

Conceptual Understanding Of Environmental Assets And The Possible Benefits Arising From It

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Abstract

Environmental issues have always been highlighted in Brazil and in the world, however, in recent decades the discussions have been narrowing since the demystification focused on natural resources as an infinite and inexhaustible good. From this perspective, environmental accounting focuses its concern on the rational use of such resources, presenting criteria for their rational use as a way to solve or minimize environmental impacts. The present work makes a conceptual approach to environmental assets and seeks to present the possible benefits arising from it. It had the contribution of authors such as Conceição, et. al. (2014), Silva and Rios (2014), Neves (2006), among others. In the course of the work, it is possible to perceive the awakening to the environmental issue from the perception that the environment is not something inexhaustible, thus offering the risk to society in general, starting with the means of production, affecting large, medium and small entrepreneurs, the community as a whole, from the interference in their quality of life.

Key Word: Environmental Issues; Environmental Assets; Environment; Society.

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I. Introduction

Throughout its history, humanity has always been in search of improvements to its quality of life, which, since its beginning, has always relied on the exploitation of the environment for its satisfaction.

Such exploitation has taken place in various ways and the search for new technologies, considered by society as indispensable for maintaining a standard of living considered comfortable, has caused the environment to be gradually forgotten.

In this context, the present work makes a conceptual approach to environmental assets and the possible benefits arising from them, to better understand the need for this policy of environmental preparation and recovery from the administration of a budget made available for this and how this has benefited economic and environmental development.

Carvalho (2007), cited by Lopes (2017, p.6) conceptualizes environmental assets as "goods and rights, related to environmental preservation, protection and recovery, and that can generate economic benefits to the company in the future".

The relevance of the theme is due to the breadth of discussions that are currently taking place around problems related to the environment and how accounting has contributed within the business context to the use of environmental issues as a source of income for the company involved in this project.

In this context, the present work is bibliographic research, which, through a lexical study, sought to make a conceptual approach to environmental assets as well as their contribution to the development of companies.

According to Fonseca (2002, p.32) "bibliographic research is carried out from the survey of theoretical references already analyzed and published by written and electronic means, such as books, scientific articles, web site pages".

The present work aims to present how environmental assets are worked within the environmental accounting context and the possible benefits for the company.

It is important to highlight that this theme should not be exhausted in this article, given the breadth of the area that surrounds it, as well as the particularities that surround it, from the environmental aspects involved, means of production and, not least, the cultural context in which the company is involved, factors that particularize the economic scenario and, not least, the cultural context in which the company is involved, factors that particularize the economic scenario and, consequently, the work methodology adopted by the company.

Much has been discussed about economic growth at the national and global level, however, the impacts arising from such growth have not always been evidenced. With technological development, which has brought with it economic growth and, at the same time, social and environmental impacts, there is a concern to turn our gaze to the measurement and mitigation of these impacts.

In this perspective, environmental accounting emerges, which would have as its general objective "to record the company's transactions that impact the environment and their effects on the company's economic and financial position, ensuring that environmental costs, assets and liabilities are accounted for in accordance with accounting principles and broad transparency" (CONCEIÇÃO, et. al. 2014, p.3).

According to Lima et. al. (2012), Environmental Accounting is a relatively new branch of Accounting Science that has as its object the set of environmental assets, rights and obligations, that is, environmental assets, and aims to provide information to the most diverse users about environmental events that alter the situation of assets.

For Santos et. al. (2001, p.91) Environmental accounting can be understood as the study of the environmental assets (environmental assets, rights and obligations) of entities. From this perspective, it is understood as an indispensable instrument in the control and/or recovery of environmental impacts, providing support for decision-making related to the actions taken.

Despite its evidence in the face of environmental problems that have been highlighted in recent years, environmental accounting is not such a recent science. For Conceição et. al. (2014, p.3), it emerged in 1970 from the first signs of concern shown by companies for the environment.

