A Philological Analysis On Green Accounting
Conceptual Permutations On Evolutionary Models

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Abstract: Environment preservation, conservation, and segregation of assets related directly or indirectly into standard accounting procedures and factoring in on the environment, and on the cost related issues in estimation of financial contingencies that are implicating explicitly or implicitly is now the most diabolic question in every government rule book, is what this study is all about. Can there be evolutionary models of green accounting, or is it still emerging at various corners of the world, and is there any standard formulae existent to derive out the net effect on the accounting related issues on environmental factors are looked at under this study. Having three logical hypotheses, and two causal hypotheses, this study tries to bring out that, factoring costs, attributing cost factors, calculation of values, preservation in tandem with cost-saving. It also tries to identify the best methods of conservation efforts to add value to existing assets, or delaying, or controlling degradation costs of the environment due to wear and tear. The study also tries to analyse the possibilities in, factoring it with penalty to prevent overuse or underuse to preserve the ecosystem of environment for the best use of resources, and finally to segregate the utilities from non-utilities, and trying to subsume the environment with managerial accounting, financial accounting and all together with the national accounting. This paper framed with logical and causal hypotheses tries to arrive at a logical conclusion, that the cost factoring and impact costs differ from country to country and it will be difficult, but not impossible to buy in ideas of accounting in a standardized manner that is applicable in various parts of the world, as the subjective factors associated with nature, preservation, legal complications, outlook towards environment, and above all the attitude of the people and the government in conserving, preserving and nurturing environment is what this study relates too. The study recommends future research on the evolutionary models where permutation combinations advantageous to the economy of a country and green count matters most, obviously for the developing countries and emerging economies like India.

Index Terms: Green Accounting, Preservation, Factoring, Contingencies, Evolutionary Models, Managerial Accounting.

1 INTRODUCTION
Green Accounting (Peter wood 1980), derived on the accounting frameworks, that attempts to factor costs of financial costs on the environment, with the objectives of segregating, elaborating, and estimating the flows and stocks of assets involving environment, and sums up the expenditure to derive out the cost factors involved in protecting the environment. While the importance of green accounting needs no emphasis, but, as far as India is concerned, apart from theoretical perspectives the status quo of green accounting in many countries including India is, accounting the economic losses that are eventually happening on renewable resources in the environment, and in terms of objectives, it segregates, and calculates the estimation of total expenditure for protecting the environment in cost terms. The supporting terms of green accounting, and articulating role is done by environmental accounting, as a tool that supports the role of natural environment in an economy, and provides data that interprets, the impact of pollution or resource degradation, and also supports in calculating the costs by highlighting the contribution of natural resources and economic well-being.

2 OBJECTIVES OF THIS STUDY:
(i) To analyse the importance and trending concepts of Green Accounting Models and the effectiveness of its applications.
(ii) To Triangulate on the core areas of conceptual permutations, to utilize the best available models.

Logical Hypothesis:
(i) $H_1$: Is there any significant advantage of using a specific model that fits all.

Causal Hypothesis:
(ii) $H_2$: Will models of the Green Accounting significantly change according to subjective factors related to the advantages and disadvantages of environment existing different countries.

Data Analysis:
Secondary data for statistical analysis, and data literature from valid and authentic sources like the GAAP and other regulatory bodies for substantiating literature is used in this study. Also, a metacognitive aspect relating to green accounting practices across the world, its practical utilities, review of related literature, and review on the impact models and practices run through varying accounting practices across the world, to arrive at the results of green accounting results are taken as a tool of analysis for the study.

Findings of the study vis-à-vis the objectives set are;

Objective 1: To analyse the importance and trending concepts of Green Accounting Models and the effectiveness of its applications.

On analyzing as to why trending concepts of green accounting hits on the current accounting practices followed across the world, unarguably, there is a renewed requirement of addressing issues of sustainability measures of accounting requires new tools, nevertheless, facing challenges on the practices followed with permutation combinations due to variegated issues related to varying environment prevailing in the subjective country, like India is not new, since we try to ape the models of the west, rather than creating our own. Like for example the transfer model approach, which always emphasizes both stocks and flows and it also focuses on biogeophysical measures, hence the sustainability issues and related doubts arise, and that the model is in the nascent stage. Likewise, there are many models, which looks seemingly simple are still more nascent according to incremental standards happening due to AI, and other software implications. There are a couple of examples to point that even now in India, the complexities in accounting schemes for composition of substances involved in greenhouse gas emissions, still stands at middle of the road, it
has no clarity as to why carbon is treated as a surrogate quantity, and where is the explanation for accounting scheme for that. In the global warming, there is no clarity, as to why they're in no accounting scheme severe enough to accommodate differential impacts of various substances that impacts, climatic impacts, fluctuation phenomena, and aggregating means to single functional relationship between greenhouse gases and global temperature. Another impetus, like in the warming and temperature fluctuations, there are many unsaid impacts on the society, and there is always the chance of taking only one impact, usually the global averaged one, and there is no appropriate and subjective geographic aggregating accounting model, there is dire need to average on the trending concepts and models, even though, obviously the models are in nascent stage.

