

Green Accounting in India

Management Insight
15(2) 36 - 42

DOI: <https://doi.org/10.21844/mijia.15.2.5>

Anchit Jhamb*, **Swati Aggarwal****

Correspondence Email: anchit786@gmail.com

Abstract

Environmental accounting or inexperienced accounting may be a new branch of accounting that aims at accounting for the atmosphere and its well-being. Though it's a very new field/branch of study and practice; it's presently gaining connection attributable to its importance. Additionally to simply checking a Company's profit or loss or its revenue and expenses environmental or inexperienced accounting may be a growing field that focuses or provides for accounting the environmental impact, bound factors might cause to a business or organization. The adoption of inexperienced accounting depicts the commitment associate degree enterprise/organization has towards the atmosphere. It deals with three most vital factors folks, profit and therefore the the} planet associate degreeed also a lot of or less deals with the prices and also the benefits or advantages an atmosphere brings to a business. India's former atmosphere Minister adult male. Jairam Ramesh once in power stressed the requirement and importance to bring inexperienced Accounting practices to the forefront of accounting in India.

Key Words : *System of National Accounts, Green Accounting, CSR, Conventional Accounting*

Introduction

Conventional accounting that is that the commonest sort of accounting doesn't take into thought loads of things like environmental expenditure or expenditure incurred to forestall

pollution. It doesn't study the cause and impact relationship that an environmental incident might cause to a business or organization. Standard accounting doesn't study or live the exhaustion of setting resources or take into thought the degradation of the environment.

*Assistant Professor, PIT, Rajpura

**Assistant Professor, Chandigarh University

Fig-1- Preparation of Green Accounting

| Row → Column ↓ | Economic Activities | | | Economic Assets | | Environment |
|---|--|------------------------|-----------------------|--|--|--|
| | 1. Production | 2. Rest of World (ROW) | 3. Final consumption | 4. Produced Assets | 5. Non produced economic assets | 6. Non produced natural assets |
| 1. Opening Stock of assets | - | - | - | Opening stock of produced assets | Opening stock of non produced economic assets | - |
| 2. Supply | Production | Imports (M) | - | - | - | - |
| 3. Economic uses | Intermediate consumption | Exports (X) | Final consumption (C) | Gross capital formation | - | - |
| 4. Consumption of fixed capital (CFC) | CFC | - | - | (-) CFE | - | - |
| 5. NDP | NDP | Net exports (X-M) | Final consumption (C) | Net Capital accumulation (I) | - | - |
| 6. Use of non-produced natural assets | Use of non-produced natural assets in production | - | - | - | (-) Use of non produced economic natural assets | (-) Degradation of non-economic natural assets |
| 7. Accumulation of nonproduced natural assets | - | - | - | - | Change in stock of non produced economic assets Net | (-) Reduction in natural assets other than economic assets |
| 8. Environmentally adjusted aggregates in monetary accounting | EDP | Net exports (X-M) | Final consumption (C) | Net accumulation of produced assets (NAp.cc) | accumulation of non produced economic assets (NAnp.cc) | (-) Net accumulation of non produced natural assets (NAnp.n) |

Explanation to Fig-1**Column (1):**

Production side covering output, intermediate consumption, consumption of fixed capital (CFC), net domestic product (NDP) and use of non-produced natural assets in production.

Column (2):

Rest of the world (ROW) account includes exports minus imports (X-M).

Column (3):

Final consumption (C).

Column (4):

Produced assets as a part of economic assets that have come into existence as output from

processes. This includes not only tangible fixed assets but also intangible fixed assets such as mineral exploration. It includes net accumulation of produced assets and other changes in the volume of produced assets i.e., gross capital formation.

Column (5):

Non-produced economic assets are defined as non-financial assets that have come into existence in ways other than the process of production. This includes tangible non-produced assets like land and sub-soil assets. Intangible non-produced assets like patented entities, leases, and

transferable contracts.

Column (6):

Records the effects of economic activities on non-produced natural assets such as air, water and virgin forests that are not included as economic assets in the stock of natural assets.

Row (1):

It records the entries of opening stock of produced assets being the value of stocks of man-made capital produced and the value of stocks of natural resources, such as oil, gas and cultivated forests etc.

Row (2):

It records total domestic production and the value of imports.

Row (3):

Economic uses including elements of intermediate consumption, exports, final consumption expenditure and gross capital formation.

Row (4):

Consumption of fixed capital (CFC) also appears as a negative item. Therefore, Net Investment (I) = Gross Investment (Ig) - CFC.

