



La Economía en contextos medioambientales

Economics within environmental contexts

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Resumen

En el pasado se habló mucho de la mitigación del impacto ambiental a través del desarrollo sostenible, ya que se busca minimizar la cantidad de recursos naturales utilizados, pero para ello era imprescindible la existencia de leyes que prohibieran algunas prácticas que eran causadas por desconocimiento, ahorro de dinero o simplemente por negligencia. Este trabajo pretende mostrar un breve repaso de cómo han ido cambiando las cosas a lo largo del tiempo, de cómo la sociedad ha ido evolucionando de esa mentalidad consumista a una mentalidad de bajo consumo y pensando más en las posibilidades que tienen frente a la Reutilización, Reaprovechamiento y Reciclaje. También conoce cómo la mentalidad de consumo se ha orientado al consumo verde, y cómo se han desarrollado las políticas ambientales internacionales y cómo influyen en las políticas colombianas. Tanto es así que ha influido en la creación año tras año de tecnologías que mitigan directamente el medio ambiente o generan un menor impacto en él.

Palabras clave: Consumidor Verde, Desarrollo Sostenible, Desarrollo de Nuevos Productos, Estrategias de Valor, Impacto Ambiental, Legislación Ambiental, Sostenibilidad, Tecnologías Verdes.

Abstract

In the past, much was said about the mitigation of environmental impact through sustainable development, since it seeks to minimize the amount of natural resources used, but for this it was essential the existence of laws to prohibit some practices that were caused by lack of knowledge, saving money or simply negligence. This work is intended to show a brief review of how things have been changing over time, how society has evolved that consumerist mentality to a mentality of low consumption and thinking more about the possibilities they have in front of the Reuse, Reuse and Recycling. He also knows how the mentality of consumption has been oriented to green consumption, and how international environmental policies have been developed and how they influence Colombian policies. So much so that it has influenced the creation year after year of technologies that directly mitigate the environment or generate less impact on it.

Keywords: Development of New Products, Environmental Impact, Environmental Legislation, Green Consumer, Green Technologies, Sustainability, Sustainable Development, Value Strategies.

Introduction

Sustainable development.

As it is well known, in the last years in different countries, policies oriented to sustainable development have been implemented. This term has been coined only for economic issues, since it is generally allowed to damage the environment if a sum of money is paid to mitigate the impact it generates. For the authors (Ortiz and Arevalo, 2009) "talking about development implies clarifying a related term: economic growth, which has been confused over time" for decades this term has been misunderstood, since social and cultural aspects, among others, have been separated. For other authors, the definition of these terms has become fashionable cases, and is still under construction due to contradictory criticisms between terms by professionals in economics and environment (López et al., 2005)

For López and collaborators, this topic is fashionable as it has become the subject of discourse by politicians and companies for various interests, losing its meaning (López et al., 2015). Going through the decade of the 70s and 80s, around the year 1987 the concept of "Sustainable Development" is created as "That development that meets present needs without compromising options for future needs", a concept that for years was accepted but left many gaps in thinkers, researchers, economists among others, generating great debates among society (Larrouyet C., 2015).

Sustainable development is the process by which only natural resources are preserved, conserved and protected for the benefit of present and future generations without taking into account the social, political and cultural needs of human beings in order to achieve sustainable development, which is the process by which the economic, social, cultural diversity and healthy environment needs of the

current generation are met, without putting at risk the satisfaction of these needs for future generations (Rivera J., 2017). Thus, the main difference is defined by the Use, for researchers and professionals in social sciences, economics and politics it is "Sustainable Development" and for professionals in Natural Sciences it is "Sustainable Development" (López et al., 2015). Some authors (Castiblanco, 2007); (Aguado and Barrutia 2009); (Fuente and Zamora, 2012), present more complete and convincing definitions that show that these developments go hand in hand, seeking a continuous growth between the economy and the environment, having pluralistic ideas and approaches..

Therefore, sustainability has been seen with different eyes, demonstrating that it involves many actors who must be aware of the struggle for the preservation of natural resources from the creation of government policies, change in the cultural mentality that generate a change at the social level to preserve and maintain the environment over time (Arribas, 2007). For different authors, it is not possible to define if any of the terms is better than the other, it only depends on the approach that best fits the specific situation either towards development (Sustainable) or towards the conservation of natural resources (Sustainable). Defining also that it is possible to take care of natural resources without neglecting human development no matter what we call it (Zúñiga 2011).