The authors also define environmental accounting as "the accounting of the benefits and losses that the development of a product or service can bring to the environment. It is a set of actions planned to develop a project, taking into account the concern for the environment" (CONCEIÇÃO, et. al. 2014, p.3).

A new dimension valued by environmental accounting, for the authors, "has the function of drawing the attention of administrators and partners to ways to reproduce or avoid costs and also improve the quality of the environment" (Naujack, Ferreira and Stela, 2018, p.1).

From this perspective, it comes to be understood, not only as a science that takes care of the financial issue of any and all institutions, but as an evaluation instrument for solving or, at least, minimizing impacts related to the environment.

II. Material And Methods

This article uses the methodology of bibliographic review, aimed at the analysis and synthesis of concepts, definitions and studies related to the theme of environmental assets and the benefits associated with them. The methodology was organized into three main stages: search, selection, and content analysis.

The search was carried out in renowned academic databases, such as Scielo, Google Scholar, Science Direct and Web of Science, covering relevant publications on the subject. Keywords such as "environmental assets", "environmental benefits", "natural capital", "green economy" and "sustainability" were used. The source selection process considered only peer-reviewed studies, academic articles, theses, dissertations, and institutional reports relevant to the topic.

The main inclusion criterion involved the direct relevance of the texts to the concepts of environmental assets and their potential benefits, both environmental and economic and social. Studies focusing on divergent topics or without a clear relationship to the theme were excluded. Publications were selected that addressed the definition of environmental assets, their classification, related public policies, as well as the impact of these assets in areas such as sustainable development and the green economy.

After selecting the sources, the articles were analyzed in depth, aiming to identify predominant definitions, theories and methodological approaches. Then, the main contributions were synthesized, with emphasis on the benefits arising from environmental assets, such as biodiversity conservation, generation of economic value and promotion of sustainability. The analysis followed a comparative approach, allowing the identification of convergences and divergences in studies on the subject.

This methodological approach of literature review allowed a comprehensive understanding of environmental assets and their potential benefits, providing a solid basis for the construction of the theoretical framework and the discussion of the findings presented in this article.

III. Result And Discussion

Elements of environmental accounting

According to Silva and Rios (2014), environmental accounting brings with it some elements considered indispensable in the demonstration of environmental nature: environmental assets, environmental liabilities, environmental costs and expenses.

In the perception of Hendges (2013, p.1), environmental assets are the monetarily measurable assets and rights owned by enterprises that represent present and/or future benefits, the resources of companies for the preservation, minimization and recovery of environmental characteristics and quality. These are controlled resources that arise from past events – the environmental aspects of products, services and business activities – and from which beneficial economic flows, direct or indirect, are expected.

From this perspective, Brumati (2015, p.107) conceptualizes environmental assets as "all goods and rights intended or derived from the environmental management activity, which may be in the form of working capital or fixed capital".

Conceição et al. (2014, p.4), conceptualize Environmental Assets as "all goods and rights intended or derived from the activity that has the purpose of controlling, preserving and recovering the environment, which may be in the form of working capital or fixed capital".

It is important to highlight that "there are significant differences between the environmental assets of the various organizations, precisely because the possible environmental damage and the mode of prevention are different for each production process" (PENSAMENTO VERDE, 2014, p.1).

The point made in the blog Pensamento Verde is in line with the point made by Hedges (2014, p.1) who explains that "environmental assets are related to investments in technologies, raw materials and processes for the prevention, containment, reduction or elimination of polluting aspects or that represent risks to the environment, public health or workers".

Regarding environmental liabilities, a publication on the blog Pensamento Verde (2014, p.1) defines them as "the short and long-term obligations that companies assume in order to promote environmental improvement".

For Hedges (2013, p.1), "Environmental liabilities are the damage caused to the environment represented by the social obligations and responsibilities of companies with the environmental aspects of their activities".

