

Received: 01/02/2017

Accepted: 08/27/2018

ECO-SOCIOECONOMIES: ANALYSIS OF EXPERIENCES IN THE WEST OF THE UNITED STATES OF AMERICA

ECOSSOCIOECONOMIAS: ANÁLISE DE EXPERIÊNCIAS AO OESTE DOS ESTADOS UNIDOS DA AMÉRICA

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Abstract

The objective of this article is to perform a comparative analysis of ten experiences with eco-socioeconomics dimensions in the western territory of the United States of America. The methodology is structured around the bibliographical and documentary review, exploratory study, and field research. The experiences have hybrid characteristics in relation to the eco-socioeconomics modalities and are classified as corporate socio-environmental responsibility, cooperativism, municipal public management, conservation unit management, socio-political movement, citta slow and ecovillages. The results suggest that in the North American experiences observed there is a correlation between instrumental and substantive action, but not reduced to the sphere of economics when it presents a merely mercantile conception, disconnected from the other dimensions of the sphere of life, good living, and sustainability. It concludes that the instrumentality of human action persists and becomes necessary at the time when the intergenerational scale is understood. Although the experiences are comparative, they consist of unique territories, which suggest that each territory has a genesis that distinguishes it.

Keywords: Climate change. Development. Institutional Arrangements. Socioproductive Arrangements.

Resumo

O objetivo deste artigo é realizar uma análise comparativa de dez experiências com dimensões ecossocioeconômicas no território Oeste dos Estados Unidos da América. A metodologia se estrutura

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na revisão bibliográfica e documental, estudo exploratório e pesquisa de campo. As experiências possuem características híbridas em relação às modalidades ecossocioeconômicas, e classificam-se como de responsabilidade socioambiental corporativa, cooperativismo, gestão pública municipal, gestão de unidades de conservação, movimento sócio político, *città slow* e *ecovillages*. Os resultados sugerem que nas experiências norte americanas observadas existem uma correlação entre ação instrumental e substantiva, no entanto não reduzida à esfera da economia, quando esta apresenta concepção meramente mercantil, desconectada das outras dimensões da esfera da vida, bem viver e sustentabilidade. Conclui-se que a instrumentalidade da ação humana ainda persiste e se torna necessária na ocasião que se compreende a escala intergeracional. Ainda que as experiências sejam comparativas, constituem-se em territórios próprios, o que sugere que cada um possui gênese que lhe distingue.

Palavras-chave: Mudanças climáticas. Desenvolvimento. Arranjos Institucionais. Arranjos Socioprodutivos.

Introduction

In the context of the great challenges of contemporary society, the process of universal awareness of the importance of the environment for quality of life and development has become central. Among the main challenges is climate change, which manifested in various time scales and parameters such as precipitation and temperature, are due to natural causes. However, after the industrial revolution, there was a significant increase in the use of carbon (mineral coal, oil, and natural gas), which, when burned, releases carbon dioxide (CO²) into the atmosphere, increasing its heat-retaining property, (IPCC, 2013; PBMC, 2014; MARENGO & MENDONÇA, 2007), contributing to global warming and, consequently, to climate change.

Thus, one can point out the industrial revolution as generating large-scale changes for the human condition and the planet, because, in the same way that it provided a huge rupture of production patterns, the economy, social relations and the notion of time, a structure was created for capitalist growth that generates environmental problems of all order: economic, environmental, political, food, energy and the threat of climate change. In addition to this aspect, it is noteworthy that there are visible contradictions between the style of development predominantly adopted by the countries and the support of this by nature. This contradiction is further aggravated if the hegemonic development strategy is maintained by the so-called developing countries in relation to the so-called developed countries. The planet would not have the carrying capacity to support such a style of development in a timeline not yet clear, and would tend to collapse in its dynamics, as in the capacity of photosynthesis (production of oxygen from the absorption of CO²). Resilience, resource regeneration capacity and waste absorption would also be in check.

Therefore, given the evidence of unsustainability of the developmental model, theoretical alternatives, such as the proposals for eco-development and sustainable development, gain strength and derivations in academic discussions. Among these derivations, eco-socioeconomies stand out, with a methodological-empirical approach, which “makes it possible to think of the territory from the network of social agents that work in it and that the results/impacts of governance/management of these overflow beyond the territorial borders (...)” (ALCÂNTARA & GRIMM, 2017, p. 126).