The environmental impact of product development.

Product development is increasingly focused on innovation, from the content of the product itself to its packaging. Traditional product packaging has been made of cardboard, plastics, aluminum and other types of polyethylene, which at the end of their life cycle are discarded, generating a large amount of solid waste that has gradually polluted the

environment (Perdomo G., 2002). Different initiatives have been created for the partial elimination of such packaging in products, being replaced by Biopolymer packaging made from waste from different industries. Biopolymers such as cellulose, chitosan, among others (Parada and Valderrama, 2017).

On the other hand, for other authors (Valero and Morales, 2015) not only the development of products has generated a drastic environmental impact, but also the non-use of waste from existing products. Thus demonstrating that many of the wastes that we generate today can be widely used in the development of new products and their packaging. As Parada and Valderrama also demonstrated in 2017 by using shrimp waste to extract components used in the development of a Biodegradable packaging.

On the other hand, the idea of cleaner production also emerged in the mid-1980s by the Office of Industry and Environment of the United Nations Environment Program (UNEP, 1999), who defined it as "the continuous application of an integrated preventive environmental strategy applied to processes, products, and services to improve eco-efficiency and reduce risks to humans and the environment". It is an approach that seeks to develop greater efficiency in the use of resources or raw materials in order to prevent or reduce environmental impacts by guiding all industrial processes towards sustainable development (Sanes, 2012).

Likewise, product development is focused on sustainable consumption. This consumption refers to "the use of goods and services that respond to basic needs and provide a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, in such a way that the needs of future generations are not put at risk" (UNEP, 1999). Understood as a series of changes in user

behavior through the selection, purchase, use, maintenance, repair and disposal of any product or service. These changes should be adopted as part of strategies to achieve the efficient use of resources (Bekin et al., 2007).

Finally, for different authors (Ludevid, 2000; Romero, 2003; Vince et al, 2008), the analysis of the life cycle of a product determines the environmental impact it generates, since through this life cycle it is possible to identify, quantify and characterize the different potential environmental impacts associated with the development of products, seeking to focus, redesign and innovate each of the stages of these products under the criteria of minimizing or reducing the amount of waste generated. Quoting Aranda (Aranda et al., 2006), "... an objective process to evaluate the environmental loads associated with a product, process or activity, this is carried out by identifying the energy, the material used and the residues of all types of discharges to the environment; determining the impact of this use of energy, materials and discharges to the environment; evaluating and implementing environmental improvement practices".

Use of green technology.

Every production and consumption model has been improving over time, since in its beginnings it was unsustainable, generating large environmental impacts as can be seen today with climate change. In this sense, policies have been created for the use of eco-friendly technologies that allow massive productions that produce low environmental deterioration (Cuevas et al., 2017). According to FAO (FAO, 2015), the increase in demand promotes the growth of production, generating that one third of the agricultural land is degraded. Up to 75% of crop genetic diversity has been lost.

Heng and Zou (2010), state that green technology is that which allows the reduction of environmental pollution, as well as reducing

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the use of raw materials, natural resources and energy. For Barrera (1992), in previous years, large amounts of electrical energy were spent to operate workstations; in the new environmental trade, under the use of green technologies, productions are directed to propagate and encourage the efficient use of energy.

Likewise, according to Muñoz and Rojas (2010), some green technologies that are most commonly used are those related to energy saving, taking into account data centers where the greatest amount of energy consumption takes place. For Molano (2002), not only gases released into the environment are toxic, but also any material that contaminates water and soil is considered toxic. Therefore, new technologies must take into account all these types of things.

Bizzo (2007) states that in the electronics manufacturing industry, the following must be observed: the transformation and finishing of the surface, the components of the survey, the plastic waste and metal fabrication and even the packaging. Also according to the author, the environmental management of the production becomes the environmental management of the product. For this reason, authors such as McKinsey (2010), through their research, show that the fastest and most effective way to reduce emissions is to invest in buildings, transportation and lighting that allow the lowest possible energy consumption.