The Variegated Measuring Tools: Ecotax: (ecological taxation), levied on actions, activities, utilities done on the environment, and if considered harmful, or proven as it is causing pertinent laid down or observed harmful impact, the levying of the taxes varies. The real intention of this tax is to promote environment-friendly activities through economic incentives. Eco-tax prevalently attempts to maintain overall tax revenue by reducing other taxes like human labour, and renewable resources, as part of green tax shift towards ecological taxation. Eco tax examines environmental impacts cost and addresses the failures due to the free market economy. Eco taxes possess the similarities of Pigouvian taxes (Arthur Pigou 1877), that attempt to make the private companies and parties using the natural resources to feel the social burden of their actions. The other related taxes, those impacts while factoring in at the green accounting and environmental accounting stages, are still to be standardized, yet are in practice.

Carbon Tax: taxes on the use of fossil fuels that indirectly increase the greenhouse gases including old hydrocarbon taxes that do not penalize on the greenhouse gas. The levying of carbon tax rests on carbon content on fuels that such as hydrocarbon fuel such as coal, petroleum, natural gas is burnt and the conversion of carbon dioxide and other compounds of carbon, and thereby recommending in the form of carbon pricing. Heat-trapping that occurs due to carbon content, damages the environment and human health, due to which the exertions that happen externally through release are compensated for taxing the carbon content of fossil fuels, at any point in the product cycle of the fuel. The significance of carbon taxes can be felt from the experiences from 27 countries across the world utilizing carbon taxing and the net effect US$ 300 billion revolves in fossil fuel subsidies alone, annually worldwide. The carbon taxes are not without disadvantages, it has an economic perspective, and increasing environmental regulations with firms relocating to a more favourable place of theirs, the relocation can cause loss of employment, again it hits on the economy of a country in a different way, for which the government never is prepared, especially as far as India is concerned.

Severance Taxes: Tax that is levied for removal of natural resources that happens with taxing jurisdiction, and are prevalent in oil-producing states. For example, the United States charges severance taxes when the extraction is done for natural oil, natural gas, coal, uranium and time. It can be under the ambit of the gross production tax. The severance taxes has its characteristics depending on the geographical locations and national laws of different nations, like the United States are distinct, where most of the natural resources are publicly owned, unlike in most commonwealth nations it is not levied as a tax, but as a royalty on the resource used, and in the forest resource usage, it is taken as stumpage. Stumpage is a price paid by the private firms operating for harvesting timber from a given land base, and this price is purely for the rights they have on the harvesting limit on timber and the prices are determined based on the number of trees harvested, or otherwise called stump. Is there a regulation towards stumpage in India with legal clarity is available is a question on the levying procedure, and how much India is prepared is a question.

Steering Tax: Steering tax (or otherwise called Ecological Incentive Tax) that tries to mediate the behavior of the taxpayer, defined by lawmakers, and it is never done to increase tax revenue per se, though it is imperative to levy on the criteria. Polluter Peter Principle revolves in the levying of this tax and is purely based on ecological tax reform, and is understood for having made for energy use. It is also levied for the number of effluents; pollution and other hazardous wastes released out to the ecosystem and thereby needs to be compensated.

Tax Shifting: Usually includes balancing taxation levels, to be revenue-neutral for the government, to protect neutrality in the government, and maintaining overall progressiveness. Usually, it is done to protect the most vulnerable and raising the minimum level to higher income level, to make them more comfortable in investing, thereby contributing to offset increased costs of consumption.

Some of the prominent Approach Models prevalent across the world are;

The feebate approach: (Amory Lovins 1970) in which additional fees on less sustainable products, such as SUVs are pooled to one group to initiate on the newer and more sustainable with hybrid electric vehicles, and even small changes can impact positively on the corporate tax rates, and it can change return on investment and if averted can take future fossil fuels taken into account. The logic as above can go in for the green mortgage, and location efficient mortgage, that recognizes person who is not driving cars and live energy-efficient lifestyle and accordingly have heftier mortgage bill, and hence banks get back more per month from a month as utilities than from car insurance companies that take less from a customer. When in progressive or regressive conditions, the tax which decreases tax for taxpayers, the income increases.

