Environmental Sustainability Management Systems and Regulations

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Abstract

Business activities have significant potential for generating impacts on the environment as a result of their environmental aspects. Businesses also tend to locate in areas of dense population in an attempt to maximize resources, which are true for Lagos state and other coastal cities in Nigeria. Population growth thus makes the case for the natural environment very compelling, but the growing population needs to change its habits if it wants to be sustainable.

It is possible that Governments can be caught up in an outmoded mindset that sees conflicts between profitability and sustainability, but this does not have to be the case. Recognizing and resolving government's environmental aspirations, social responsibilities and business development is possible through an integrated management system.

A similar single sustainability management system derived from ISO 9001 quality management system and ISO 14001 environmental management system audit programs was created by BMT Group UK in 2009, which was accredited in 2010. This paper summarizes the essentials of their contribution to growing environmental management challenges.

The generic qualities of both standards properly implemented and embedded in a communication concept based methodology would move environmental performance from a compliance and measurement activity to one that adds value to business which directly or indirectly engages it stakeholders, address socio-economic needs and promote environmental stewardship.

Key words: Business Activities, Population, Sustainability, Social Responsibility, Compliance.

Introduction

A strong majority of us express concern about the environment and believe that at least some (if not immediate and drastic) action must be taken to address environmental problems, yet only less than 20% regard themselves as active participants in such efforts *(Dunlap & Saad, 2001).* We have always altered our physical environment in order to survive, but the pace and scale of current environmental changes knows no precedent. The longer we wait, the worse the problems become, making solutions seem more and more difficult and the gamble we take on technological solutions seems more and more irrational.

The concept of sustainable development in environmental management which was introduced in 1987 by the World Commission for Environment and Development (WCED), known as the *Brundtland Report* has come a long way in trying to shape our future as humans on earth vis-à-vis our responsibility to the environment. This could be truer in coastland and wetland areas as a result of the complexity of environmental interrelationships. The news is bad and it continues to get worse. In any event, it is becoming clear to most of us that we cannot continue on our present course. The process of exponential growth is deceptive because it starts off slowly but quickly and steadily accelerates. It occurs when a quantity increases by a fixed percentage of the whole, meaning that it will double after certain interval rather than grow incrementally.

Visualizing the Scope of Environmental Stewardship

Coastal cities like Lagos and its ever growing population do have extreme impacts on ocean ecosystems. The global trend of rural-urban migration, which is quite evident in places like Port Harcourt and other coastal cities in Nigeria tend to put tremendous strain on the hydrological cycle. These intricacies could not be more evident in wetland regions. Wetlands are transitional areas between land and marine areas providing breeding and nursery areas for thousands of species, but most importantly for humans. If the complex balance of the environment is anything to go by, then we could just be scratching the surface of our impacts on wetland regions.

Interestingly, the solution or solutions to the problem of environmental degradation still eludes the majority of us. This is evident in the constant divide by scientists and nations on how best to combat this ever creeping and perceived eminent danger that threatens the survival of the human race.
This paper however focuses on the effect of population increase and land use management with respect to governmental environmental policies and sustainable business practices as they relate to environmental management.

Presently, current proposed solutions have been nonetheless grossly inadequate, partly because private and public institutions are approaching environmental issues differently, or according to their individual convictions. For example,

I. Governments are more inclined to be worried about economic developments than caring for a disappearing wetland region;
II. Environmentalist are concerned with past and present crimes, such as, mining operations, emissions from automobiles, use of pesticides, waste production etc. while the rest of us are just plain scared of the impacted balance of nature and the unknown.

According to the United Nations Development Program's (UNDP) Human Development Report 2007/2008 (UNDP 2007) and the recent Global Monitoring Report (World Bank and IMF 2008), as well as other literature within the last decade or so, on economic growth and the environment, has shown that environmental sustainability could be consistent with sustained economic growth if certain conditions are met. But one cannot but ignore the handling of 'Social Equity' by governments as seen everyday in the news media. We see nations advertising their respective countries on international media telling people to come visit, on the basis of

their economic development. On the other hand, it seems most nations tend to owe a lot of money! Where is the logic in all these?

Current Situation of the Environmental Global Governance

Economic stagnation is almost always associated with government policy failures, such as misallocation of public revenues, and failure to promote the development of certain basic institutions. A lot of these policy failures, by and large could be attributed to ignorance and the total loss of social responsibility currently being exhibited in the political systems the world over. The amounts or level of riches of special interest groups and elites are now variables or indicators used for measuring countries economic growth. So, if countries like the United States of America that is on the forefront of sustainable environmental and economic developments (social-entity effect) are currently in debt to a whooping tune of 14 trillion dollars with China, and other creditors holding just over 4 trillion dollars, that is 30 percent of the total sum. Hence, who does the US government owe the rest to? The answer would be the business community.

On the up side, we have seen an ever increasing participation from committed professionals and scientist in the environmental sectors and other facets of the cooperate world. Large bodies of scholarly analysis now exist in academia; environmental policies and scientific research have been enacted by governments the world over. However, as humans, we have been known to always alter our physical environment in a bid to survive; and giving the steady population increase amongst other things, the rate and scale of these environmental changes are nothing short of frightening. The current situation has become too complicated and cumbersome to get a grip on by a small group of scientists.

One of the greatest misconceptions that have ever been propagated is that of the meaning of the word environment! The environment does not only imply coastal and wetland regions, pollution and endangered species coral reef destruction, deforestation, to mention a few; it is more of an integrated system than a global economy which is adversely impacted by human activities. The inefficient patterns of goods and services consumptions and the equally biased population distribution configuration are putting additional pressure on the current already over stretched natural resources.

Considering what has been done so far by all parties involved, is still a far cry from the current situation we now find ourselves in. The word climate change which has been loosely thrown around should about now be taken more seriously! We are at this time seeing monumental frequencies in “acts of God”. The present information and data on environmental issues have by no means translated to better knowledge or efficiency. This could be attributed to their lack of connectivity or contradictory nature, giving rise to a challenge in sustainable governance and methodological challenges.

A Complementary Approach to Promoting Environmental Sustainability

If the Gaia hypothesis by *James Lovelock 1970* (An active, adaptive control process, able to maintain the Earth in overall Balance) is anything to go by, then a leaf should be borrowed from nature. The key word here is balance! Earth science recognizes four spheres, the lithosphere, the hydrosphere, the atmosphere and the biosphere which are linked in a complex web of sustainability. This could also be said for a civil society and governments. There are obviously complex inter-linkages existing between the environment and the human society or in other words, governance, economic policies and the environment. What has been achieved so far seems to be disjointed, and approached individually with lots of emphasis on bias and prejudice across the board. It appears that the global agenda on environmental sustainability did not arise as a result of actual impacts on people; but rather forged from top to bottom by international watch dogs of the environment, which has nonetheless translated into gigantic disparities in the degree of public awareness and support.

A more coherent understanding between the economy and the environment thus seems a better approach towards sustainability. Management systems that could quantify trends and impacts in environmental degradation; impact policy changes and communicate awareness to the civil society as delineated by the Commission on Sustainable Development (CSD) in Agenda 21, of the 1992 Rio Earth Summit. But what these groups mainly translate to, in lack of a proper phrase, is "the general populace".

Businesses and the Environmental Psychology of the Civil Society

To put it simply,

I. The business community has been making huge profits as a result of the boost in the world's population and the advancement in social networking.
II. Business has now embedded itself with the politics of governments that any meaningful decisions on reaching a variable environmental sustainability could not exist in isolation, that is, without economic sustainability.
III. Our social and behavioral psychic has also been greatly affected by businesses through our dependence on consumables.

An Integrated Management System:

A simple management system created from two similar but different management systems would achieve positive economic growth along with environmental sustainability and social environmental stewardship, one that will touch every structural dimension of human endeavor, such as, material and energy flow, as well as ethical, aesthetic and cultural values. The transition towards sustainability is enormous and a process of social, cultural and technological innovation.

Integrating an International Standard Organization (ISO) 14001 and International Standard Organization (ISO) 9001management principles, as a single management system would enable the vast majority of the sustainable society develop a more habitual sense of sustainability through a low cost information dissemination system.

ISO 14001 is part of an international standard for environmental management with a set of interrelated elements used to establish policies and organizational objectives in companies. The

standard amongst other things, measures the results of an organization's management of its environmental aspects against the organization's policy, environmental objectives, targets and performance requirements.

While ISO 9001 is part of the ISO 9000 series, concerned with quality management and meeting customer quality requirements. The two standards are known as generic management system standards because they are not specific to a particular organization or sector, whether it is business, public administration, or a government department. This Sustainable Management Environmental System (SMES) will contribute to the conservation and regeneration of the social and capital demand that has come to dominate our current way of life. The system would enable;

I. Government review environmental regulations and policies that would give more incentives to businesses, hereby promoting necessary communication through these companies, environmental awareness to further develop peoples understanding of the consequences of their actions on the environment.
II. By adapting SMES, business in turn would be practicing lean management. That is to say, adopting environmental procurement practices in their raw material consumption purchases hereby reducing waste, improve resource efficiency, provide cost savings and enhance corporate image and provide added value by helping stimulate markets for environmentally preferred goods and service
III. The environmental sustainability awareness that is being feed into this social learning process of our versatile human nature, will empower communities with a sense of initiative, collaboration and belief in its ability to find a sustainable way of living which would in-turn translate back to governments in form of leadership and continuity. Thus, civil societies can help build a political will for a new approach to development that integrates environmental and social goals. In turn, governments would direct attention towards concrete and direct methods of environmental sustainability.

By comparison to other innovative ways of trying to solve our environmental dilemma, the proposed solution ideally focuses on behavioral technology to try and change people's perception towards understanding our environmental problems through education and change in attitudes. In reality, the SMES methodology is a product and service-based system which addresses the problem of global environmental degradation through an already existing social and cultural framework of the society (meaning; governments, businesses, and stakeholders) in their respective regions. The complexity of our world is an issue that makes developing an all encompassing environmental management system a difficult if not an impossible task.
For instance, the cumulative pollution effects on ocean ecosystems in Nigeria, as a result of social ignorance and lack of concern for the environment from the consumption of everyday product could result to an unprecedented change in certain environmental conditions in Canada. As such, the sustainable management environmental system tries to engage the socio-economic and environmental processes that define our existence.

Conclusion

In this paper we have seen that the challenges and solutions to environmental management are like strands in a mass of knotted string. The natural climatic regulation and chemical

interactions that exist between the earth's spheres result in an intricate network that affects the rise and fall of natural processes and biodiversity which is especially more intense in coastland and wetland areas. But the balance of nature has been nature's way of sustainability since the beginning of time.

The argument presented in the design of the sustainable environmental management system, has simply borrowed a leaf from nature. It is based on the concept of creating a balance between institutions and human social activities through corporate technological innovation and communication from a bottom-up initiative (where life-sustaining processes of the environment should be perceived as a common concern for us all) that would inevitably lead to a diverse sustainable society. A system consisting of two already well tested management standards (ISO 9001 and ISO 14001) currently been employed in their respective realms of the society, namely; economic and environmental development.

Environmental interrelationships are nothing but very complex, everything seems to be connected to everything else, the uneven distribution in urbanization does not appear to be helping matters, however, there have been efforts by national and international legislation leading to the control of environmental degradation, but how well informed about the magnitude of the problem is the ordinary man on the street?

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