Finally, the principles of reduction, recycling, reuse and energy recovery in this and any other productive activity are valid, as most metals were extracted from nature. The fact is not limited to recycling and reuse of non-renewable resources, but also for economic reasons that justify the growing interest that companies adopt environmental measures (Minatti, 2010)

Emergence of the green consumer.

For some authors (Mainieri et al., 1997); (Zhang, 2010). Green consumption is the purchase and consumption of products that are environmentally friendly, thus generating the consumer who begins to look beyond the products, seeking those that provide better quality of life and do not cause damage to the environment.

Colombia has a national environmental survey, according to the 2015 National Development Plan, investment in environmentally sustainable production is not an obstacle for the country's economy and growth. In fact, there is an increasing interest in environmental issues and the purchase of green products (Escobar et al., 2015). For example, the results of the second Great National Environmental Survey 2015 show that in 2,580 households interviewed (13.5 million people) in the 12 main cities of the country, 33% of the respondents stated that they had purchased an environmentally friendly product during the last month.

On the other hand, the use of bicycles and ecological tourism are other practices that, according to the study, have been well received by consumers. In conclusion, the study says: "in Colombia today there are social practices that although they are not yet in the majority, they are significant and allow us to visualize real and potential green markets. It could be affirmed that close to four million people in the main twelve large cities of the country are sensitive to this type of products or services (French, S., and Showers 2008). It can be evidenced that the Colombian consumer, like the European consumer, is aware of the environment and that it is necessary to take care of it and buy sustainable products, but at the time of purchase, very few people buy these products".

The study by Barbarossa and Pastore (2015) reveals that within the barriers that hinder

the consumption of environmental or green products, are in the scarce supply, lack of time and desire to make purchases, price, communication and display (they are mixed with traditional products

Research in the UK and Switzerland reveals that price is the biggest obstacle for consumers who want to buy green products," (Weisstein et al., 2014) conclude that "Consumers with a high degree of green awareness are attracted to promotions that emphasize profit, while those with a low degree of green awareness prefer promotions that emphasize loss reduction. In addition, average green consumers shows similar reactions to both formats. Our studies further demonstrate that consumers' perceived value is affected by perceived quality and perceived savings on green purchase intentions." We can conclude that price and sourcing are the most relevant factors for the consumption of a green product.

World legislation on the environment

The principles of international law are born from those fundamental ideas, expressed in general statements that inform or direct the creation of norms. In this context, international environmental legislation is also born from which there are two important references: The Declaration of the United Nations Conference on the Human Environment (or Stockholm Declaration), 1972, and the Rio Declaration on Environment and Development (or Rio Declaration), 1992 (Cano, 1993).

La celebración en Estocolmo, Suecia, de la Conferencia de Naciones Unidas sobre Ambiente Humano y Desarrollo, en junio de 1972, vino a darle una dimensión universal a los problemas de la protección del ambiente. Los años siguientes traducirían ese fervor por el ambiente en la creación de numerosas organizaciones sociales y políticas y hacia 1973 un estudio de la Agencia para la Protección

del Medio Ambiente (EPA) de EE.UU., revelaba que sólo en ese país existían unas 20.000 asociaciones protectoras de la naturaleza, en tanto, en Francia, la participación de los movimientos ecologistas en las elecciones presidenciales de 1974 abrió a estos movimientos las puertas de la política (Buey, 1994).

Rio Declaration on Environment and Development (1992) Instrument adopted at the United Nations Conference on Environment and Development, held in 1992 in Rio de Janeiro. There are three factors that give this declaration considerable authority and influence in the articulation and development of international environmental law: a) Unlike the Stockholm Declaration (1972), it is expressed in binding terms. Most of the precepts begin with "States should...". b) Its twenty-seven principles represent a "package" negotiated by consensus, so that they must be read as a whole. This "compromise" character - between developed and developing countries, and between the needs of economic development and environmental protection - is reflected, for example, in principles 3 and 4, which complement each other in what can be considered the essence of sustainable law. It reflects a consensus between developed and developing countries on the need to agree on international environmental protection standards (Servi, 1995).