Eco-socioeconomies consist of a pragmatic conception, in which experiments emerge with different genesis, but which present alternatives of ingenious solutions, concerning technologies appropriate to the location and/or institutional and productive arrangements, associated with contemporary territorial experiences can be characterized both as mitigating and adaptive to climate change.

In this context, the objective of this article is to perform a comparative analysis of experiences identified as eco-socioeconomies in progress in ecosystems in the Western territory of the United States of America, to evaluate their ability to contribute so that they can exceed the limits established by current economic rationality, in search of sustainability of development.

The methodology with a qualitative and descriptive focus is structured in the bibliographic and documentary review. Field research was also carried out to analyze ten experiences characterized as eco-socioeconomic modalities, and classified as corporate socio-environmental responsibility, cooperativism, municipal public management, management of conservation units,

socio-political movement, *città slow* and *ecovillages*. The research was carried out in the following organizations: *Yellowstone Greenest*; *Starbucks Coffee*; *Coop*; *Ecovillage Cedar Moon e TCL Farm*; *Plum Organics*, *Ecovillage Homes*, *Citizen's Climate Lobby*, *Ecoroofs*, *Sentinel Coffe*, *Alaskan Roast e Klondike Gold Rush National Historic Park*.

Method and materials

Constituted as a qualitative and descriptive research, interdisciplinarity is adopted as a theoretical and methodological perspective because it is understood as the collaboration of two or more disciplines around a common problem. This proposal arises within a set of efforts, whose problem, for its understanding, requires articulation between several disciplines in search of knowledge that includes, beyond the unidisciplinary domain, the collaboration of several knowledge areas.

Regarding data collection, this included field research initiated in 2015, from the visiting professor's internship, of the first author, with *Washington State University* and *DePaul University*. In 2016 and 2017, the experiences were researched, and the data collected, through e-mail, telephone contact and search on the experiences website. In 2018 and 2019, data was updated and organizations revisited on their websites. Although the experiences of California were not visited, they were included because it considered the American state progressive in terms of good eco-socioeconomic practices. In the spatial delimitation of the research, it takes place in the American states of *Washington, California, Idaho, Oregon, Montana, Wyoming and Alaska* (Figure 1).

Figure 1: Political map of the United States of America, with emphasis on the states where the researched experiences are inserted.



Source: Adapted by the authors, 2019.

The methodological steps were structured in two stages: (a) Bibliographic and documentary research developed fundamentally on climate change, development, socioproductive and institutional arrangements and eco-socioeconomics; (b) Exploratory stage to identify experiences of eco-socioeconomics, based on indications by North American and Brazilian experts working with the eco-socioeconomics theme or who approach it: development, sustainability, climate change, good living, ecological economy and socio-environmental indicators. After the selection, informants/managers of the respective experiences were contacted to answer questions. For this

stage, there was the collaboration of graduate, master's and doctoral students and postdoctoral researchers within the scope of the Center for Studies in Eco-socioeconomy (UFPR / UP / FURB / ISAE / PUCPR), who assisted in the collection data and selected the information for further crossing and analysis. The experiences were described and analyzed using a qualitative data collection form (Table 1).

Table 1: Summary of the information requested in the qualitative form

General Aspects	The Genesis of the Proposal	Actions developed	Project milestones (strategies)
Name and start date of the project, location, funding agency, coordinating agency, universities that provide advice, scientific productions from experience.	The problem that generated the experience, objective, method employed, description of the place (natural, cultural, social, and economic).	Actions performed, results obtained, impacts that occurred after the implementation of the project.	Project strengths, weaknesses, threats and opportunities, established institutional and productive arrangements, proposals and future intentions, local and or governmental entities involved with the proposal and their contributions.

Source: The authors (2017, 2018).

The collection was also based on secondary data obtained electronically, publicly accessible, institutional platforms of their own experiences, documents, research reports, articles, dissertations, theses, among other documents. The experiences and their eco-socioeconomies modalities were selected because they present in their main problem, elements that bring them together, intertwine and complement each other and can be pointed out as alternatives of ingenious solutions, concerning technologies appropriate to the place and/or institutional and productive arrangements that contribute to the adaptation and mitigation of climate change.