Row (5):

Net domestic product (NDP) represents the elements that define the national income accounts identity between net domestic product (NDP) and expenditure categories:

Net Domestic Product (NDP) = Net exports (X-M) + Final consumption expenditure (C) + Net capital accumulation or Investment (I)

Row (6):

It includes the elements for the use of non-produced natural assets by depletion of economic natural assets and degradation of non-economic natural assets.

Row (7):

It relates to accumulation of non-produced natural assets which include change in stock of economic assets and reduction on natural assets relating to environment.

Row (8):

It relates to environmentally adjusted aggregates in monetary environmental accounting. These macro-economic aggregates of EDP = Net exports (X—M) + Final consumption (C) + Net accumulation of produced economic assets (N_{Ap}.ec) + Net accumulation of non-produced economic assets (N_{Anp}.ec)-Net accumulation of non-produced natural assets (N_{Anp}.n).

Forms of environmental accounting

(1.) Environmental Management Accounting (EMA): Environmental Management Accounting with a specific focus on material and energy flow data and environmental value data. This kind of accounting can be additionally classified within the following sub-systems:

(i). section Environmental Accounting: this is often AN internal tool of environmental accounting for choosing AN investment action, or a project, associated with environmental conservation from among all processes of operations, and to weigh up environmental effects for ascertain amount.

(ii). Eco Balance Environmental Accounting: this is often AN internal tool of environmental accounting for supporting PDCA for property environmental management activities

(iii). Corporate Environmental Accounting: This could be a tool for informing the general public of serious data compiled in accordance with the Environmental Accounting

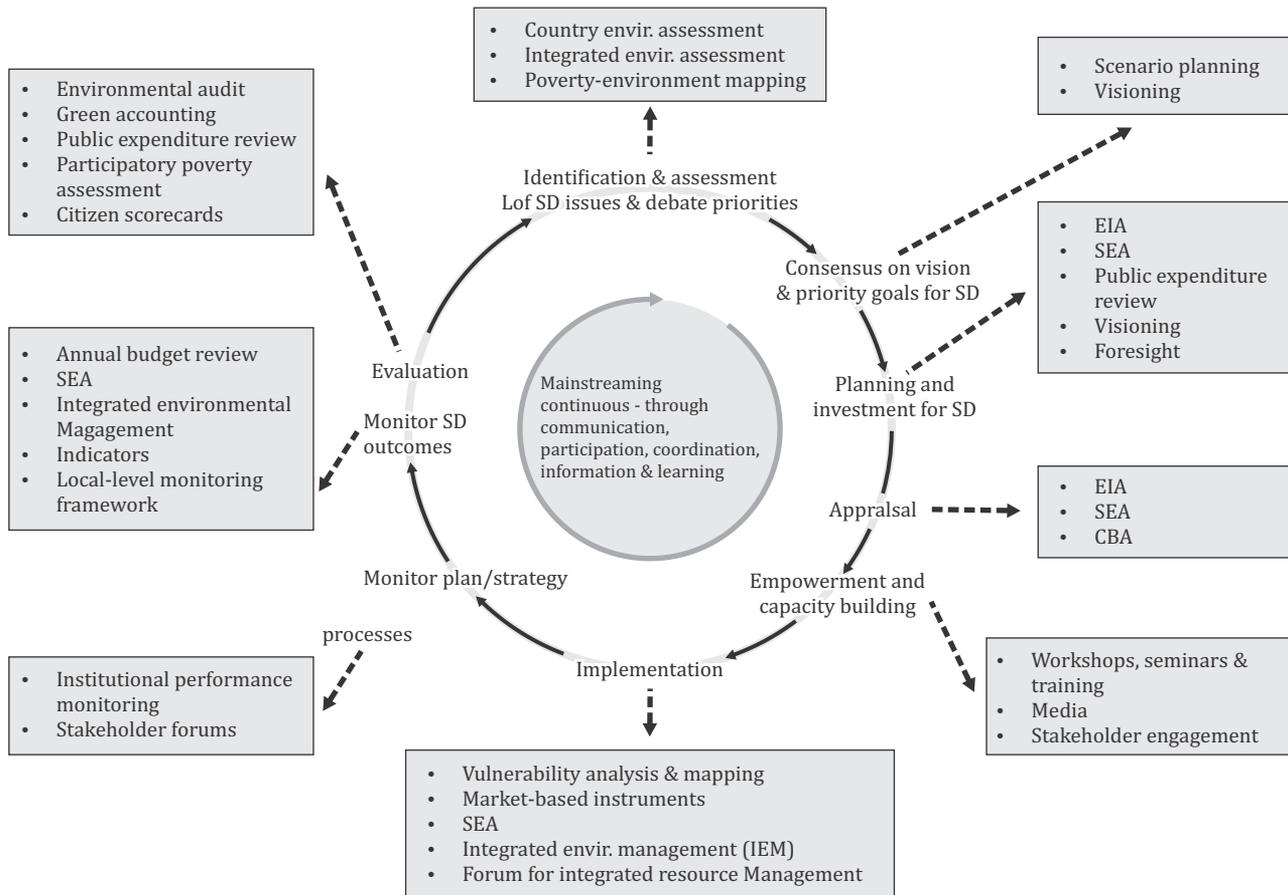
2. Environmental money Accounting (EFA): Environmental money accounting with a specific focus on reportage environmental liability prices and different relevant environmental prices.