Regulatory Approaches: the conventional approaches so far have affected prices much in the same way; nevertheless it lacks revenue recycling potential for eco-taxes. The tax revenue could be redistributed on a per capita basis, on a basic income scheme. In the basic income scheme, the poorest people can gain what the average citizen pays as eco-taxes minus their small contribution without a car, and small apartment. This design can be highly progressive and even the alternative eco-tax can have a lifeline design with modest consumption level priced relatively low or even zero in certain
cases. It can have inclusions of recycling to reduce, eliminating regressive factors, increase in eco-tax by offsetting the decree to a regressive payroll or consumption tax, etc. The advantages though not tangible, but substantial by creation of second benefits of increased employment or at least the costs on the health care, as the market and society is adjusting to new fiscal policy, and more often the environmental harm is hitting poor more who falls as victims, so they do not have a buyout, and have to a mere receptor of what comes as air pollution, water pollution, and impacts on the health and welfare.

Eco tax enactment scenario across the world: The advanced countries like Germany which introduced the eco-tax on the electricity, next on the petroleum, in variable rates, with environmental considerations, and the taxes are to favour conventional power plants, and the income taxes were reduced proportionately so that the citizens' tax burden is constant.

Taxing Registrations: the countries like Netherlands, Portugal, Canada, Spain, and Finland are practicing differential taxing procedures to less to more polluting cars, to psychologically tune customers to opt for the cleanest car models. For example: recommending through fewer taxes on registration on hybrid, electronic and other fuel-efficient cars, thereby reducing pollution. The UK has developed a model to change people's behavior, and not fundamentally to make revenue, and similarly in India, the ministry of environment and forests, and government of India collects eco-taxes on coal, automobiles, chlorine, phosphate, detergents, chemical pesticides, chemical fertilizers, lead-acid batteries, and plastics.

Location value tax: A site valuation tax and splitting of the rate of tax or site value rating is the tax levied on the unimproved value of land, disregarding building, personal property taxes and other improvements to real estate. Land value tax is known otherwise as perfect tax and because the location value is created by communities and public works, the economic rentals of land are the most logical source of public revenue. It is a progressive tax and the tax burden fall on the title holders in proportion the value of locations, the ownership of which is highly correlated with overall wealth and income. The countries like Denmark, Estonia, Litania, Russia, Singapore, Taiwan, and to some extent in Australia, Mexico, the United States, etc.

Logical Hypothesis: the significant effect of modern green accounting models and approaches has not yet started to deliver results, concerning Indian conditions. The logical conclusion can be, due to compliance issues, or complications in procedures which are not obvious, or since its transfer models from abroad, may be subjectively effective in advanced economies, and maybe in the nascent stage in the emerging and developing economies in India.

CONCLUSION: The logic of Green Accounting has improved upon in 21st century with various models and procedures adopted as per the suitability of variegated factors, particularly related to the environmental acts of various countries while calculating the cost and related factors. The logic here is that the damages to the worst extent are already done, and with the level of damages that are not quantifiable is still prevalent and the assessments, valuations and penalizing is still not clear to many of the authorities including that of many developing countries. Hence considering the logical hypothesis, we need to look at whether the damages and prevention from damages or restraining the use and misuse to protect the remaining form worst is far from reality. The logical conclusions shall be drawn from few of the existing models and having a close look at the metrics on which the ad Valorem is done shall give some logical know-how, of why green accounting concepts are still done on permutation combination at various locations.

To get clarity to the logical hypothesis of this study, let us deliberate before concluding on the few questions as to why sudden consciousness is on the green accounting. The disturbing questions for which, the deliberations so far can take to further research are;

- The relevance is gaining importance is because a company's profit and loss or its revenue and expenses have an insidious impact on the environment. The environmental impact does influence the companies profit and loss.
- It gives a snapshot of the 3 important factors that it factors in that is people, profitability, and Planet, including the issues of costs, advantages the environment brings in to a business.
- The green accounting adoption is paying its benefits through the commitment it can draw from the corporate towards environment protection that it shares with business concerns.
- The functional logic of GDP, as a matter of fact, does get affected due to the impact of environmental and climate change, and the disclosure procedures are growing all the more.
- The steps that were taken in 2013, through the new companies act, that made CSR falling under the 3 categories as mentioned:
  - Companies making net worth 500 crores or more
  - Companies making a turnover of 1000 crore or more
  - Companies having a net profit of 5 crores.