For content analysis, the raw results are treated in a way that they are meaningful and valid. In this sense, the categories: location; experience mode; main problem; opportunity, strengths, threats and prevailing weaknesses; design of the leading organizations; implemented main actions and their results; institutional and productive arrangements constituted and predominant characteristics; and sustainability indicators serve to transform information into data that is interpretable and meaningful according to the research objective. The crossing of the data was organized around the categorization that consisted of discovering among the experiences its capacity to contribute to actions that promote sustainable development and the climate change mitigation.

The context of development and climate change

Considered an offshoot of the environmental crisis, climate change can be one of the biggest global challenges facing today's society. This crisis, from the perspective of global warming, gained visibility, starting in 1980, when "the international community was alerted by scholars about the destruction of the ozone layer, situated at about 50 km of altitude, which, as is known, protects the planet from the lethal action of ultraviolet radiation" (CONTI, 2005, p.71). Since then, a huge repertoire of scientific and journalistic productions have argued that the use of fossil fuels is contributing to global warming. In this context, some predictions of the Intergovernmental Panel on Climate Change IPCC (2014) are classified as highly reliable and with strong evidence of happening. Furthermore, the publication of the Summary for Policymakers WGI AR5 reaffirms that the warming of the planet is "unequivocal", the human influence in the rise of global temperature is "clear", and limiting the effects of climate change will require "substantial and sustained" reduction in the emissions of greenhouse gases (IPCC, 2014). In the Summary for Public Policymakers (2018), it is reaffirmed that "human activities have caused about 1.0°C of global warming, above pre-industrial levels, with a probable variation of 0.8°C to 1.2°C. Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate" (p. 8).

Another relevant aspect of climate change, from the perspective of warming, is the global scope, both in its causes and in its consequences (IPCC, 2007) and, being a global problem, it manifests itself unequally in the most diverse regions of the world (STERN, 2006). Poor countries are expected to face the greatest consequences even though they are not responsible for most greenhouse gas emissions (GGE). However, with varied, dissenting, and antagonistic perspectives,

there are predominantly two well-defined positions on climate change. If, on the one hand, scientists point out that the changes would be the result of the process of industrialization that occurred in the last century, on the other, there are statements by skeptics and/or critics who are positioning themselves alternatively or against hegemonic in relation to forecasts, intensity of changes, scientific and political form of how to face them and, mainly, that the climatic change is due to natural processes, recurring throughout the history of the Planet, without significant human participation in face of these processes (GRIMM, 2016).

Opinions differ, and countless uncertainties, guide the scenario about the anthropogenic contribution to the increase in the average temperature of the planet. Economic, political, and environmental interests of climate change heat the arena in the dispute between science and politics. At this point, it is appropriate to observe that the hypotheses about climate change should be analyzed considering it as a complex, relative, volatile phenomenon and compatible with the scientific experience that believes in the “certainty of uncertainty” (DEMO, 2000) and admits the importance of the principle of uncertainty and precaution.

At this point, efforts occupy the public policy agenda of most countries, with initiatives focused on understanding and developing measures to mitigate GGE emissions, seeking, in this way, to control their effects on the increase in average temperature, or attempt to maintain it at acceptable levels. Recently, the creation of a carbon market and actions at the international level to facilitate the adaptation of populations in areas considered at risk in emerging countries and mitigation actions are considered efforts to reverse the effects of problems resulting from global warming (FERREIRA *et al.*, 2010).

On the scenarios for mitigating the impacts of climate change presented by the IPCC (2014), these involve reducing greenhouse gas emissions and investing in technologies capable of sequestering the carbon emitted. In the same way, it is necessary to create conditions for world communities to adapt to new phenomena arising from climate change.

Adaptation means, “both the technological changes introduced by climate change and the adjustment of living conditions in urban spaces directly or indirectly affected by the phenomenon” (PBMC, 2013, p.2). Adaptation should involve all productive sectors, consumers, and governments in order to develop strategies and actions to reduce possible damage, such as to circumvent adverse consequences or create opportunities (PBMC, 2013).

It is in this context that the experiences reported here present among them and with the phenomenon of climate change a close relationship. All seek, at a given moment in their objectives, alternatives of economic, social, and environmental dimensions that can contribute to mitigating global climate changes.

Eco-socioeconomies and the sustainable dimension

The term eco-socioeconomies⁵ is relatively recent, not finding in the literature, concepts, and practices that can be theoretically replicated. However, it can, like ecodevelopment and sustainable development, be considered a field of study under construction. A derivative of the work of Karl William Kapp (1950), in which he deals with the socio-environmental costs of companies, which is currently called an externality, brings criticism to the logic of privatizing short-term profits and socializing medium and long-term socio-environmental costs, besides relating this view to structural issues, such as the State, market and civil society as well as their overlaps, as suggested by the institutional economy.

Kapp's work (1950) is constituted from a back and forth between theory and applied experiences. It provides starting points and a coherent and organic scenario for understanding strategies and practices related to sustainable and environmentally compatible economic development, with individual and social needs and aspirations. That is, to think about development based on the assumptions of eco-socioeconomies.

At this point, eco-socioeconomies constituted as a recent and interdisciplinary field of knowledge, are used to name and demonstrate ongoing experiences that show that it is possible to operationalize or implement another management and that results in another development, as suggested by Smith & Max-Neef (1991), in the sense of incorporating the socio-environmental dimension in the decision-making process, which in most cases has a predominance of mercantile

⁵ See work by Sachs (2007) organized by Paulo F. Vieira, entitled Towards Eco-socioeconomy.

logic, as if life could be reduced to a mere economic calculation (SAMPAIO, 2015). From this perspective, the researched experiences come close to the practice of another economy parameterized in the sustainability of development.

To think about eco-socioeconomies is to think about the daily practices that according to Sampaio (2015) occur in the world of organizations' empirics, whether in productive groups (not necessarily to result in economic gains), companies, associations (including cooperatives), communities, villages, where problems and solutions happen and are not always properly qualified. It is, as exposed by Mancebo and Sachs (2015) and Kapp (1950), a theory thought based on experiments and the complexity of daily life, and this can, according to Grimm (2016), emerge from new arrangements aimed at solutions to the socio-environmental problems that occurred in a given territory.

Eco-socioeconomies assume that experiences have their own theory, which emerges from the ingenious solutions mentioned above, even because it is based on an emerging paradigm, even though it has rationality remaining from the previous paradigm. However, although there is an effort to understand how to signal experiences of eco-socioeconomies based on indicators (SAMPAIO, 2000), the task is complex in the sense of incorporating subjective data, which can be harder to measure. Moreover, when the database refers, for example, to the community scale, an under-researched field, in practice it makes even more difficult a comparative analysis, which is one of the main purposes of an indicator. When these exist, they are limited to the municipality, state, and country (SAMPAIO, 2015).

However, peculiarities aside, both approaches are based on two essential factors for sustainable territorial development: participation of the actors involved in the development process and the consideration of territorial space (in all its aspects) in the definition of planning for development, that is, the contemplation of microeconomic problems with territorial-based solutions, which permeate the perspectives of endogeneity and autonomy of local communities (ETZIONI, 2003; LAVILLE, 2003; YUNUS, 2011).

Territorial-based arrangements

From the above, the term eco-socioeconomies of organizations emerges, which makes it possible to think about the inter-organizational viability for such a proposal and the extra-organizational effectiveness for the territory, besides highlighting the so-called extra-rationality in the decision-making processes, which can be constituted of knowledge and daily practices well understood in a given territory, but which can be difficult to understand outside of it. It approaches what Polany (1983) calls the tacit dimension of knowledge.

The eco-socioeconomies of organizations favor studies that enable the macro (inter-organizational) and microeconomic (organizational) viability of people and organized groups or almost articulated organized groups, called shared socio-enterprises (SAMPAIO, 2010), which seek development alternatives with a view to reducing the carbon footprint of production processes.

As previously mentioned, eco-socioeconomies do not exclude individual socioproductive initiatives, however, it is understood that paradigmatic experiences, so-called more systemic, with a greater possibility of consistent and lasting results, are those that are structured in institutional and/or socioproductive arrangements, or which, still, Etzioni (2015) understands by *the new normal*, when societies go through crises, which can be socio-political (like the attack of September 11th, 2001), socioeconomics (such as the real estate bubble of 2008) and socio-ecological (such as climate change) or the combination of these three aspects, as currently shown by the crisis surrounding the Pandemic of the new Coronavirus, which from them change patterns of conduct or behavior in society.

It is around these issues that eco-socioeconomies arise so that one can understand the experiments that take place in the world of life, in territories, in communities, in villages, in organizations, where problems and solutions happen and are rarely properly qualified (SAMPAIO, 2010) and replicated, which sometimes are constituted as institutional and socioproductive arrangements of sustainable basis. These arrangements, in addition to increasing the survival capacity of small businesses in the market economy, encourage the creation of jobs and income near to the place of residence, promote the reduction of rural exodus and local development, strengthen community actions, which, once organized, can use this capacity to achieve other objectives. In other words, territorial-based institutional and socioproductive arrangements can play an important role

in strengthening urban or rural regions, especially economically fragile, stimulating the strengthening and diversification of complementary activities (GRIMM, 2016).

Institutional and socioproductive arrangements with a territorial focus encourage social actors to seek, in this development strategy, the solution for local situations, of an economic, social, and environmental nature, putting into practice development projects that rely on community participation. These experiences according to Ortega (2014): “(...) have as one of their objectives to increase territorial competitiveness in regional, national and international economic circuits, taking advantage of the cooperative synergy between the actors and the gain of scale that can be achieved from collective actions” (p.3).

Therefore, they refer to the eco-socioeconomies organizations, in which the initiatives are intertwined, as arrangements, and where there is the eminence of an extra-organizational action, that is, the organizational agent highlighting the impacts of their action on the territorial environment (SAMPAIO, 2010). In the sense of institutional agreements, thought of as community-based socio-political and socioproductive agreements, in a way that generates social capital⁶, it is suggested to identify the representatives of the organizations that will compose the agreements, to gather and stimulate the bases to think three different actions: inter-organizational, extra-organizational and extra-rational (SAMPAIO 2010).

Based on the principles of the eco-socioeconomies of organizations, it is suggested that the management of companies, public organizations, non-governmental organizations, as well as the inter-organizational arrangement that is composed of these three types of organizations should be guided by extra-organizational criteria, in order to incorporate socio-environmental demands from the territory in which the inter-organization is installed; where rationality is driven by the calculation of societal consequences, privileging the socio-economic-environmental (sustainable) dimensions in order to correct the mistakes caused by a management model that privileges only intra-organizational criteria (within the organization), whose basis is based on economic rationality of calculating consequences only organizational (SAMPAIO, 2015).

The eco-socioeconomies of organizations do not claim to be a new conceptual basis for thinking about another way of life, as suggested by sustainable development. However, despite the fact that it is considered a theory under construction, with reduced amounts of scientific production. The aspiration is to embrace the eco-socioeconomies as a contributory factor to the idea of plausible alternatives to environmental, social, and economic problems, especially at the territorial level.

Results

To analyze and discuss the researched experiences, it is necessary to highlight that although these, in general, present hybrid characteristics in relation to the eco-socioeconomic modalities; they are based on institutional and socioproductive territorial arrangements and have a characteristic of cooperation between the participating organizations.

Regarding the researched organizations, they are composed of suppliers of inputs or information providers, producers and distributors or consumers of products or information (Table 2), geographically close or, with similar identity, ideology or socioeconomic interests, connected in the territory, where they favor the use of appropriate technologies, such as promoting healthy food with organic products, reusing and capturing rainwater, solid waste collecting, and environmental education programs.

⁶ Social capital is a resource for community action in a given territory (COLEMAN, 1988).

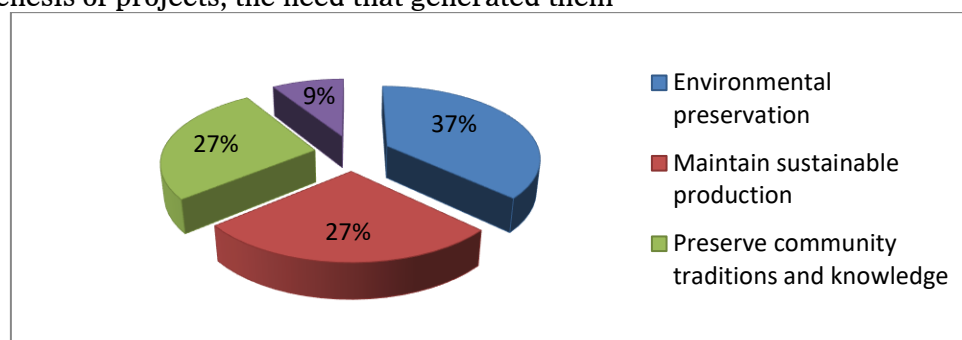
Table 2: Summary of the analyzed experiences

Name City/State	Modality	Practices that characterize them
Yellowstone Greenest Park (States of Wyoming, Idaho, and Montana)	Management of environmental conservation units	Management of conservation units with socioeconomic impact on the urban environment. Sustainable energy.
Starbucks Coffee (Seattle- Washington)	Fairtrade	A movement that brings together producers with socioeconomic vulnerability and conscious consumers. Social responsibility.
Coop (Moscow - Idaho)	Cooperative/ ecogastronomy	Cooperativism, an associative group of individuals with a socioeconomic purpose. Education
Name City/State	Modality	Practices that characterize them
Ecovillage Cedar Moon e TCL Farm (Portland - Oregon)	Ecovillage	Association Città Slow in which it promotes cities that emphasize good living. Education for sustainability.
Plum Organics (Emmerville - California)	Benefit corporation/ ecogastronomy	It privileges the food production dynamics based on a territorial arrangement that involves the cultivation of typical ingredients, local recipes, and consumption in the territory itself
Ecovillage Homes (Davis - California)	Ecovillage	Ecovillages are sustainable settlements or communities that preserve ecosystem dynamics on a human scale, with the meaning of Good Living
Citizen's Climate Lobby (Moscow - Idaho) e (Pullman - Washington)	Social movement of environmental policy	A socio-political movement related to the impacts of climate change
Ecoroofs (Portland - Oregon)	Appropriate technologies	Municipal public management that develops systemic actions of urban drainage. Energy Efficiency.
Sentinel Coffee Alaskan Roast (Juneau - Alaska)	Social economics	Cooperativism, associative group of individuals with socioeconomic purpose
Klondike Gold Rush National Historical Park (Skagway - Alaska)	Management of environmental conservation units	Management of conservation units with socioeconomic impact on the urban environment

Source: The authors, 2018.

These experiences may also derive from a network of efforts, in the case of a private for-profit initiative, which has a socio-environmental corporate responsibility in its mission, such as *Starbucks Coffee*, favoring small producers, coming from isolated locations and native peoples, guaranteeing purchase prices above what the market establishes and favoring marketing spaces within points of sale.

Regarding the motivations that originated these experiences (Graph 1), the main ones being: environmental preservation 37%, conservation of local culture 27%, sustainable production 27%, and the guarantee of the quality of life for local communities 9%.

Graph 1: Genesis of projects, the need that generated them

Source: Field research, 2018.

In general, the problems of the analyzed projects are correlated to the socio-environmental dynamics of the territories where they operate. The data suggest that environmental problems, including climate change, the need to maintain quality of life, and local knowledge start from the need to counter the mercantile logic of exploiting natural resources.

The genesis of the experiences is related to the creation of sustainable action modalities for environmental conservation and community strengthening, which converge to collective construction processes that surpass the individual benefit calculation.

The predominant institutional design in these organizations is diversified, with emphasis on community association and cooperativism (27%), as the most expressive. There are also governmental and non-governmental organizations, social, and environmental movements and social entrepreneurship. Although many seem close, they can be classified into two groups.

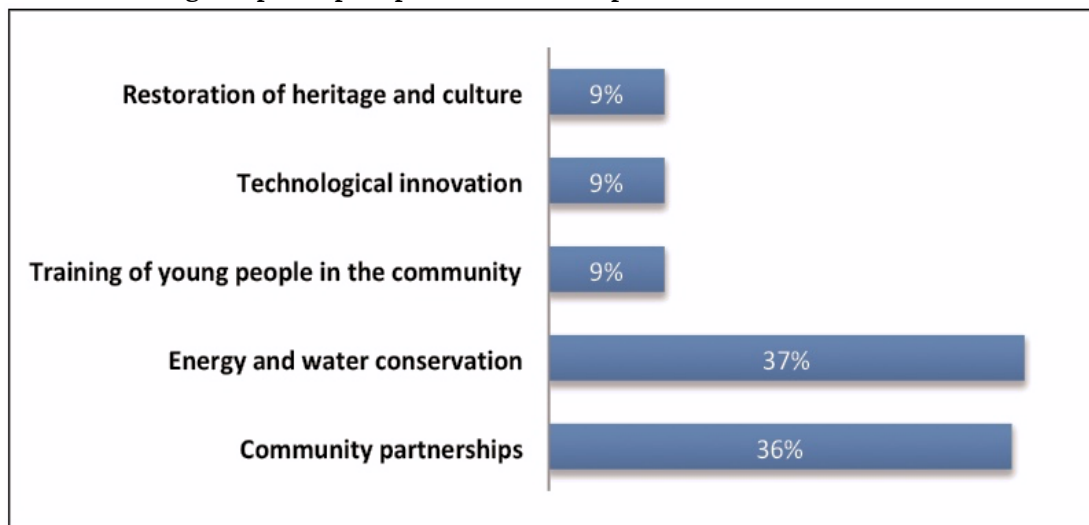
The first of a community nature (association, whose purpose is social) and cooperative (with an economic purpose), both are formal organizations, with established statutes. It is noteworthy that a non-governmental organization differs from these first two. After all, they have socio-political objectives, and social and environmental movements, in turn, distinguish themselves from non-governmental organizations because they are not formalized. The second group is formed by social entrepreneurship, which are established business initiatives and which operate in the market.

From the objectives of each of the experiments, a macro-environmental analysis was possible, identifying elements that denote fragility in the projects. It is noteworthy, to mention the threats to the continuity of the experiences:

- Dependence on external financing and voluntarism as an established form of work;
- Project costs and resistance to community participation when the risks arising from climate change in their lives are unknown;
 - Dependence on innovation centered on technological issues;
 - Difficulty in replicating some approaches;
 - Vulnerability to climate change.

On the other hand, there are also strong points in all experiences, in which the quality of the actions taken aiming at climate change mitigation and care in training and preparation for members of the communities that relate to projects stand out.

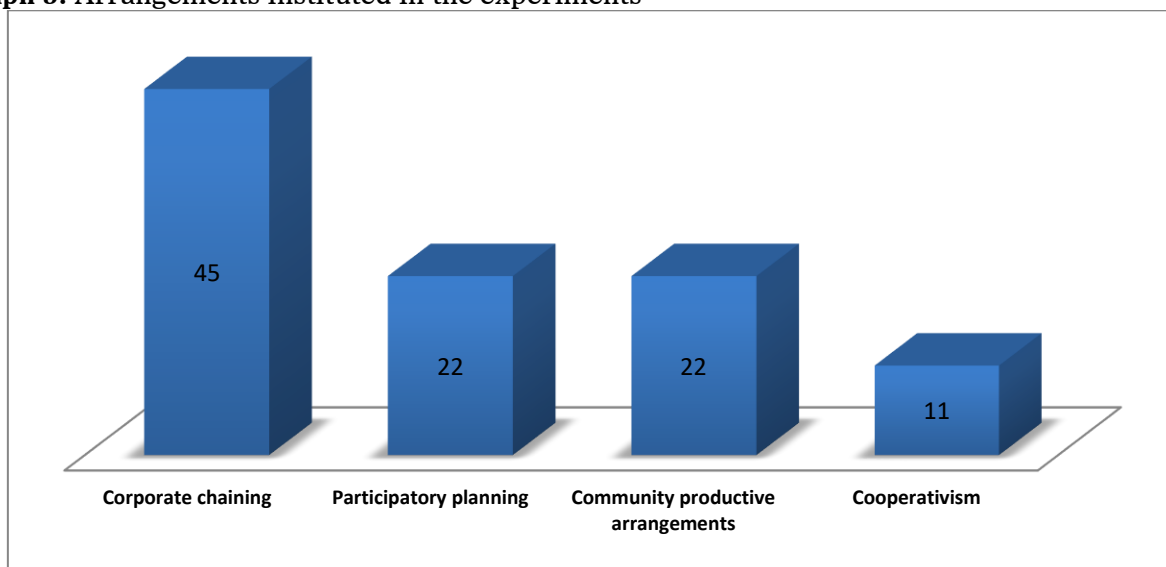
In seeking to understand how these experiences are consolidated, some factors permeate the constitution of institutional and socioproductive arrangements that comprise the macro-environmental situation that requires its planning and management. The experiences (Graph 2) denote in the principles of their actions that can be identified as determinants for their realization.

Graph 2: Determining the principles present in the experiments.

Source: Field research, 2018.

The evidence of sustainability that demonstrates the qualification of the projects is diffuse, which prevents them from being represented in percentage terms, sometimes they are presented as measurements of results, sometimes they are constituted as procedural evaluations. In any case, the main results of these actions are recognized: reduction of energy and water consumption, which suggests conscious consumption; appreciation of cultural traditions, and environmental education.