3. Environmental National Accounting (ENA): National Level Accounting with a specific target natural resources stocks and flows,

environmental prices and position prices etc. Environmental Accounting at Corporate Level

helps to understand whether or not corporation has been fulfilling its responsibilities towards surroundings or not.

Fig-2 Processes of Green Accounting



Procedure for environmental accounting and Major issues and challenges

- i. Profit and Loss Account: All revenue expenditure incurred for the protection of the atmosphere ought to be debited to the present account.
- ii. Balance Sheet: All environmental and natural resources consumed by the business ought to be thought to be environmental assets and it ought to be the liability of the organization towards society to utilize such assets at maximum potential

capability and at minimum value while not adversely moving society's interest. Any capital expenditure incurred by the organization ought to be shown in the record.

iii. Budgets: The environmental budget ought to be ready by the organization to determine the quantity needed for environmental activities. The accountable person ought to check and verify the particular quantity of expenditure spent on environmental activities.

iv. Reporting: The organization ought to report for

environmental activities, the price obligatory by the organization on the environmental advantages served by the business organizations, advantages received from the environment and also the prices obligatory by the atmosphere. In short, social responsibility of business are happy by the news system.

The major burning problems and challenges with relation to environmental accounting include:

- a. Identification of environmental costs;
- b. Capitalization of costs;
- c. Identification of environmental liabilities; and,
- d. Measurement of liabilities. completely different pointers concerning these problems are issued by several organizations from time to time, however the rules square measure nearly informative in nature.

Legal framework for environmental accounting in India

While industrial licensing has been terminated for all practical functions, environmental clearance from numerous Government authorities has currently taken the center stage. With increasing international worry over the protection of the environment, Asian country too has got wind of a Union Ministry of Environment with the thing of coordinating among the various states and therefore the numerous ministries, the environmental protection and anti-pollution measures. Essential legislation has conjointly been passed.

- (i) Directly related to Environment Protection:
 - (a). Water (Prevention and Control of Pollution) Act, 1974.
 - (b). Water (Prevention and Control of Pollution) Cess Act, 1977.
 - (c). The Air (Prevention and Control of Pollution) Act, 1981
 - (d). The Forest (Conservation) Act, 1980.
 - (e). The Environment (Protection) Act, 1986.
- (ii) Indirectly related to Environment Protection:
 - (a). Constitutional provision (Article 51A).

- (b). The Factories Act, 1948.
- (c). Hazardous Waste (Management and Handling) Rules, 1989.
- (d). Public Liability Insurance Act, 1991.
- (e). Motor Vehicle Act, 1991.
- (f). Indian Fisheries Act, 1987.
- (g). Merchant of shipping Act, 1958.
- (h). Indian Port Act.
- (h). Indian Penal Code.
- (i). The National Environment Tribunal Act, 1995.

It is to be noted that each one new comes want setting clearance. This clearance issues each the Union Ministry of setting and Forests and also the corresponding State Govt. department of setting. Guidelines are issued and every one such comes area unit expected to get environmental and anti-pollution clearance before they're truly enforced. A Central Pollution electrical device has additionally been found out. Where vercases of violating of standards of water or pollution have been get the information, show cause notices have been issued to involved industrial units and every one such units area unit being unbroken beneath constant examination. According to the Annual Report of the Ministry 1997-98, out of 1551 giant and medium industries acknowledged in the seventeen classes of extraordinarily polluting industries, 1261 have put in the requisite pollution management facilities and 165 units area unit within the method of putting in such facilities. 125 industrial units are closed down. During the year 1997-98 some 680 complaints regarding varied styles of pollution i.e. air, water, noise and soil are received and attended to. The priority of the Ministry to shield the setting within the coastal waters and also the coastal belt has diode to the burden of a no construction belt of 300 meters far from the high water tidal limit on the Indian coast line. This has affected the beach hotels and coastal resorts. with the exception of the final concern for creation of the setting, the priority for the management of risky substances for the protection of the forest wealth and wild life and for preventing biological dreadful conditions have additionally caused some limitations that the prevailing industrial units and also entrepreneurs

