ACCOUNTING AND SUSTAINABLE DEVELOPMENT IN EMERGING ECONOMIES: THE NIGERIAN SCENARIO

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Abstracts

Accounting for sustainability is the process of internalizing socio-economic factors, otherwise referred to as externalities to product costs, using any of the modeling techniques namely; eco- balance, life cycle analysis and ecological foot print. However, these costs are valued by pollution methods and cost of the damage arising from impacts to be internalized to increase product costs, reduce profits and ameliorate stakeholders' adverse impacts. It also assist decision makers to take rational decisions based on full- cost and get economic prices right. Methods of arriving at environmental amount to be internalities is calculated and the value of externalities is deducted from profits available for distribution as dividends. It also showed a reduced profit and cash available for dividend and reduces stakeholder's impacts' costs borne by them. The results disclosed by present traditional accounting and socio-economic measurement information is unrealistic in achieving sustainable development, an aspect of development that targets meeting the needs of the present without compromising the ability of future generations to meet their own need. Based on the foregoing, this piece, using the stakeholders' theoretical approach, advocates that Nigeria and other developing countries should shift accounting for sustainability to achieve the desired objectives, externalities data should be widely available, Academics and professionals should develop accounting for sustainability in line with developed countries. The concept should be widely promoted in developing countries and disseminated among organizations through rigorous education and training.

Key word: - Accounting for sustainability, developing countries, externalities, internalities

Introduction

Accounting for Sustainability is of crucial importance to the future of the Nigerian economy and developing countries. Benefits provided include internalization of external costs to existing production costs to get economic prices rights as it is done in most developed countries and ameliorate the impacts of external costs borne by stakeholders that do not engage in manufacturing activities of the products causing the impacts. It also enhances the ability to negotiate and include all resource prices and activities, which leads to higher costs of goods and services contributing to accounting sustainability.

Objective of the Study

The objective of the study is to present the impact of internalization of social and environmental costs to the cost of organizations activities/services in developing countries: Nigeria as a focus

Background to the Study

The Institute of Chartered Accountants in England and Wales (2004) says that sustainability was rooted in the idea of sustainability development in 1987 by United Nations. Brundtland Commission referred to as development that meets the needs of the present without compromising the ability of the future generations to meet their own needs. It simply means how the activities of human affect people, the economy, society, the built and natural environment, in fact everyone, everything and whether it has a long term future.

It is also important because as it relates individuals, societies and governments and on a global basis, there have been several political initiatives to consider the issues, particularly the environments and socials.. These led to the RIO Declaration (1992), the Kyoto Protocol (1997) and the Johannesburg World Summit (2002). Under the Kyoto protocol, industrialized countries agreed to reduce the emission of greenhouse gasses (GHG) by at least 5% by 2012. ICAEAW (2004).

Sustainability management is an organizational response to the importance of sustainability issues by concerning itself with maintenance and long-term enhancement of:

- Environmental performance is related to natural capital that is the natural resources and processes used in delivering products and services.
- Economic performance includes financial performance and reflects the companies' performance on the under developed economy.
- Social performance reflects firms' impacts on human and social capital where human capital comprises health, skills, knowledge and motivation and social on individual's Social capital is the value added by human relationships, partnerships and co-operations.

The concern of those who promote sustainability is that some of the costs involved in producing goods and services are not borne by an enterprise itself but fall on host communities, including future generations. The total cost of production is understated because of such non-quantifiable external costs.

Accounting for sustainability is a means by which market prices can be corrected in order to create an economic system that is more likely to deliver sustainable development because it is assumed that;

The economic system as presently constituted is deficient and that the goal of sustainable development is desirable. Purages (1990) in Bebbington, Gray, Hibbit and Kirk (2001) made an economic assumption that economic growth in developing countries will stimulate growth and prosperity in the developing world, often interchangeably referred to as the never to be developed world. (p.2). this suggests that it is not clear that "a slowly rising tide of economic growth will lift all ships. In fact, there is a founded fear that the tide may be ebbing and leaving developing countries behind. In addition Esleva, 1992, p.16, Sachs, 1995, p.7) noted that with a few exceptions of developing countries in South East Asia, the rich countries got richer and the poor ones poorer (p.1). In a similar manner, Zolba and El-kholy (1992) summarized their contributions thus: that: the whole world economy has grown considerably. Much of the growth has been in countries that were already consuming an inordinate share of the world's resources. Many of the least developed countries had little economic growth and a sustainable fall in per capital production during the 1980's (p. 816).