The ultimatum being that, every company making net profits for 3 years, from which average worth of 2 percent needs to used for the CSR is now mandatory. The other part being the companies in India needs to disclose particulars relating to conservation of energy, technology absorption, foreign exchange earning are few of the steps supporting the growth of Green Accounting. The challenges, logical disruptions, accounting standards in terms of calculations, breaking of conventions, Political imbroglio, projected and predicted disruptions in the environment, classification of the importance of environment subjective to economic value/utility of locations is making us spin on the logic of working of Green Accounting application in India. GIST, Green Indian States Trust is leading the cause of green accounting disclosures in India. The objectives that go in are; to assess the environmental costs and benefits to concern, to segregate and categorize various environmental costs, and to link physical resources with environmental accounting monetarily. The logical question is whether green accounting is superior to the conventional accounting system, and how far it can support the accounting cause still looms large as a doubt in many people. A
conventional accounting system is not accommodating factors like environmental expenditure, or expenditure incurred to prevent pollution or any damages caused to the environment. There is no interpretation of cause and effect relationships of an environmental incident to a business or organization. Conventional accounting is not studying or measuring the exhaustion of environmental resources that are considered as damaging factors degrading the environment. Hence India is beginning to recognize the importance of protection of the environment and now the legal compliance towards protecting the environment and its biodiversity along with its ecosystem is an extremely critical area as well as compliance done with national priority. Resolving Issues of Green Accounting in India: Green Accounting as a concept, procedure, and accounting system is still not without doubts including conceptual clarity is still prevalent in India including the corporate companies. Even though there are compliance, there are no clear cut practices and policies in place to protect the environment, and this article is trying to deliberate on the models that are practiced across the world, and whether the conceptual permutations from those models shall converge to a reasonable practice with support system of accurate green accounting is what this study strives to.

Henceforth, the Status Quo of Green Accounting Conceptual Challenges in India:

- Accounting procedures relating to Green Accounting Practices and natural capital which is a naturally endowed stock of nature cannot be substituted easily, and the ecosystem of GDP of the poor, that are provided free of cost to the poor, does not feature anywhere in the traditional system of national accounting which needs clarity.
- The ecosystem services still need accounting procedures to get placed in the national accounts and the indicators to manage these are not clear.
- Natural capital assessments although gaining importance in India, a holistic indicator via the process of natural resource accounting or green accounting to aid the policy of the engineering process of a country is not clear.
- Natural Capital assessments and its challenges are still striving for a holistic indicator, ahead of traditional GDP or GNP system.
- The other flaw is the lack of market-based worth of the natural resources as well as the known valuation of the harmful by-products.
- Failure of the environmental markets due to the reason that information is asymmetric and is flooded with outdated methods, in the accounting system that is not including various stakeholders.
- Huge outflow of natural capital through international trade to other countries needs a huge tab since transferring in the name of exports is too high, and that natural capital vis a vis the augmented pressures can be detrimental in the long run.
- Inappropriate methodologies with lack of objectivity are still casting doubts on the impact assessment, as Indian growth rate will become lower if the human well being with HDI with environmental externalities are accounted for.

Challenges vis a vis world targets: The UN SDG specifically highlights the integration of ecosystem and integration challenges of integrating the ecosystem services with biodiversity into local and national accounts by 2030. Only, with the aim of poverty reduction, $ 489 billion is available for the implementation of SDG goal number 14 (life below water) and 15 (life on land) cumulatively, and with the small part of the available 1.64 percent, of the estimated funds, can advancements be made too stands as a question. Analytical inputs from various source on the status quo of green accounting milestones: The National Biodiversity Action Plan of India, in the year 2008 observes that policy relating green accounting are very inadequate and the valuation of goods and services provided by biodiversity is nowhere visible. The leadership matters here as in the way to handle, with conceptual clarity (karthikeyan,2017), the lattice leadership style (karthikeyan, 2017), the conscious levels in leadership (karthikeyan c,2017), as said in level 7 consciousness of a leader (karthikeyan c, 2017) can put the commitment on top, and then the political leadership in India needs to develop a strong vertical leadership (karthikeyan c 2017) at execution levels to make it viable for the public, as well as industries at all levels to understand and take up the initiative. The ministry of environment, forests and climate change had launched their crucial Green Skill Development Programme, to combat unemployment, and environmental degradation by creating green jobs, for the youth. The final outcome from various studies and results of schemes are that, the Green Accounting is retarded by a variety of methodological barriers, sluggish political will and lack of data, which is crucial for the success of the accounting procedures, and still lack clarity on the capital assessment agenda, whether the CSR and R&D of the big companies are there to ensure better quality of life. Hence the questions on these are looming large as doubts. The question looming large from this study is are Transfer Models for Green Accounting Suitable, as suggested by Paul P. Craig and Harold Glasser, with models suitable for environmental policy analysis for sustainable development in India.

REFERENCES:


