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RESEARCH ARTICLE

ANALYSIS ON SUSTAINABLE CONSUMPTION IN COLOMBIA AS STRATEGY FOR STRENGTHENING ITS RESEARCH AT THE NATIONAL AND LOCAL LEVEL

*,1María Eugenia Buitrago-González, 2SandraSantacoloma-Londoño and 3Luis Carlos Villegas-Méndez

¹Graduate in Biology and Environmental Education, MA in Education with emphasis in Natural Science
 Teaching, Full-time professor at UCEVA in the program of Environmental Engineering, Director of a Research Group in Environmental Management and Natural Resources program called Tolúes (UCEVA)
 ²Chemical Engineer, Specialist in Environmental and Sanitary Engineering, MA in Environmental Engineer.
 Full-time professor at Unidad Central del Valle del Cauca – UCEVA in the program of Environmental Engineering, Director of a Research Incubator program called Tolúes (UCEVA)
 ³Agricultural Engineer, MA in Biological Studies and Naturist, Environmental Engineering professor Unidad Central del Valle del Cauca, UCEVA

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ABSTRACT

Sustainable consumption (SC) is considered as an important aspect for the development and environmental care for Colombia and other countries around the world. However, some limitations in terms of research and knowledge on SC (Ministerio de Ambiente, 2010) are presented at a national level, as well as at a regional and local level as there is a little information about the issue (UCEVA-CVC, 2013), and it is required to delve into the knowledge and state of art of SC (Cruz G. Javier, 2014). It is evidenced the need for an analysis on SC in Colombia which addresses conceptual aspects and investigative trends in the issue and contributing to strengthen its research. This study explores the way to contribute to the research strengthening on SC at a national and local level in order to advance in the pursuit of innovation and the dissemination of sustainable consumption patterns (Ministerio de Ambiente, 2010). At the same, time it seeks that the Environmental Engineering program of UCEVA guide its research processes on SC in a coherent manner with what is conceptually established and use methodological tools consistent with the issue. This led to theoretical analysis in which main concepts are established in SC and procedures to deal with its study and interdisciplinary. Also, important aspects in order to advance in the study of the matter were set up, among them, education for SC and research trends in SC at a national level that cover different sectors such as business, education and social ones.

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INTRODUCTION

In 1972, the Club of Rome made the inform "the limits of growth" public, in which established if consumption trends were kept, the world would collapse before 2100 due to depletion of renewable resources. This inform alarmed about the indisputable fact that the consumption must have limits if it is not wanted to run out of natural resources (CORTINA Adela, 2002). Twenty years later, according to the Program 21, in the

*Corresponding author: María Eugenia Buitrago-González

Graduate in Biology and Environmental Education, MA in Education with emphasis in Natural Science Teaching, Full-time professor at UCEVA in the program of Environmental Engineering, Director of a Research Group in Environmental Management and Natural Resources program called Tolúes (UCEVA)

action plan for the sustainable development approved by the Earth Summit, held in Rio de Janeiro in 1992, in its fourth chapter establishes that "the main causes of the continued global unsustainable environment deterioration are consumption and production modalities, particularly in industrialized countries". While in the Global Summit for Sustainable Development in Johannesburg was established the commitment of developing the 10-Year Framework of Programs (10YFP) in order to accelerate the change towards Sustainable Consumption and Production (SCP), in this context, the Marrakech Process is started (PNUMA, 2009). This process was defined as global action campaign based on the interaction of diverse parts interested in promoting sustainable consumption and production (SCP) and work in the

conformation of a "Global Action Framework about SCP", known as 10-Year Framework of Programs in response to the call of the Johannesburg Plan of Implementation (JPI) (PNUMA, 2002). There is a direct relationship between the consumption and environmental sustainability. uncontrolled growth of consumption affects directly the ecosystems capacity for providing environmental goods and services (Ministerio de Ambiente, 2010). With the increased water and energy consumption as well as the high waste generation, among others, has resulted a continued deterioration of the environment and generates a severe risk for the planet and the human been. The 15% of the world population who lives in high-income countries is responsible of the 56% of the total consumption in the world, while the 40% poorer ones, in the low-income countries, is only responsible of 11% of the consumption. Despite of most people consume more nowadays -due to the expansion of the world economy in the decade of 1990 and the improvement in standards of living in many countries- the average African home consumption is 20% lower than the same one 25 years ago (ONU, 2002). In Colombia, in 2010 the Ministry of Environment, Housing and Territorial Development (MEHTD) presented the National Policy on Sustainable Production and Consumption (PSPC). This policy was raised in order to seek changes in little sustainable patterns of the production and consumption ways in different sectors of the country, and thus reduce environmental pollution, the impact on natural resources and at the same time, promoting sustainable ways of biodiversity use. Sustainable consumption (SC) is considered as a major axis in the development policies and environmental policies for Colombia and other countries in the world (Ministerio de Ambiente, 2010).

The most common definition of consumption is based on the economical concept that all products are manufactured in order to cover all needs from consumers and where domestic consumption, intermediaries, storage and exportation are considered elements of the final demand (Spangenberg 2001, quoted by MASERA Diego, 2001). Sustainable consumption is understood as the use of goods and services that respond to the basic needs and improve quality of life. This, reducing the use of natural resources, toxic materials, as well as the generation of waste and pollutants during the whole life cycle without undermining the possibility of future generations of satisfying their own needs (Oslo Symposium, 1994, quoted by Instituto Argentino para el desarrollo sustentable –IADS (2014). In that context, the Policy on Sustainable Production and Consumption aims to contribute preserving the natural capital of Colombia, which provides the current development of the country and constitutes the heritage that future generations will inherit. This heritage represents the services that ecosystems provide:

- Supply of raw materials and inputs,
- Regulating services and balance,
- Support services and,
- Cultural services.

These services turnout decisive for the development of any human activity, being the increase or decrease of its supply what affects in a direct way the efficiency and even the existence or emergence of the activities, business ones among them (Ministerio de Ambiente, 2010). Then, it is from 2010 when the issue of SC has been present in different national sceneries not only in the ones related to environment, but also different economical and educative sectors, this university

among them. The Unidad Central del Valle del Cauca (UCEVA), by means of the Faculty of Engineering in 2013, under an agreement with Corporación Autónoma Regional del Valle del Cauca (CVC) which is a regional corporation aiming to implement environmental policies, addresses different environmental matters. Among them, sustainable consumption habits for being implemented with social actors of Valle del Cauca. In the framework of this agreement, a primer was elaborated "Educative-environmental strategy on sustainable consumption habits", being present in the development of this process that is required to deepen in the knowledge and the sustainable consumption state of art (UCEVA, 2013). In like manner, in the project "Design of environmental educative strategies on sustainable consumption habits for students at Unidad Central del Valle del Cauca - UCEVA", carried out by the Environmental Engineering program in 2014, it is concluded that there is a little information about the issue at a regional level (CRUZ G. Javier, 2014). The previous initiatives put in evidence the need to create, from the Environmental Engineering program, a SC analysis allowing to establish a state of art on the issue, as it has not been carried out a study which deepens on aspects on conceptual aspects and investigative trends on the issue yet. Promoting a strengthening in its research at a national and local level, not knowing these elements are necessary for being approached in a scientific and academic way.

Added to the above, this country has some important limitations in terms of research and knowledge generation on sustainable production and consumption (Ministerio de Ambiente, 2010). Production and consumption patterns continue being unsustainable and hardly press on natural environment, deteriorating the environmental quality and influencing negatively in the productive sector of the country, generating imbalances to be looked after and corrected. (Ministerio de Ambiente, 2010). Carrying out the project, the analysis on sustainable consumption in Colombia, aims to contribute creating a state of art on the issue, which is an important aspect for the sustainable development. Besides, it will allow a better understanding on the concept that is considered as complex and it is sometimes difficult to understand (UNESCO-PNUMA, s.f), and to know the context in which SC is developed in this country. Furthermore, this project is articulated with the fourth (4) strategic axis of the National Policy on Sustainable Production and Consumption (PSPC), which aims to strengthen and extend the research on sustainable practices, technologies and business, as basic elements in order to advance in innovation and diffusion of sustainable production and consumption patterns (Ministerio de Ambiente, 2010). Moreover, the development of this project will allow an advance in a clear and wise way in the work that has been performing in the Environmental Engineering program at UCEVA in this matter, as it will let establish epistemological, conceptual and procedural aspects owning SC. This will allow that the program could focus its research activities on SC in a more coherent manner with what it is conceptually established, and more pertinent methodological tools on the issue SC will be used and it will let guide the development of research processes currently performing.

MATERIALS AND METHODS

According to the problem raised, it was assumed as hypothesis that as of an analysis on sustainable consumption in Colombia is possible to contribute to the strengthening of its research at a national and local level. Basing on the hypothesis raised, it was performed a methodology as follows:

Theoretical analysis on sustainable consumption at a global and national level, this activity was performed with the purpose of collecting conceptual elements on SC from its start, consolidation and evolution and that have influenced in the development of development policies on this issue in different countries and particularly in Colombia. Moreover, it aimed to provide comprehension on SC which is considered complex and little difficult to understand. In this activity, common perspectives on SC were identified that simultaneously permitted to establish an orientation or meaning on SC operates at a global and national level.

Identification of research trends on SC in the country. It was tried to evidence the approach that sustainable consumption has in Colombia, as well as establishing the needs and potentialities of the research in this matter.

Definition of the main conceptual and methodological aspects for strengthening research on SC. Based upon the theoretical analysis of the concept of SC and the identification of research trends on SC in the country, obtained in the development of the first two objectives, main conceptual and methodological aspects must take into account in the research on SC. This activity is performed aiming to establish relevant aspects that initiatives, processes and research projects on SC must have in order to be developed in this country and particularly in Environment Engineering program at UCEVA.

RESULTS AND DISCUSSION OF RESEARCH OUTCOMES

Theoretical analysis on sustainable consumption at a global and national level

Analysis on sustainable consumption from international conferences on environment. International conferences on environment, such as the Stockholm, Tbilisi, Rio de Janeiro, Johannesburg and Rio+20; addressed the issue on SC. These conferences have established the trends on this matter and in the environmental field. It started in Stockholm (UNESCO, 1972), in the Earth Summit by recommending a wide study on energetic consumption trends in order to contribute laying the foundations of the most effective way possible to take advantage of the energetic resources in the world. Afterwards in Tbilisi (UNESCO, 1977), it was considered the great possibility that consumers have to indirectly influence by means of their behavior on the environment consumption repercussion and on the use of natural resources in the world. Besides, it was considered who produce goods and advertise them are responsible for a direct and indirect repercussion on the environment. In this conference, it was recognized the great influenced of the social media on the consumer behavior. It continued with the conference in Rio de Janeiro (UNESCO, 1992), which established in the principle number 8 that in order to achieve a sustainable development and a better life quality for everyone, every State would have to reduce and eliminate production modalities and unsustainable consumption. At an international level, the related consumption modalities are, among other things, with the energy and emissions use, water, food, forest products and waste. And in the Johannesburg Summit (ONU, 2012), it was addressed in a wider manner the issue on SC, with regard to the previous conferences. It was

recognized that among major problems to be solved in the world, the modification of unsustainable production and consumption practiceis indicated. There is an agreement to consider that unsustainable production and consumption modalities are creating an ecological disaster, which threatens both general life and human life in particular, where by SC is considered as a primary objective for the social and economic development and fundamental for a sustainable development at the same time. Lastly, in the UN Conference on Sustainable development Rio +20 (ONU, 2012), in its final document "The Future We Want - Our Common Vision", it was recognized that among the general objectives and indispensable requirements for sustainable development, it is found the modification of unsustainable modalities and the promotion of production and consumption modalities. In addition, it was adapted the 10-year framework of programs on sustainable consumption and production modalities.

Analysis on sustainable consumption from authors

Authors such as Cortina, Seyfang, and Latorre, have addressed the study of sustainable consumption or responsible consumption. The analysis of their perspectives on this issue, shows how on the subject of sustainable consumption, it is presented in common an ecological and environmental vision in which consumption consumes "without endangering the maintenance of nature" (CORTINA Adela, 2002), that among its characteristics present "The reduction of ecological impact" (SEYFANG, Gill 2006), and in which "interest for the environment prevails" (LATORRE Emilio, 2002). The authors also argue that sustainable consumption is a collective issue, where one must assume along with others the norms of a lifestyle that promote awareness in decisions about consumption. Another common element that the authors present is the distinction between needs and desires, this idea is also supported by Bauman (2007), stating that the sustainable consumption is the one oriented to satisfy the necessities, fundamentally of biological origin, that must be taken care of for the survival. While desires, which are of psychological origin, lead to indefinite consumption, where there is a movement from consumption to "consumerism", oriented to "wanting, wishing and yearning for", that is, an indefinite consumption, a consumption not responsible.

Analysis on sustainable consumption from Environmental Institutions

The United Nations Environment Program (UNEP), the Ministry of Environment and Sustainable Development (MEHTD), the Valle del Cauca Regional Autonomous Corporation (CVC), are institutions that work on sustainable consumption at different levels (International, National and Regional) and contribute to the diffusion, development and adoption of this topic in different sectors such as productive, educational, services, among others. UNEP, together with UNESCO believe that the role of the consumer is essential to drive faster and more successful actions that contribute to sustainability. These agencies strive to make people aware of more sustainable lifestyles, the challenge is to consume differently and efficiently. Attention must be paid to what it is produced and how it is produced and consumed, and to understand that there is a direct relationship between Sustainable Consumption and quality of life.

Table 1. Research studies on Sustainable Consumption in Colombia

Title	Author	Year	Description
Formulation and implementation of strategies of environmental education for sustainable consumption with school students at the Libre University.	Laura Victoria Rojas Zúñiga	2015	Carrying out of an analysis of student consumption behaviors and adaptation of sustainable consumption themes proposed by UNEP, UNESCO and MEHTD. Subsequently educational- environmental strategies were implemented in the National Environmental Education Policy.
The influence of price and visual communication strategies based on cultural symbology on the preference of ecological brands and sustainable consumption.	Haidy Johana Moreno C.	2014	Establishing the influence of price and visual communication strategies on the preference of ecological brands in toiletries, in order to promote sustainable consumption in households.
Design of environmental education strategies in habits of sustainable consumption for students at the Unidad Central del Valle del Cauca	Javier Cruz Guevara	2014	Environmental education strategies in habits of sustainable consumption for students of the Unidad Central del Valle del Cauca and identification of negative environmental impacts generated by the use of unsustainable consumption habits.
Sustainable consumption in fishing products: strategies for the implementation of sustainable consumption policy in Colombia.	Yolanda Díaz Lozano y María Camila Bautista Becerra.	2014	Presentation of the relevance of Sustainable Consumption as one of the main global guidelines for the application of Sustainable Development in the fishing sector.
The concept of socially responsible consumption and its measurement. A review of the literature.	Sebastián Dueñas Ocampo, Jesús Perdomo Ortiz y Lida Esperanza Villa Castaño.	2014	Review of literature on the measurement of socially responsible consumption, within which is an environmental component that is related to sustainable consumption, and its evolution over time, taking as reference the period between 1960 and 2012.
Conceptual and pedagogical elements for the promotion of sustainable consumption in higher education.	Carlos Eduardo Casas Marmolejo.	2012	Presentation of conceptual and pedagogical elements to promote sustainable consumption in higher education, through the proposal of modules for education in sustainable consumption, in order to achieve changes in student behavior.
Strengthening of corporate environmental performance, through the cleaner production and sustainable consumption program of Valle de Aburrá Metropolitan Area.	Raúl Alexander Cardona Pareja, Luz Matilde Flórez López, Sandra Milena Silvia Arroyave e Isabel Cristina Arango Pérez.	2010	Follow-up to a program, through the development of a methodology for verification and strengthening in cleaner production and sustainable consumption, applied to the business sector, as an approach to the national policy of production and sustainable consumption.
Responsible consumption in Colombia.	Catalina Salas Cruz.	2009	Determination of the position of responsible consumption from the perspective of the company and the consumer in a theoretical and practical way in the Colombian population.
Estimation of the willingness to pay for ecological panela from the sustainable consumption approach.	Zulma Roa, Gonzalo Rodríguez, Ramón Rosales Álvarez y Denis Requier-Desjardins.	2004	Estimation of the willingness to pay for ecological panela, questions about consumer behavior, tastes, preferences, environmental, social commitment and socioeconomic characteristics.

Source: Own elaboration based on research studies consulted on sustainable consumption in the country.

Table 2. Concepts and subjects of study on sustainable consumption based on the triangulation of the contributions of Conferences on environment, authors, Institutions and research studies

Concepts	Consumption, Environment, Energy Resources, Consumer, Sustainable Production, Needs, Desires, Ecological Impac Sustainability, Quality of Life, Cleaner Production, Sustainable, Environmental Education, Cultural Change, Sustainable Consumption, Sustainable Development, Sustainable Consumption, Environmental Impact, Responsible consumption Consumer behavior, Waste.
Subjects of study	Effective use of resources. Sustainable use of natural resources. Reduction, elimination and modification of unsustainable production and consumption patterns. Promotion of sustainable production and consumption patterns. Sustainable lifestyles. Eat differently and efficiently. Sustainable Consumption and quality of life. Environmental Cost, human and social costs of consumption. Unsustainable patterns of production and consumption patterns. Sensitization against consumption. Sustainable production and consumption system. Educational, business and social approaches to sustainable consumption. Cleaner production and sustainable business consumption. Socially responsible consumption. Communication strategies to promote sustainable consumption in households. Consumption and environmental commitment. Sustainable Consumption in higher education. Sustainable Consumption and Sustainable Development. Environmental education strategies in sustainable consumption habits. Negative environmental impacts and unsustainable consumption habits. Establishment of forms of production and sustainable consumption. Behavior of consumption and environmental and social commitment. Comprehensive waste management. Influence of social media on consumer behavior. How it is produced and consumed. Ethics of consumption.

Source: Author.

Sustainable Consumption is not only considered an environmental issue, it is something that promotes a decent standard of living for all human beings. Sustainable Consumption then does not refer only to the environmental cost that causes the way it is produced and consumed; human and social costs are also taken into account. "Sustainable consumption must defend social justice and respect basic human, social and economic rights, which must be for all, without excluding anyone".

In 2010 the MEHTD of Colombia presented the National Policy on Sustainable Production and Consumption (PSPC). This policy was designed to look for changes in the unsustainable patterns of the production and consumption forms that occur in different sectors of the country, in order to reduce environmental pollution, impact on natural resources and at the same time stimulate sustainable forms of use of biodiversity. Sustainable consumption (SC) is considered an important axis of development policies and environmental policies for Colombia and for other countries in the world. In turn, the Sustainable Production and Consumption Policy responds to the commitments made voluntarily by the country under the Marrakesh Process, which is promoted by the United Nations (UN) to comply with Chapter III of the Plan of Implementation of the Johannesburg World Summit (2002). This same process reaffirms and seeks to move beyond Agenda 21, which began an international process aimed at stimulating cleaner production, starting with the Earth Summit, organized by the UN itself in 1992 (ONU, 1992).

Specifically on Sustainable Consumption, the MEHTD realized a successful and recognized program that is "I am Ecolombian". This program seeks to raise awareness about consumption. Another program that manages is the one of the "University Union in Production and Sustainable Consumption" that seeks to generate permanent actions that incorporate the subject in higher education. This program is working within the 10-Year Framework of Programs on Sustainable Consumption and Production (10YFP), and in conjunction with UNEP - on the Sustainable Development Objectives, specifically Objective 12 of the new sustainable development agenda, which calls for Ensure more sustainable consumption and production patterns. At the regional level, the CVC has addressed the issue of Sustainable Consumption within the framework of the Sustainable Production and Consumption Policy (PSPC) of MEHTD, has worked from Environmental Education and has designed different documents for the dissemination of information and at the same time for Training of actors in the Valle del Cauca. Among the actors, children were prioritized, then the strategy was focused on sustainable consumption habits towards them, for which it is been working on training teachers so that they can bring this information to children. The documents designed include Primers, Posters, Video and CD of children's songs. These documents are aimed at a school audience of different educational levels. CS has also been addressed through informal education (including the media), as well as workshops, seminars and educational campaigns on the issue.

Trends in SC research in the country

On the researches that in sustainable consumption have been published in Colombia, initially can be said that they are scarce or limited. However, it can also be noted that research on sustainable consumption has been developing in recent years in the country, with a greater proportion as of 2010, with the presentation of the National Policy on Production and Sustainable Consumption. The Ministry of Environment, Housing and Territorial Development (MEHTD) has considered the important role played by the different actors in the dissemination and implementation of this policy. It argues that universities, educational centers and research institutes play a central role in contributing to cultural change, capacity building and research in the field of sustainable production and consumption. Non-governmental organizations and other representatives of civil society and the media are essential in their capacity as allies or lobbies, or even as protagonists in the changes towards a sustainable production and consumption system. Reported research presents various approaches to sustainable consumption, such as educational, business and social. The table 1 lists some available studies on the subject.

Main conceptual and methodological aspects to strengthen SC research

The conferences of Stockholm, Belgrade, Tbilisi, Rio de Janeiro, Johannesburg and Rio + 20, the different authors addressed in this research, the institutions at the global, national and regional level, and the SC researches have been carried out in the country, conceptual contributions and trends in the SC study. To handle the information, the triangulation process was carried out, specifically the data obtained from the different sources of information addressed in this research (Conference, authors, Institutions, Research). The table 2 presents the data obtained from the triangulation: This analysis reveals relevant concepts and trends in the study of SC, which constitute a fundamental contribution to guide and strengthen their research at national, regional and local level.

Conclusion

An important aspect to contribute to the strengthening on SC research was its theoretical analysis, which allowed the establishment of conceptual and procedural elements to address the SC study. Also understanding that SC should be approached in an interdisciplinary way, because in it, different environmental, economic, psychological, administrative, sociological, and other knowledge converge.

Based on SC contributions made by international entities, it is established that among the most important aspects to consider in order to move towards SC are the consumption patterns, the influence of the mass media on the consumer and education for the SC. The establishment of research trends in SC at the national level, allowed to know the study needs and possible fields of application of the SC theme, such as the business, educational and social sector.

At the national level, several contributions are made to the development of the SC from different actors, but greater efforts are required to consolidate the National Policy on SPC, especially from the academic sector, taking into account that education can contribute to consumers being conscious and responsible for the social and environmental consequences of their actions against consumption.

REFERENCES

Bauman Zygmunt, 2007. Vida de consumo. Fondo de cultura económica. México.

- Cardona P. Raúl, *et al.* 2009. Fortalecimiento del Desempeño ambiental empresarial, a través del programa de producción más limpia y consumo sostenible del Área Metropolitana del Valle de Aburrá. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1909045520100002 00002&lang=ptAccessed 23 de Septiembre de 2015
- Casas M. Carlos E. 2012. Elementos conceptuales y pedagógicos para la promoción del consumo sostenible en la educación superior.https://red.uao.edu.co/bitstream/10614/1079/1/TAA00229.pdfAccessed 28 de septiembre de 2015
- Cortina Adela, 2002. Por una ética del consumo. La ciudadanía del consumidor en un mundo global. Santillana Ediciones Generales. Madrid.
- Cruz G. Javier, 2014. Diseño de estrategias educativo ambientales en hábitos de consumo sostenible para estudiantes de la Unidad Central del Valle del Cauca-UCEVA, municipio de Tuluá, Valle del Cauca.
- Díaz, L. Yolanda, y BAUTISTA B. María Camila, 2014. Consumo sostenible en productos pesqueros: estrategias para la aplicación de la política de consumo sostenible en Colombia. http://www.uelbosque.edu.co/sites/default/files/ publicaciones/revistas/revista_tecnologia/volumen13_nume roespecial/07-Articulo5-Rev_Tec_UB_Vol-13_Num-Especial.pdfAccessed 30 de septiembre de 2015
- Dueñas O. Sebastián et al, 2014. El concepto de consumo socialmente responsable y su medición. Una revisión de la literatura. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S012359232014000300010&lang=ptAcces sed 17 de noviembre de 2015
- Instituto Argentino para el desarrollo sustentable –IADS, 2014. Programa Producción y consumo más sustentables. http://www.iadsargentina.org/consumo.phpAccessed 01 de diciembre, 2014
- Latorre Emilio, 2002. El cuidado ambiental desde el hogar. Artes gráficas del Valle Ltda. Colombia.
- Masera Diego, 2001. Hacia un consumo sostenible en Latinoamérica y el Caribe. PNUMA, Consumers International, Carl Duisberg Gesellsshaft e. V (CDG). Brasil.
- Ministerio de Ambiente y Desarrollo Sostenible, 2010. Política Nacional de Producción y Consumo sostenible. Bogotá. Presidencia de la República.
- Moreno C. Haidy, 2014. La influencia del precio y las estrategias de comunicación visual basadas en simbología cultural sobre la preferencia de marcas ecológicas y consumo sostenible. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid =S0120-81602014000200009&lang=ptAccessed 18 de noviembre de 2015
- ONU, 1992. Agenda 21 http://www.un.org/spanish/esa/ sustdev/agenda21/agenda21spchapter4.htmAccessed 01 de diciembre, 2015
- ONU, 2002. Cumbre de Johannesburgo. http://www.un.org/spanish/conferences/wssd/modelos_ni.htm Accessed02 de diciembre, 2015

- ONU, 2012. Río+20. Conferencia de las Naciones Unidas sobre el Desarrollo Sostenible https://rio20.un.org/sites/rio20.un.org/files/a-conf.216-l-1_spanish.pdf.pdfAccessed 18 de agosto, 2015
- PNUMA, 2002. Proceso de Marrakech. Hacia un Marco Global de Acción sobre Consumo y Producción Sostenibles (CPS). http://www.pnuma.org/eficienciarecursos/proceso_marrake ch.phpAccessed 01 de diciembre, 2015
- PNUMA, 2009. Producción y consumo sustentable (CPS). Estado de avances en América Latina y el Caribe. http://www.unep.fr/scp/marrakech/publications/pdf/Doc%2 0LAC%20SCP%20Draft%20Sept%2009.pdfAccessed 01 de diciembre, 2015
- Roa Zulma et al. 2004. Estimación de la disposición a pagar por panela ecológica desde el enfoque del consumo sostenible. http://dialnet.unirioja.es/servlet/articulo? codigo=4786969Accessed 25 de septiembre de 2015
- Rojas Z. Laura V. 2015. Formulación e implementación de estrategias de educación ambiental para el consumo sostenible con los estudiantes del colegio de la Universidad Librehttp://repository.unilibre.edu.co/bitstream/handle/1090 1/7950/FORMULACI%D3N%20E%20IMPLEMENTACI %D3N%20DE%20ESTRATEGIAS%20DE%20EDUCACI %D3N%20AMBIENTAL%20PARA%20EL%20CONSU MO%20SOSTENIBLE%20CON.pdf;jsessionid=FDA82F4 9C4BB437FB1A9E2C5D01CCE39?sequence=1Accessed 30 de enero de 2017
- Salas C. Catalina, 2009. El consumo responsable en Colombia. http://www.javeriana.edu.co/biblos/tesis/ economia/tesis206.pdfAccessed30 de septiembre de 2015
- Seyfang, Gill, 2006. Sustainable consumption, the new economics and community currencies: Developing new institutions for environmental governance. Journal Regional Studies. Volume 40,Iss. 7.http://rsa.tandfonline.com/doi/full/10.1080/00343400600959173?scroll=top&needAccess =true Accessed 17 de noviembre, 2016
- UCEVA- CVC, 2013. Estrategia educativo ambiental en Hábitos de consumo sostenible. Escuela Latinoamericana de liderazgo SAS y Contenidos Educativos Online SAS. Colombia.
- UNESCO, 1972. Declaración de la conferencia de las naciones unidas sobre el medio humano. http://www.ambiente.gov.ar/infotecaea/descargas/estocolmo01.pdfAccessed 13 de agosto, 2016
- UNESCO, 1977. Conferencia Intergubernamental de educación ambiental. Las grandes orientaciones de la conferencia de Tbilisi. Paris. UNESCO.
- UNESCO, 1992. Declaración de Río sobre medio ambiente y desarrollo. http://www.unesco.org/education/nfsunesco/pdf/RIO S.PDFAccessed19 de agosto, 2016
- UNESCO-PNUMA (s.f.). Jóvenes por el Cambio. La Guía. Manual de Educación para un consumo sostenible. http://unesdoc.unesco.org/images/0012/001240/124085s.pd fAccessed 28 de noviembre, 2015