Among the examples of environmental liabilities to be cited, the aforementioned author highlights investments in actions for recovery or, at least, minimization of damage. "Examples of environmental liabilities are Petrobras' expenses when there are oil spills, as occurred in Cubatão in 1980 and in Guanabara Bay in 2000" (PENSAMENTO VERDE, 2014, p.1).

It is important not to confuse the concept of environmental liabilities with environmental costs and expenses. For Santos et. al. (2001, p.93), Environmental costs and expenses are expenses (consumption of assets) applied directly or indirectly in the environmental management system of the production process and in the company's ecological activities.

In this expectation, Herckert (2018, p.1) explains that environmental costs are related to resources aimed at investing in goods whose use aims at the conservation and/or recovery of natural resources.

On the other hand, Tridapalli, et. al. (2001), cited by Borinelli, Baccaro, Guandalini (2018, p.3), explains that "environmental expenditures can be understood as those inherent to the constitutional functions of the State related to environmental preservation, control and recovery and the guarantee of environmental rights".

Abreu, et. al. (2016, p.269) reinforces that "environmental expenditure may be related to poor environmental quality that exists or that may exist, often due to the activity that the company carries out".

In view of the conceptual approach, the present work seeks to make an approach to environmental assets, their implications, potentialities and limitations.

Environmental assets

Unlike conceptual aspects worked on by general accounting, which present a concept of asset as the available financial resources – that which comes in as revenue -, the environmental asset, in the perception of Naujack, Ferreira and Stela (2018, p. 6) explain that "it is represented by acquisitions, such as stocks of inputs, parts/accessories, when these are used to eliminate or reduce negative impacts on the environment."

The words of Naujack, Ferreira and Stela are in line with the concern pointed out by Welter (2018, p1), who presents that in Environmental Accounting, an environmental asset can be understood as applications and investments aimed at environmental preservation, which have the purpose of generating future economic benefits, which is its main characteristic, since the preservation of the environment does not have an immediate result.

Reinforcing the explanation of the authors, Diegues and Rosman (2018, p.10), explain that "assets stand out for three different aspects: a) source of natural resources, b) support for the development of socioeconomic activities, c) deposition of effluents from these activities".

Conceição et. al. (2014, p.4) presents some examples related to environmental assets, namely that stocks of inputs used in the process of eliminating or reducing pollution levels; investments acquired or produced with the intention of mitigating the impacts caused to the environment; research expenditures, aimed at the development of modern technologies, in the medium and long term, provided that they constitute benefits or actions that will reflect in the following years.

Another factor that deserves to be highlighted is the clarity between environmental assets and liabilities and how they are worked by institutions. From this perspective, Neves (2006, p.50) brings two illustrations for a better understanding of the differences between the referenced terms.

The first refers to the impact caused by the implementation of a certain economic activity where the plaintiff presents as a liability the impacts during the implementation, the wear and tear on the environment that

surrounds him due to noise and dust, for example. Alteration or even the elimination of the natural resources existing there due to the structuring of the work, in addition to the overload of the road system, due to the increase in the flow of loading and unloading vehicles (NEVES, 2006).

On the other hand, the same author presents the environmental assets, starting with the work of signaling and protecting the traffic of vehicles, work that tends to reduce the risk of accidents, in addition to the emission of pollutants to the environment; recomposition of the previous state, which occurs in an attempt to minimize permanent damage and, finally, the minimization of risks from signage and cleaning, which, among other actions, requires the recomposition of the environment in addition to the correct disposal of waste (NEVES, 2006).

The author also reinforces his perception based on the concern with the issue of load during the construction of the projects, presenting as passive aspects that involve disturbance, increase in the flow of vehicles and people, overload of the services offered to the community, such as health, education, etc. Draining natural resources and increasing waste production. In view of the examples of liabilities presented, the author exemplifies as environmental assets the reduction of disturbances, optimization of circulation routes, recomposition of the drainage system in addition to the treatment of effluents (NEVES, 2006).

Neves' explanations provide the best understanding regarding environmental assets and liabilities, in view of all this, Tinoco and Kraemer (2011) cited by Silva and Rios (2014, p.5) who highlight as benefits arising from environmental assets "improved efficiency, increased capacity, safety of other assets, reduction or elimination of contamination resulting from operation in future years, among others".

Thus, the importance as well as the need for environmental assets within the business context can be perceived, which tend to optimize, not only the environmental issue, but the economic development of the institution in the face of the maintenance of environmental resources, which, in a way, will subsidize its economic growth in the future.

IV. Conclusion

The evolution of society has brought with it social and environmental benefits and impacts. In this sense, the present work sought to present the contribution of accounting in the process of environmental preservation, especially regarding the preservation of impacts provided by large entrepreneurs.

The distinction between the concepts allowed a better understanding of environmental accounting, mainly from the perception of the importance and need of each of them within the process of preservation of environmental resources.

In this perspective, the present work sought to make a conceptual approach to environmental accounting and its elements, emphasizing environmental assets and their benefits for the company and society.

The elaboration of the same brought with it a broadening of the view on the importance of this area of accounting, starting with the minimization of environmental and financial wear and, on the other hand, the use of the environment as an ally in its economic development.

Despite little social repercussion, environmental accounting has not started recently, which proves that the concern with the environmental issue is already something that has been worked on for a long time. On the other hand, the expansion of the supply-demand relationship has consequently brought a greater need for new areas of commercial and financial exploitation, demands that have as their main source the exploitation of the environment, putting life itself at risk.

Thus, environmental assets come to be understood as indispensable in this commercial and environmental relationship, because it is from the perception of them as a source of renewable resources that institutions began to develop or respect policies aimed at their conservation, thus promoting the opportunity for an economic, social and environmental return and, consequently, the improvement of people's quality of life and greater business profitability.

Thus, the need for a deepening of the theme for a greater dimension of learning is perceived, making the concepts worked on, in fact, come to be evidenced in the daily life of academic and professional life, thus reducing environmental impacts and, consequently, promoting the quality of life of society in general.

References

- [1]. Abreu, Ana Cristina Silva. Et. Al. Gastos Ambientais E Níveis De Atividades Potencialmente Poluidoras Nas Empresas Do Índice De Sustentabilidade Empresarial (Ise) Da Bm&Fbovespa. R. Gest. Sust. Ambient., Florianópolis, V. 5, N. 1, P. 267-290, Abr./Set. 2016. Disponível Em: <File:///C:/Users/Semus/Downloads/3046-8436-1-Pb.Pdf>. Acesso Em: 04 De Out. 2024.
- [2]. Borinelli, Benilson; Baccaro, Thaís Accioly; Guandalini, Natalia Nakay. Os Gastos Ambientais Dos Estados Brasileiros: Uma Análise Exploratória. Disponível Em: <Http://Engemausp.Submissao.Com.Br/17/Anais/Arquivos/153.Pdf>. Acesso Em: 04 De Abr. 2018.
- [3]. Brumati, Débora Natalia. Contabilidade Da Gestão Ambiental: Ativos E Passivos Ambientais Em Empresas, Em Alta Floresta/Mt, Em 2014-2015. Disponível Em: <Http://Faflor.Com.Br/Revistas/Refaf/Index.Php/Refaf/Article/Viewfile/213/Pdf>. Acesso Em: 01 De Out. 2018.
- [4]. Conceição, Fernando. Et. Al. Contabilidade Ambiental. Xi Simpósio De Excelência Em Gestão E Tecnologia – Seget. 2014. Disponível Em: <Https://Www.Aedb.Br/Seget/Arquivos/Artigos14/132021.Pdf>. Acesso Em: 01 De Set. 2024.

- [5]. Diegues, Antonio Carlos; Rosman, Paulo Cesar Colonna. Caracterização Dos Ativos Ambientais Em Áreas Seleccionadas Da Zona Costeira Brasileira. Disponível Em: <[Http://Nupaub.Fflch.Usp.Br/Sites/Nupaub.Fflch.Usp.Br/Files/Color/Ativos18.Pdf](http://Nupaub.Fflch.Usp.Br/Sites/Nupaub.Fflch.Usp.Br/Files/Color/Ativos18.Pdf)>. Acesso .11 De Set. 2024. Fonseca, J; J. S. Metodologia Da Pesquisa Científica. Fortaleza: Ufc, 2002. Apostila.
- [6]. Hengdes, Antonio Silvio. O Que É Ativo Ambiental. Ecodebate, 16/09/2013. Disponível Em: <[Https://Www.Ecodebate.Com.Br/2013/09/16/O-Que-E-Ativo-Ambiental-Artigo-De-Antonio-Silvio-Hengdes/](https://Www.Ecodebate.Com.Br/2013/09/16/O-Que-E-Ativo-Ambiental-Artigo-De-Antonio-Silvio-Hengdes/)>. Acesso Em: 01 De Set. 2024.
- [7]. Herckert, Werno. Custos Ambientais. Disponível Em: <[Https://Meuartigo.Brasilecola.Uol.Com.Br/Administracao/Custo-Ambientais.Htm](https://Meuartigo.Brasilecola.Uol.Com.Br/Administracao/Custo-Ambientais.Htm)>. Acesso Em: 03 De Abr. 2018.
- [8]. Lima, Karla Priscilla Sales De. Et. Al. Contabilidade Ambiental: Um Estudo Sobre A Evidenciação Das Informações Ambientais Nas Demonstrações Contábeis Das Grandes Empresas Brasileiras. Revista Eletrônica De Administração (Online), V. 11, N.1, Edição 20, Jan-Jun 2012. Disponível Em: <[Http://Amcc-Ma.Com.Br/Publicacoes/Francisco_Gilvan/01.Pdf](http://Amcc-Ma.Com.Br/Publicacoes/Francisco_Gilvan/01.Pdf)>. Acesso Em: 09 De Set. 2024.
- [9]. Antonio Silvio. O Que É Passivo Ambiental. Ecodebate, Redação-23/09/2013. Disponível Em: <[Https://Www.Ecodebate.Com.Br/2013/09/23/O-Que-E-Passivo-Ambiental-Artigo-De-Antonio-Silvio-Hengdes/](https://Www.Ecodebate.Com.Br/2013/09/23/O-Que-E-Passivo-Ambiental-Artigo-De-Antonio-Silvio-Hengdes/)>. Acesso Em: 01 De Ago. 2024.
- [10]. Lopes, Rafael Alexandre. Estruturação Das Contas Dos Ativos Ambientais Envolvidos Em Um Processo De Recuperação Ambiental De Áreas Degradadas Pela Extração Do Carvão. 2017. Disponível Em: <[Http://Repositorio.Unesc.Net/Bitstream/1/5450/1/Rafael%20alexandre%20lopes.Pdf](http://Repositorio.Unesc.Net/Bitstream/1/5450/1/Rafael%20alexandre%20lopes.Pdf)>. Acesso Em: 13 De Out. 2024.
- [11]. Pensamento Verde. Blog. Entenda A Diferença Entre Ativo E Passivo Ambiental. Publicado Em: Fev 03, 2014. Acesso Em: 01 De Set. 2024.
- [12]. Naujack, Jakeline Ferreira, Josleimara Luzia Stela, Eder Rogério. Contabilidade Ambiental: Uma Revisão De Conceitos. Disponível Em: <[Http://Www.Fecilcam.Br/Anais/Vii_Enppex/Pdf/Ciencias_Contabeis/03-Cicont.Pdf](http://Www.Fecilcam.Br/Anais/Vii_Enppex/Pdf/Ciencias_Contabeis/03-Cicont.Pdf)>. Acesso Em: 09 De Out. 2024.