Accounting for sustainability incorporates accounting for both internal and external costs but no one knows what a full cost price would actually look-like because the issue is far too complicated and research is not yet fully enough developed to say internalize cost of winds used to produce products and services. However, UNCZAD (1996) in Bebbington et-al (2001) pp. 26-77 summarized these approaches of cost internalization thus:

An effective, enforced regulatory system that sets costs for previously free goods.

A civil liability system that punishes firms/executives for not taking care of health and safety, and the environment such as health damages are paid by the polluter.

- A corporate accounting system that reflects "real" environmental costs during internal decision-making processes for example, recycling costs are included in budget forecasts
- An eco-labelling system that encourages consumers to make purchases on the basis of the products environmental impact (so that consumer purchasing choices could penalize unacceptable environmental business decisions).

A national tax system based on the use of national resources rather than income flows (taxes could be charged on the consumption of nonrenewable resources than economic flows).

A mandated requirement that manufacturers have a responsible for their products.

ICAEXW (2004) added these market approach mechanisms to sustainability thus;
Corporate policies: where expectations of the society convinced organizations of the merits of adopting policies on sustainability and publishing impacts information about the policies.

Supply chain pressure: by which the expectations of the society drive purchases to promote desired standard of sustainable performance and reporting amongst suppliers and others in the supply chain Stakeholders engagement: enabling those with a particular interest to influence the decision and behavior of an organization's dialogue and a process of feedback from stakeholders, supported by information flows about sustainable development.

Voluntary codes: through which society encourages organizations to improve particular aspects of their sustainability performance, often requiring a statement for stakeholders regarding compliance.

Rating and benchmarking: by which investors and others or agencies working on their behalf, grade organization through the use of benchmarks or ratings on the basis of information on sustainability policies and performance and thus influence the behavior of organizations and stakeholders.

Taxes and substance: to incentives organizations to operate in ways that contribute to the sustainability requiring information in the form of tax returns and grant claims.

Tradable permits: whereby government rations allocation of scares resources undesirable impacts improve sustainability, requiring information about quotas utilization and prices to support the operation of the markets.

Requirements and prohibitions: through which society mandates actions that enhance sustainability, requiring relevant information flows to enable enforcement bodies to monitor compliance.
We use the following links to identify the externalities between the environmental impact and organizations activities: Eco-balance. Life cycle analysis and ecological footprint.

Accounting for sustainability is to translate physical qualities into monetary quantities. Using the following steps: costing externalities systems to quantify accurately all the costs but cost of abating, avoiding or remediating the impacts maintenance approach, cost approach, we use these steps, Some level of environmental performance is specified; level of emissions of particular pollutant, The cost of avoiding emissions using the various technical solutions and estimations.

The technical solutions that could be employed to achieve the target and determine costs of the damage arising from the impact may be estimated in variety of ways;

Physical impact associated with an activity is modeled, Estimate of economic value of the damage is exempted using: existing price e.g. damage to health requiring medical treatment plus opportunity cost of not working, the cost of transport approach investigating how far people would be prepared to travel in order to enjoy an environmental benefit, the hedonic pricing methods assumes the price of environmental amenities is implicit within the value of goods. A contingent valuation method seeks to ascertain how individuals value the environment. There are two main ways: to determine the amount people would pay to improve the adverse environmental impact. (Willingness to pay method) and to determine the amount people would wish to be paid for accepting the adverse environmental impact (willingness to received)
Sources, IFAC (1998) Ekins (2000) and Anethieaume (1997).

Literature Review

This piece intends to provide guidance on how, sociologically speaking, accounting for sustainability addresses the issue of sustainable development. It is designed to provide information on environmental and social resources and how they are internalized as part of the full cost of production and reflected in market prices with these assumptions: current economic system is deficient and the goal of sustainable development is desirable because neither conventional accounting numbers and conventional economic measurement capture all the consequences of economic actions, (Pearce., 1989; 1990; Costanza, 1991; Vase 1998 and Ekins 2000a). Consequently, the form of accounting used at the macro and micro level to manage, guide national and international policy making and assess the effectiveness of these policies ignores anything that does not have a price attached to it. As prices only arising through the transfer of private property rights do not exist and those aspects of transactions that tend not to be impounded in the price are ignored by societies making relevant decisions. The consequences of this are obvious because important sociological, economic and business decisions are made with no explicit concern for the externalists, rose from those decisions.

Theoretical Framework

Economic Growth and the Developing Countries

In 1987, the United Nations Commission on Environment and Development (UNCED), published the brundtland report, achieved a measure of global consensus that the indictors of planetary health were showing increasingly alarming trends of bad news and UNCED, placed the term sustainable development at the heart of international policy making and the world entered a new phase. The polices were no longer identified in the brundtland report considered to be localized ones over which we might make personal choices. Rather they were global, systematic, and threatened the existence of us all, rich and poor. (Holdgate et al., 1982 and Grubb et al., 1993). Equally, the ethical dilemma was removed from the equation into that a global consensus was reached that neither global environment desecration nor social injustice was no longer acceptable to humanity. This is where accountability for sustainability comes into the equation because it is a system which allows current accounting and economic numbers to incorporate all potential and actual costs and benefits into the equation including environmental Internalizing the externality because the prices do not tell ecological truth and by and large, that prices underestimate, the environmental damage caused by products, processes and services.

Since we accept that current prices fail to incorporate the majority of environmental and social issues then, in the language of economics, we are talking about externalities which arise where private decisions do not reflect either the public costs of those decisions, that is, cost borne by society as a whole. At least one part of the difficulty facing attempts to reverse negative environmental trends was lack of detailed agreement among the parties as to the extent of our current unsustainability.

Accounting for Sustainability

The essence of the approach lies in the recognition that markets are rarely enacted anarchic institutions. They are governed by constraints and rules. The most obvious way in which less unsustainable behavior can be encouraged is by changing the structure of the economic environment.There is a wide range of mechanisms that can be, and are, rules'. among the more obvious are: Environmental taxes – on such things as fuel, carbon content, disposable containers, landfill resources among others., Environmental grants to encourage more benign options and reduce the costs there of Environmental regulations requiring specific standards of behavior and accountability from those operating in certain areas., Environmental quotas by restricting the volume of a resource that can be extracted or the hours that can be worked in an area; the costs of operations are thereby raised, encouraging greater efficiency, Removal of assets from economic activity through, forbidding certain activities and the supply of the resource represented by those assets will be reduced and thus the prices of the remaining available resources will rise Environmental fines and penalties all systems must be closely policed and there may be prohibitive penalties for those failing to work within the new structural rules.

Certainly, conditions such as remediating land used for pipelines or mines, insistence upon more careful means of extracting raw materials from the sea or the ground, or levels of consent on the use of disposal media have all, forced some internalization of environmental costs.

The shadow price approach

Rearrangement, re-definition and reporting of actual costs, Use of economic valuation systems to produce a social cost benefit statement, Linowes and Abt13).

Use of existing market prices to calculate the cost that an organization *would* have had to bear if it had acted in a sustainable manner during the accounting period. This is the *sustainable cost approach* (used by the Center for Social and Environmental work has the same roots as the sustainable cost approach and goes by the name of a *sustainability gap analysis*

Problem Statement

Present Accounting and economic systems adopted at micro and Macro have not got the prices of right and therefore unsustainable for economic development. Shareholders theory Friedman (1970)that emphasized profit maximization has not internalized external costs into product costs. Consequently, stakeholders are bearing severe impacts of external costs not originated by their activities. This study aims at recommending mechanisms to ameliorate the impacts of external costs borne by stakeholder on activities and services caused by other organizations in Nigeria.

Each of the options considered so far has introduced some real economic effect at some point in a product or services life cycle costing. The result is that some level of cost increases enter the system and play through suppliers, manufacturers, transport, sellers and eventually retailers to the final customer. In this way, it is assumed, the market will begin to reflect society's environmental preferences through prices that increasingly reflect the 'true' environmental cost of the good or service.

At the corporate level, the shadow price approach can take, broadly, one of three forms:

Accounting Research (CSEAR), Rubenstein, 1994 and by Forum for the Future's costing experiments with, among others, Interface Europe – See Howes, 2000). In addition, Paul Ekins (once again in conjunction with Forum for the Future) has attempted to measure what it would cost a nation to meet sustainable economic policy objectives (Ekins 2000a,b). This

Methodology

The study at this junction practilise the expected outcome thus:-

Accounting sustainability's product = Financial Information Element of Financial information = income

- Statement of comprehensive income = S.S.L
- Statement of comprehensive Financial position = S.C.F.A
- Cash flow statement = C.F.S

The above: S.SI, S.C.F.P, and C.F.S summaries needs of stakeholders, but fail to produce sustainable current economic positions by ignoring internalization of external cots thus:-

Hypothetical Organisation's Position Before Internalisation of External Cost:- Tradition Approach

			N
31/12/17	Statement of comprehensive income		20million
31/12/17	Statement of comprehensive income		735,000
	Total Asset plus stock		
	Bal. at Bank		15million
	Repressed by		750million
	Shareholders fund		730million
	Profit		20million
			750million
31/12/17	N20million is planned thus:		
	Divided to shareholder	N10million	
	Transfer to reserves	N10million	
31/12/17	indend paid = reduce cash by N10million		

Accountization For Sustainability Position As At 31/12/17

				N K
31/12/17	Statement of Comprehensive income			20million
		N	K	
Mechanism approach to internalization of external costs		2M		
Shadow costs approach to internalization of external cost		1M		
Accounting for sustainability				3million
Statement of Comprehensive income				17million

Accounting for sustainability statement of CFP :-

N K

Total Asset		735M
Bank Bal.		12
Shareholders Fund	730million	
Profit	17	
Transfer to reserve N10		
Deduct payment 7	747	

Stakeholders external costs burden born by them are reduced by:-

a) Mechanisms approaches:
   Shadow costs approaches

Thereby improves developing nation's stakeholders and reduces organizations profits. Organizations may increase their product price if they shall wish to maintain the same profit but stakeholders may change to substitute products.