The management and protection of natural resources and the environment in Colombia has been characterized by the evolution of environmental legislation and has been partially influenced by international policy on the subject (Sánchez, 2002). The Law enshrines the duty to be, the purposes, rights and procedures to protect life and the environment, but social practices as a whole contradict the regulations, which makes protection difficult. The failure is not exclusive of the Colombian legislation but also of international agreements

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and declarations, constituted in simple normative statements for whose execution there is no political will. The political failure of environmental protection laws and the rights that derive from them is due not only to “weaknesses in enforcement mechanisms or insufficient regulation”, but also to the mistaken “emphasis of environmental law on the symptoms and not on the fundamental causes of pollution” (Henoa 2003).

The introduction of the expression human development in the text of the National Constitution poses a clear pronouncement of the constituent with regard to the parameters that must be taken into account when making governmental decisions, when what is at stake are the conditions for human life, in everything that has to do with its dignity, quality and equality (Sabsay, 2014). Although minimum compliance with the Global Compact principles related to human rights, labor rights, environment and anti-corruption is generally incorporated in the legislation of developed countries, this is not always the case in developing countries. In this sense, it is important for companies operating in an international context to ensure that they respect these principles both in their workplaces and in their supply chain and wider sphere of influence (Ayuso and Mutis, 2010).

Discussions and/or Results

As could be seen throughout this document, to talk about environmental trade we must start talking about sustainability and sustainability, but for many authors one of the two terms should be used, being sustainability the most appropriate when referring to the environment. The authors show us that it is essential for human beings to sustain themselves through all that nature offers us, but also to make it sustainable over time; to try to generate productivity but at the same time not to partially or totally deteriorate that from which it is provided.

This leads us to talk about the environmental impact of the productive development of a society, since every action has a consequence, and the actions of human beings in relation to nature must be mitigable. The production of a good or service requires the generation of an impact, but this impact does not necessarily have to be negative and this is something that human beings have not wanted to understand. Many studies have revealed that throughout the history of mankind, the earth has changed, the environment has changed and human beings have become aware of this and have begun to take measures in response to these changes.

Thanks to this, we have ventured into the use of technologies to reduce all these impacts without affecting productivity, which is why the so-called green technologies have been born, which for many authors are only technologies that reduce the negative impact on the environment, and for others are those technologies that will benefit the environment in some way. Nowadays we can find technologies that mitigate carbon emissions from seeding chimneys or machinery that produces cigarettes with tree seeds inside.

By applying these technologies, what many authors refer to as the green consumer is also born. This is the consumer who is concerned about the environment and tries to cause the least possible impact, such as using less paper, reusable packaging or eliminating plastics in the products he or she buys. But many organizations have been in charge of stalling this type of practices since they raise the costs to the products generating exclusivity in their products and they forget the most important detail, “The environment is not a privilege of a few, if not the necessity of all”, being thus, when raising their costs to these products, many individuals are in the necessity of not acquiring them and to continue as traditionally they go, polluting.

It is for this reason that the governmental entities, hand in hand with people who care about the environment and the economy of a society, have decided to create laws and regulations, worldwide on the environment, which has allowed that many of the mitigations that are made are no longer by emotions or feelings themselves if not an ORDER. On the other hand, it has allowed developing countries to be helped by developed countries to follow these eco-friendly paths.

Conclusion.

From this article it can be concluded that the environment is an inescapable social responsibility that if neglected can lead to our extinction. In addition, it is necessary the action of all the possible legal stays so that there is fulfillment of these norms as a society.

The environment today cannot be tradable for money, since no one should be profiting from its care; but it is a responsibility of each one of us to take care of it, to generate actions of change that allow all individuals to coexist in favor of the environment.

We can also conclude that Sustainability is the appropriate term to refer to all these actions of change, since constant and lasting changes will depend on it.

The environmental impact is inevitable at the time of generating any production, but it is in us to generate actions that procure positive impacts.

For such impacts, the use of green technologies is our best tool, since this will depend on a constant production without fear of generating factors of deterioration to the environment.

And all this is possible thanks to the fact that many of us have joined the change, allowing its generation thanks to our preferences

towards greener consumption, sponsored every day with greater impact by the territorial entities that have by requirements the cleanest productions.

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