Fig-3-Environmental Conservation Cost

| Category | Investment in relevant year (yen) | Expenditure (yen) | | | |
|--|-----------------------------------|---------------------|--------------|-------------|-------------|
| | | Fixed property cost | Running cost | Expenses | Total |
| Pollution prevention cost | 235,808 | 17,195,643 | 56,712,396 | 7,119,853 | 81,027,892 |
| Global environmental conservation cost | 9,400,000 | 79,208,157 | 28,336,117 | 6,206,912 | 113,751,246 |
| Resource recycling cost | 0 | 21,170,338 | 10,146,926 | 92,214,346 | 123,531,610 |
| Upstream and downstream cost | 0 | 16,057,138 | 3,926,000 | 195,538,189 | 215,521,327 |
| Management activities cost | 0 | 21,556,872 | 1,443,276 | 188,624,342 | 211,624,490 |
| R&D cost | 11,684,962 | 0 | 0 | 207,058,831 | 207,058,831 |
| Social activity cost | 0 | 0 | 0 | 3,328,626 | 3,328,626 |
| Natural restoration cost | 0 | 0 | 0 | 0 | 0 |
| Total | 21,320,770 | 155,188,147 | 100,564,775 | 700,091,099 | 955,844,021 |
| Reference: Total of fiscal | 622,543,394 | 174,374,038 | 79,151,014 | 677,599,279 | 931,124,331 |

Fig-4- Effects of Environmental Conservation & Economic Effects (Cost excluded)

| Details | Annual effect size | | Effect converted into yen |
|---|--------------------|----------------------------|---------------------------|
| | Amount | Unit | Total |
| Electricity reduction | 4,922,425 | kWh | 66,535,682 |
| Fuel reduction | 124,793 | Converted into crude oil l | 7,663,885 |
| Greenhouse gases (e.g., PFCs) reduction | 0 | kg-CO ² | 0 |
| Water reduction | 151,8050 | M ³ | 24,692,764 |
| Raw materials & subresources reduction | 0 | kg | 0 |
| Crating material reduction | 144 | kg | 93,360 |
| Chemical substance reduction | 162 | kg | 42,930 |
| Paper reduction | 414 | kg | 8,433 |
| Waste reduction | 2,365,000 | kg | 77,653,943 |
| Yield rate improvement | 314,376 | kg | 258,707,137 |
| Others & reuse* | 889 | Cases | 3,573,696 |
| Total effect converted into yen | | | 438,971,830 |
| (Reference: Total effect converted into ven in FY 2008) | | | 593247,207 |

Conclusion

India is still in the nascent stages of development when it comes to Green Accounting. In fact, most of the world at large is still unaware of the term Green Accounting or its importance. Even though

Indian corporates and businesses comply with requirements such as Corporate Social Responsibility etc., there are no clear-cut practices or policies in place to protect the Environment. Hopefully, with more awareness on the subject, Green Accounting will become a

practice and reality among all firms one day. Actually, unless normal folks of Bharat don't seem to be created aware towards environmental safety, development of accounting during this regard is complicated. Business homes got to prepare to create a solid environmental policy, take steps for pollution control, suits the connected rules and rules, and reveal adequate details of environmental aspects within the annual reports. For property development, a crystal clear environmental policy furthermore as correct execution and appropriate accounting procedure is should.

Annexure

Fig-1- Preparation of Green Accounting

Fig-2 Processes of Green Accounting

Fig-3- Environmental Conservation Cost

Fig-4- Effects of Environmental Conservation & Economic Effects (Cost excluded)

References

<https://www.techjini.com/blog/green-accounting/>

<http://www.yourarticlelibrary.com/economics/environmental-economics/green-accounting-need-objectives-problems-and-other-details/39675>

<https://waset.org/publications/10005264/environmental-accounting-a-conceptual-study-of-indian-context>

<http://www.irjcjournals.org/ijmsr/June2014/1.pdf>