Conceptual Framework

Sustainability: in 1987, the United Nations Brendtland commission says: it is a development that meets the needs of the present without compromising the abilities of future generations to meet their own need. Therefore the human activities are to take an overall view of how these activities affect the people, the economy, social, stakeholders built, and natural environment. Which comprises of management, social and economy? This explains the reality that sustainability is dependent on accounting for sustainability, all mechanism to summon heavily supported by quality of all, in Babington ET all (2001).

Accounting for sustainability is one of a range concept that seek to work through the mechanism of current business and economic organization to pursue more environmentally.

Sensitive and socially just futures. Consequently in order to link the externalities arising from particular activities, link between the environmental impacts and activities must be determined, by any related techniques for modeling environmental impacts. They include: Eco-Balance, life cycle analysis impacts and ecological footprints.

An eco-balance in this content is a representation for a single entity of all the material, resources, energy, and service inputs and corresponding outputs, emission and leekages.it seeks to track the inputs and outputs from particular activities/ entities, but definition around the boundary around the activity of interest and then tracking flows over that boundary. The control is that the energy and material inputs should equal to energy and material outputs.

Life cycle analysis (LCA) is a: process used to evaluate the environmental burdens associated with a particular product, process or activity. This is accomplished by identifying and quantifying energy and materials usage and environmental releases of the environment, over the entire life cycle of the product process or activity comprising of extracting and processing of the raw materials, manufacturing, transportation, distribution, used re-used maintenance, recycling and finance disposal (fava, 1991, quoted in gray et al, 1993,p.163).

Ecological footprint technique- are usually constructed on a country wide basis and are often used to provide an indication of how richer countries used more than their fair share of resources in order to support a particular lifestyle.(Ekins 2000 a) notes an ecological footprint seeks to – convert a country's use, energy and land for food , forest, products and building to an area of consume and used lands then identify how much ,land people in one area are appropriating from another(p.26).

The outcome of each tools/methods will generate sets of environmental impacts expressed on physical terms which are deemed to arise from sets of activities. Accounting for sustainability is to translate physical quantities unto monetary quantities, any of these methods already explained (1) pollution valuation method: where the level of environmental performance is specified, technical methods are accurately defined and the costs of avoiding (abating are succinctly estimated. On the other hand cost of damage arising from impacts may be estimated and incorporated to costs thus (:1) casting actual process plus opportunity cost, haddock pricing methods with the assumption that environmental amenities is implicit with value of goods and contingent valuation methods which seek in ascertaining how individual values the environment and cost of this is factored in to product costs.

Source- (IFAC 1998, EKINS 2009

Summary

The present economic system is deficient mostly in developing countries because conventional accounting measurement captures all the economic activities that have monetary value to achieve sustainable development but not ideal. We identified the externalities arising from relevant activities, then links them with the environmental and social impacts and the activities are determined, using three modeling techniques; namely, eco-balance, life cycle and analysis and ecological foot print using pollution valuation methods and the cost of the damaged arising from the impacts to cost impact to be internalized by any of the modeling techniques to arrive at cost to be internalized to increase product costs and reduce profits. Accounting for sustainability ensures putting in place appropriate mechanism and environmental costing principles relevant for internalization of externalities Such as shadow costing which aligns developing countries charge out prices with developed world full cost pricing techniques.

Conclusion

Most decision makers basing sustainable development on traditional accounting and economic information are planning at variance with the world sustainable development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Accounting for sustainability is an approach used to internalize external costs borne by stakeholders to product cost to ameliorate impacts borne by them; and also get economic prices right for decision making.

Recommendation

Developing countries should make externalities data widely available as in European countries and United stated of America. Accounting for sustainability is a way of achieving these laudable objectives.

Academic and practicing professionals need to develop accepted approach to Accounting for sustainability in line with widely accepted norms suitable for interventional comparison.

An education and practical guide programme must be developed because accounting for sustainability development is a powerful tool in a transition toward sustainable economy.

Accounting for sustainability should be widely promoted and disseminated among organizations and stakeholders.

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