped)
TRIPS	Trade and competition (dropped)
Creation of the WTO	Transparency in government procurement (dropped)
The agreements on trade related investment measures (TRIMs)	Trade facilitation
Pre-shipment inspection (PSI)	Aid for Trade

Challenges to progress in negotiating rounds, hence, also arise from the inability for negotiations to be facilitated at a greater pace at a level involving significantly higher degree of multilateral involvements – hence the need for more effective negotiating partners and actors. Bilateral and regional alliances appear to have greater effectiveness in achieving their targets, goals and objectives in terms of generating less communication and expectation gaps.

According to Kleen (2008:19):

- Since the start of the WTO in 1995, an increasing number of member countries, often as a result of a lack of resources, have turned to specialized NGOs for assistance in undertaking research and preparing negotiating positions on specific issues - one example from the Doha Round illustrating this being cited as the situation in 2003 when four LDC countries demanded the elimination of cotton subsidies.
- That based on a then recently issued World Trade Report 2007 from WTO, the original hesitation and suspicion among most members with respect to the role of NGOs has been replaced by a more constructive relationship and that through closer bilateral cooperation with delegations, the NGOs have succeeded in influencing the Doha agenda more effectively than would have been possible through established institutional channels like the WTO Secretariat.
- That two areas where input from the NGOs has been crucial are the negotiations on fisheries subsidies and the environment chapter.

Despite the increasingly acknowledged role of NGOs in multilateral agreements and processes – as well as the need to ensure that political instruments, mechanisms and interests do not influence the overall outcome and efficiency of such processes, questions have also been raised in matters of the performance of NGOs, the need to monitor and measure such performance as a means of gauging the effectiveness of their roles. In this respect external and internal measures of



accountability have been proposed – even with regards to the fact that many NGOs are designated as non profitable (charitable organisations).

### External and Internal Measures of Accountability: The Need for Independent Non Political Monitors of Accountability

As well as reference to Grant and Keohane’s “two theoretical models” or “basic concepts” of accountability, namely, delegation and participation – models which are considered to “offer distinct answers to the question of who is entitled to hold power-wielders accountable”, Charnovitz (2005:5) adds that “another important conclusion to be derived” is namely the need for mechanisms of appropriate accountability to be institutionalized – “if governance above the level of nation-state is to be legitimate in a democratic era.”

Excellent examples of means whereby independent non political monitors of accountability can be instigated as standards of measures and monitors for non governmental organisations include the use of academics, foundations and charities and other NGOs (Charnovitz, 2005:22) – even though the use of governments would not be advocated by the authors of this chapter. The use of peer reviews and monitors, namely “the establishment of NGOs to monitor other NGOs” is also one which is considered “the most interesting development”.

And as highlighted by our Foreword contributor,

“NGOs are recognized as pillars for the implementation of Sustainable Development Goals (SDGs), with the understanding that the State and its institutions cannot achieve the objectives of the 2030 Agenda by themselves.

This situation is reflected in the very design of the 2030 Agenda, since, this sector had a very important role in the accompaniment of the initiatives, thematic consultations, contribution in terms of inputs and experiences - their participation in the process being generated in the form of coalitions organized by sectors, countries and regions.

NGOs have played an important role in the change and transformation of society. From a working approach based on human rights, NGOs are a necessary bridge between citizens and public authorities, in the search for balance between social demands and the response capacity of public authorities.

There is a need for spaces in which all the actors involved in the implementation of the SDGs can collaborate on a permanent basis, be they of the government sector, the business sector or those originating from the NGO sector.”

*Enriqueta Serrano Caballero*

## Conclusion and Further Recommendations

It is important to address challenges presented through unequal distribution of gains derived from globalization – such that globalization – particularly in respect of information, innovation, labor markets, and information technology, does not generate protectionist attitudes – as well as reduced incentives to engage in multilateral cooperative agreements.

Following 14 months of negotiations, and after much anticipation as regards whether the North American Free Trade Agreement (NAFTA) would be dismantled, a new trade agreement, the USMCA, was finalized on the 1st October 2018. With ratification arrangements being undertaken, the new name – as well as many of the following fundamental changes represent a change to those which were initially set in place in 1994 (BBC, 2018):

Provisions relating to the car industry, first of which requires that 75% - up from 62.5% - of the parts that go into a vehicle be made in the region to qualify for tariff-free treatment, a move intended to boost production in North America;

The second provision, which requires 40-45% of a vehicle be made by workers earning at least \$16 an hour - a measure aimed at discouraging firms from shifting work to lower-wage Mexico. (In the US, the average hourly pay for auto manufacturing workers being more than \$22 as of June 2018).

The provisions are considered to be directed toward blue-collar workers in US manufacturing states, who share Mr Trump's critique of the deal. But they also offer a win to labourers in Canada and Mexico.

With respect to another vital industry, the dairy farm industry, the following results were achieved – with greater access being granted to US producers:

The USMCA will grant them a 3.6% slice of Canada's domestic market. It also scraps a recently implemented milk-pricing policy that had raised the ire of producers in US states like Wisconsin and New York.

The dairy agreement between the United States and Canada had threatened to derail the free trade negotiations and dismantle Canada's "fifty year dairy management system" – and even though considered protectionist, the ability of negotiators to preserve the dairy agreement is considered pivotal and significant as the issue relating to dairy arrangements had substantially delayed and caused significant difficulties during the NAFTA renegotiations – such that it had threatened to dismantle the tripartite free trade relationship to a bilateral one, namely the US- Mexico Agreement that had been finalized weeks before, and created as a supplementary and back-up agreement (which was yet to be ratified) in the event that a bilateral stance had to be adopted between the United States and Mexico.

In respect of technological and pharmaceutical companies, favourable conclusions were also derived for all three parties to the agreement – with the issue of tariff imposition on steel and aluminium imports constituting ongoing concerns for the USMCA allies – as well as other notable allies such as China and the EU.

The relevance of non governmental measures and programs aimed at facilitating entrepreneurship start-ups constitute vital means which foster not just accountability in the process, but also contribute immensely to economic development – and that also being from a perspective which addresses trade relations and concerns in respect of wages, job losses and potential losses of vital

transferable skills.

Why should greater focus be accorded to measures aimed at addressing environmental challenges and geared towards measures such as the facilitation of entrepreneurship start-ups which contribute immensely towards economic development – because free trade arguments within the context of sustainable development appear cannot be restricted solely to arguments relating to environmental issues.

The second part to this topic will hence focus on addressing challenges presented to the goals and objectives of preserving the environment – as well as fostering greater measures of sustainable development.

## References

- Adams, W.M. (1990). *Environment and Sustainability in the Third World* Routledge, Taylor and Francis Group, London and New York
- Baekstrand, K. (2006). *Democratizing Global Environmental Governance? Stakeholder Democracy after the World Summit on Sustainable Development*. *European Journal of International Relations*. DOI: 10.1177/1354066106069321
- BBC, *New USMCA Trade Deal: Who Gets What from "New NAFTA"*  
 HYPERLINK "<https://www.bbc.co.uk/news/world-us-canada-45674261>"  
 µ<https://www.bbc.co.uk/news/world-us-canada-45674261>§
- Betsill, M.M. and Corell, E. (2008). *NGO Diplomacy: The Influence of Nongovernmental Organizations in International Environmental Negotiations*, The MIT Press, Cambridge Massachussets, London, England
- Charnovitz, S. (2005). *Accountability of Non Governmental Organisations in Global Governance*, GW Law Faculty Publications
- Folke, C. Carpenter, S. Elmqvist and Gunderson L (2002). *Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations*
- Hart, S.L. (1996). "Beyond Greening: Strategies for a Sustainable World" *Harvard Law Review*
- Hoekman, B M & Kostecki, M M (2001). *The Political Economy of the World Trading System: The WTO and Beyond*. Oxford: Oxford University Press.
- Kleen, P (2008). *So Alike and Yet So Different: A Comparison of the Uruguay Round and the Doha Round*. February 2008
- Lafferty, W.M. (2006). *Governance for Sustainable Development: The Challenge of Adapting Form to Function*. Edward Elgar Cheltenham UK , Edward Elgar Publishing Inc, USA
- Lele, S. (1991). "Sustainable Development: A Critical Review" *World Development*, Vol 19 No 6  
 pp 607-621.

- McRobert, D. (1988). “ Questionable Faith” Probe Post, Vol 11 No 1 pp 24-29
- Meadowcroft, J. (2009). “What about Politics: Sustainable Development, Transition Management and Long Term Energy Transitions”
- Ojo, M (2017). Uncertainties and Risk Assessment in Trade Relations: Emerging Areas and Opportunities for Research.
- Pearce, D., Barbier, E., and Markandya, A. (2013). Sustainable Development: Economics and Environment in the Third World
- Scherer., A.G.. Palazzo., G., and Seidl., D. (2013). “ Managing Legitimacy in Complex and Heterogenous Environments: Sustainable Development in a Globalized World”
- Teegen, H., Doh, J.P. and Vachani, S. (2004). “The Importance of Non governmental Organizations  
In Global Governance and Value Creation: An International Business Research Agenda” Journal of  
Internal Business Studies, Vol 35, 463-83
- The Economist (2006). “Emissions Offsets: Upset About Offsets” August 2006
- World Commission on Environment and Development, Our Common Future ( New York: Oxford University Press, 1987)
- WTO (2007), World Trade report 2007—Six decades of multilateral cooperation: What have we learnt? Geneva: World Trade Organization

## **Chapter Two**

### *ENGAGING NON GOVERNMENTAL ORGANIZATIONS AND ACTORS IN SUSTAINABLE DEVELOPMENT: The Role of Environmental Accountability (II)*

*Prof Marianne Ojo and Dr Sana Moid*

Sustainable development is becoming popular in different countries of the world, including India, realizing the importance of ecological requirements for economic development. Accounting is no longer confined to description of financial performances but considered as one of the most important services of society. The ecological role of corporate sectors responsible for their business

activities on the environment is becoming particularly explicit. Along with the finance and production results of business activities, their environmental and social effects are also important. As environmental or natural resources are invaluable there is an immediate need to maintain accounts of such resources, and as a result, Environmental Accountability” has emerged.

Information technology has been a rapidly expanding phenomenon which has radically transformed

the global landscape – particularly from the perspective of emerging economies such as India and China. In combination with the internet revolution, this have paved way for opportunities which have not only rapidly contributed to the pace of growth in emerging economies, but also impact advanced economies – both from the perspectives of prices – as well as labor markets.

Emerging economies, as a group, have been growing faster than developed economies for several decades. China, which joined the WTO in 2001, is having a bigger global impact than other emerging economies, not only because of its vast size, but also its unusual openness to trade and investment with the rest of the world.

The internet has made it possible radically to reorganize production across borders – such that once non tradable services, such as accounting, can now be provided from afar – thus exposing more sectors in the developed world to competition from India and elsewhere (The Economist, 2006).

Knowledge transfers and spillovers contribute incredible sources of human capital which add value

to global value chains. This chapter will also hence, seek to explore how emerging economies such as India, are developing such knowledge and value chains in enhancing local communities – as well

as what more could be done to improve such transfer of knowledge resources. Entrepreneurship programs constituting value means whereby knowledge transfers can be facilitated. Hence this research will also highlight how vital information relating to environmental accounting practices can be quantified, disclosed and reported – as a means of facilitating better accountability mechanisms and contributing to the local and broader economy as a whole.

#### Aims and Objectives of this Section

The primary objective of this section is to evaluate the corporate practices relating to measurement, recognition and disclosure of environmental costs and benefits. This primary objective is supported

by following sub objectives:

To review accounting regulations and government rules relating to Environmental Accounting.

To analyze the corporate strategies towards environmental safety and protection.

To evaluate corporate practices relating to the quantification of environmental costs and benefits.

To analyze the recognition procedure – i.e., recognition of environmental costs and benefits in the books of account – either in the financial statements and/or in the annual reports.

To do an evaluation of environmental accounting practices, including disclosure practices, of selected Indian companies

To offer suggestions for the improvement.

#### Contribution to the Literature

The period 1971-1980 marked the beginning of environmental accounting in the form of ‘social responsibility accounting’. Social responsibility accounting aims to establish the degree of responsibility that companies should have towards stakeholders other than the firm’s shareholders.



Part of this responsibility is concerned with the interaction of firm and ecological environments.

During the period 1981-1990 focus of accounting literature shifted from ‘socially responsible accounting’ to ‘environmental accounting’ reflecting societal interest in the society. Research became more analytical in approach and the philosophical debate began to focus more on what kind of environmental information it was appropriate for companies to disclose. From 1990 to date the emphasis continues unabated and engages the interest of both academic and practicing accountants.

The latter have found their interests stimulated by government legislation.

Rob Gray and Jan Babington (2010) provide a reflection of the current state of art in environmental accounting research through this lens and then go on to present the essence of the problem through the reporting of a new analysis of data from an international study of accounting, sustainability and transnational corporations.

As well as exploring the concepts of environmental accounting and chances of broadening the applicability of environmental reporting concepts to be utilized by governments to make businesses more responsible for their externalities, Heba Y.M. Abdel-Rahim and Yousef M. Abdel-Rahim in their paper entitled, “Green Accounting – A Proposition for EA/ER Conceptual Implementation Methodology” discussed the understanding of environmental accountability education. Further contribution is offered by De Villiers and Van Staden (2006) by utilizing annual report content analysis to investigate the environmental disclosure practice of companies operating in South Africa. A further contribution by Bhate (2002) investigated the extent to which consumers of India are aware of environmental issues.

However, in India, very few corporations provide information regarding environmental issues. As per requirement of applicable law, companies have to prepare and submit information relevant to environment they have to make necessary preparation. The Environment Ministry has issued instructions in this regard for the preparation of environmental statements. Through their accounts, it can be observed that the following types of information are principally provided:

Type of devices installed for controlling pollution

Steps taken for energy conservation.

Steps taken for conservation raw material

Steps taken to address waste water and production process waste

Steps and measures taken in response to the need for improvement of quality of products and services, process of production, etc

It was also observed that most of the companies disclose the environment information in a descriptive manner rather than financial type i.e., no accounting is done for the degradation of natural capital when calculating corporate profits. Various studies have been undertaken and completed in such a similar manner in the past by the researchers. However, this initial survey of available literature revealed that no work focused on the evaluation of Environmental Accounting Practices followed by Indian Companies.

According to Moid (2016b):

Environmental aspects of sustainable development add another dimension as to how to share the benefits and costs between current generation and future generations. It makes more sense to identify, quantify and measure environmental costs. Accounting information system constitutes an important component of management information systems. It plays an important role in protecting the environment by holding polluting production companies more responsible and accountable for environmental protection – that is, how companies disclose items in their accounts or how they might expose issues, etc.

However, necessary rules and regulations are necessary to protect the environment. Further, well established accounting guidelines are required.

The following observations are also highlighted (Moid, 2016b:9):

Environmental accounting has no economic value.

The method of estimating the social value of environmental goods and services is often misleadingly construed.

Estimated values for environmental goods quantified or qualified in terms which have no fixed conversion into money.

Because of unrecorded environmental costs and difficulty in extracting and separating environmental cost the industry data is virally unreliable.

Social values placed on environmental goods and services are changing so fast that estimates are likely to be obsolete before they are available for use.

Lack of accountability standards for environmental accounting

Assumptions which are not applicable.

Comparison between two firms or countries is not possible if method of accounting is different which is quite obvious.

Input for EA is not easily available because costs and benefits relevant to the environment are not easily measurable.

EA cannot work independently and should be integrated with the financial accounting, a task which is not easy.

EA must be analyzed along with other aspects of accounting. Because costs and benefits related to environment itself depends upon the results of financial accounting, management accounting, cost accounting, tax accounting, national accounting, etc.

### **Issues to be Addressed**

No standard accounting method is universally required or stipulated to be applied and followed by all firms. Hence, comparisons between different firms or countries is not possible, or difficult where different methods of accounting are applied.

An estimate input for Environmental Accounting is not available or feasible to determine because costs and benefits relevant to the environment are not easily measurable. Many businesses and government organizations including large and well managed ones do not adequately track the use of energy and material or the cost of inefficient materials use, waste management and related issue. It (EA) mainly considers the cost internal to the company and excludes cost to society.

Environmental Accounting cannot function independently and should be integrated with the financial accounting, a task which is not easy. Users of information contained in the EA require adequate knowledge of the process of EA as well as rules and regulations prevailing in the country either directly or indirectly related to environmental aspects.

## Suggestions and Further Research Recommendations

A successful environmental management system should have a method in place to account for full environmental costs and should integrate private environmental costs into capital budgeting, cost allocation, process/product design and other forward- looking decisions. Companies can make progress in environmental accounting incrementally, beginning with limited scale, scope, and applications.

Efforts to integrate societal costs into business decisions should continue to expand. Most corporate information and decision systems do not currently support such proactive and prospective decision making. Capital markets do not yet have adequate ways to evaluate the financial performance of progressive companies who do so.

## Conclusion

It is clear that companies are completely aware that environmental issues will affect their businesses and industries in the near future. They are fully convinced of the need for environmental information. Yet the absence of external environmental accounting persists. Companies here do not have a proper environmental accounting system for determining environment related costs, benefits, assets and liabilities. Indian companies fail to provide adequate disclosure on the environment.

The conventional accounting system which is mainly the source of information regarding the organization's operations must be adjusted for environment cost assessment inclusion. Incorporating environmental accounting into managerial system could be a better step in this regard. If the environmental liabilities are to be considered, they are characterized by uncertainties – hence immense challenges are presented to the organizations in dealing with such critical issues.



## References

Acs, Z.J., Audretsch, D.B. Braunerhjelm, P., & Carlsson, B. (2005). *The Knowledge Spillover Theory of Entrepreneurship* (Discussion Papers on Entrepreneurship, Growth and Public Policy) 2705 Jena:MP

Allemade, F., Kleinschmidt, C. and Hekkert, M. (2007). Analyzing Emerging Innovation Systems: A Functions Approach to Foresight. *International Journal of Foresight and Innovation Policy* 3(2) 138-169

Arber, G., Barrere, R. and Anllo G. (2008). "Measuring R & D in Developing Countries: Measurement Priority and Methodological Issues in Latin America" Working Paper prepared for the UIS, Montreal.

Arora, A., and S. Athreye. (2002). "The Software Industry and India's Economic Development," *Information Economics and Policy*, Vol. 14, 2002, pp. 253-273.

Athreye, S. (2002). "The Indian Software Industry and its Evolving Service Capability," mimeo, Open University, U.K., June 2002.

Dosi, G., Freeman, C. Nelson R. et al (eds) 1988. *Technical Change and Economic Theory*. London: Pinter Publishers.

Gray, Rob Jan Babington, (2010) *The Environmental accounting, managerialism and sustainability: Is the planet safe in the hands of business and accounting?* in (ed.) (Advances in Environmental Accounting & Management, Volume 1), Emerald Group Publishing Limited, 1-44, 2010)

Grossman, G.M. and E. Helpman (1993). *Innovation and Growth in the Global Economy* Cambridge MA: MIT Press

Hitt, M.A., H. Li and W.J. Worthington IV (2005). "Emerging Markets as Learning Laboratories: Learning Behaviours of Local Firms and Foreign Entrants in Different Institutional Contexts." *Management and Organization Review* 1(3) 353-380

Kalia, P., K. Navdeep and T. Singh. (2016). "E-Commerce in India: Evolution and Revolution of Online Retail" in *E-Retailing Challenges and Opportunities in the Global Marketplace Shailja Dixit (Amity*

*University, India) and Amit Kumar Sinha (Amity University, India) (eds) Projected Release Date: March, 2016. Copyright © 2016. 380 pages.*

Kasemsap, K. (2016). “Advocating Electronic Business and Electronic Commerce in the Global Marketplace” in *E-Retailing Challenges and Opportunities in the Global Marketplace Shailja Dixit (Amity University, India) and Amit Kumar Sinha (Amity University, India) (eds) Projected Release Date: March, 2016. Copyright © 2016. 380 pages.*

Krugman, P (1994). “The Myth of Asia’s Miracle” *Foreign Affairs* 73(6), 62-78

Kurian, B. (2016). “Case Study E-Tailing Health Services in India”

*in E-Retailing Challenges and Opportunities in the Global Marketplace Shailja Dixit (Amity University, India) and Amit Kumar Sinha (Amity University, India) (eds) Projected Release Date: March, 2016. Copyright © 2016. 380 pages.*

Liang, B., T. Yanbin., T. Cline, and Zhongyu, M. (2016). “China’s E-Tailing Blossom”: A Case Study”

*in E-Retailing Challenges and Opportunities in the Global Marketplace Shailja Dixit (Amity University, India) and Amit Kumar Sinha (Amity University, India) (eds) Projected Release Date: March, 2016. Copyright © 2016. 380 pages.*

Moid, S. (2016). “Taxation Policy Measures for E-Retailers”

*in E-Retailing Challenges and Opportunities in the Global Marketplace Shailja Dixit (Amity University, India) and Amit Kumar Sinha (Amity University, India) (eds) Projected Release Date: March, 2016. Copyright © 2016. 380 pages.*

Moid, S. (2016b). ENVIRONMENTAL ACCOUNTING: AN ANALYSIS OF INDIAN CORPORATE SECTOR ELK ASIA PACIFIC JOURNAL OF FINANCE AND RISK MANAGEMENT

ISSN 2349-2325 (Online); DOI: 10.16962/EAPJFRM/issn. 2349-2325/2016; Volume 7 Issue 4 (2016)

Narang, R. and Trivedi, P. (20016). “Challenges and Opportunities of E-Tailing in Emerging Economies”

in *E-Retailing Challenges and Opportunities in the Global Marketplace* Shailja Dixit (Amity University, India) and Amit Kumar Sinha (Amity University, India) (eds) Projected Release Date: March, 2016. Copyright © 2016. 380 pages.

OECD (2012). Innovation for Development. Paris: Organization for Economic Cooperation and Development

Ojo, M. (2015). E Commerce as a Tool for Resource Expansion: Postal Partnerships, Data Protection Legislation and the Mitigation of Implementation Gaps in *E-Retailing Challenges and Opportunities in the Global Marketplace* Shailja Dixit (Amity University, India) and Amit Kumar Sinha (Amity University, India) (eds) Projected Release Date: March, 2016. Copyright © 2016. 380 pages.

Ojo, M. (2017). Internet Taxation and E- Retailing Law in the Global Context IGI Global

Porter, M.E. (2000). “Location, Competition and Economic Development: Local Clusters in a Global Economy.” *Economic Development Quarterly* 14(1), 15-34

The Economist (2006). “ Surprise!: The Power of the Emerging World (Special Report on the World Economy) Sept 2006

Vollero, A., A. Siano, and Sardanelli, D. (2016). “Opinion Leaders Go Online: An Empirical Study on Interpersonal Influence on Purchase Intentions in E-Retailing”

in *E-Retailing Challenges and Opportunities in the Global Marketplace* Shailja Dixit (Amity University, India) and Amit Kumar Sinha (Amity University, India) (eds) Projected Release Date: March, 2016. Copyright © 2016. 380 pages.