The institutional arrangements constituted (Graph 3) for the development of the experiences demonstrate that the majority of the projects have: integrated corporate chaining in order to provide governance to the arrangement established by well-organized groups and companies; participatory planning conducted by the municipal government; productive arrangements consisting of community groups and cooperative system with partnerships with small farmers, in which they suggest a sense of territoriality and preservation of their own socioeconomic dynamics.

Graph 3: Arrangements instituted in the experiments

Source: Field research, 2018.

In general, the institutional arrangements constituted have the following predominant characteristics: Educational support centers for sustainable practices (45%); Community and cooperative development (33%); Partnerships with non-governmental organizations with qualified credentials (11%), and Volunteer support (11%).

Although each of the experiences has unique characteristics originating from their territories, social technologies originated based on the formation of institutional arrangements, characterized as inter-organizational action, when it comes to demanding political actions by civil society before the spheres of government, executive and legislative, regarding the effects caused by global climate change, as is the emblematic case of the *Citizen's Climate Lobby*. It is about creating a corporate lobby, in order to strengthen this sphere with the State and the private sector, when society realizes that its demand has not been met.

In addition to the institutional arrangements in terms of innovation, there is the establishment of socioproductive arrangements composed of agents that incorporate socio-environmental and economic responsibility, in order to boost the territory, which suggests extra-organizational criteria, by incorporating socio-environmental demands from the territory, that is, the organizational agent acts to minimize the impacts of its action on the territorial surroundings.

It is also what illustrates the cases of *Città slow* and *Ecovillages*, close to the term called neighborhood economy, with a community purpose, where the socioeconomic agents - supplier, producer, and consumer - are geographically close and there is a predominance of the coexistence relationship between them, not only the mercantile sphere was reduced, as indicated by Ivan Illich (1973).

In addition to social innovations, the triad of community tourism, responsible and sustainable, in which it is inserted in the cases of *ecovillages* and presents elements in natural parks, is also characterized as an opportunity, that which involve the consumer, in this case, the solidary tourist, willing and conscious, the ways of life of the local populations and the predominant landscapes of the visited territory. When a food cooperative, such as *Coop and Plum Organics*, incorporates in its cost spreadsheet services such as environmental education courses, nutritional guidance for parents, improvement of organic farming techniques, social security program for socioeconomically vulnerable families, it suggests as an example of a productive chain that is not only commercially established, but also from territorial coexistence. It is noteworthy that extra-rationality also predominates in the territory, based on the sharing of knowledge and ethical codes of conduct, barely visible to those who do not belong to this spatiality.

In addition to social technologies, appropriate technologies are also available, called by Schumacher (1991) as intermediate technologies, such as the use of green roof, rainwater harvesting, bioconstruction, as in the case of *Ecoroofs* and organic agriculture that reduce the ecological footprint. On *Ecoroofs*, in May 2018, the Portland City Council adopted the 2035 Central City Plan, including a green roof requirement in the Portland Zoning Code for new buildings with a net construction area of more than 1,800m² (CIDADE DE PORTLAND, 2019). These *ecorooft* requirements are seen as the strictest (if not the most) in the USA. However, buildings required to install *ecorooft*, as part of the new requirement, will receive exemptions.

The good practices demonstrated in these modalities and which show signs of eco-socioeconomies intertwined, complementing each other and contributing, albeit symbolically, to the mitigation of major global problems such as climate change. It is not clear whether such experiences could be replicated in other territories, probably not, however, there is no claim to such. What is suggested is the observation of the principles highlighted above as elements that can signal opportunities, given that the knowledge and social capital that each territory possesses are its own, peculiar, unique according to its historical trajectory. The evidence of greater associativism, cooperativism, private or social entrepreneurship, marks some experiences territorially, political social movements, among others. It is worth saying that they contribute to building an encyclopedia of everyday life, as suggested by Ignacy Sachs (2007).

Conclusions

In view of the proposed objective of performing a comparative analysis of experiences identified as eco-socioeconomies developed in the Western territory of the United States of America, some points of convergence and divergence between the projects were identified. Taking into account that in comparative studies, even though investigating experiences considered in the same modality of eco-socioeconomies, it is emphasized that these have their own singularities. In this case, the experiences investigated are concentrated in a territory whose situations have specific socio-environmental standards and, therefore, many of them cannot be considered as approaches to be replicated in their entirety, but as having elements to be observed.

In relation to the genesis of the experiences, this is related to socio-environmental concern, where social dynamics are interconnected with ecological ones based on a territory and a territoriality resulting from the set of established socioeconomic and cultural relations. There is an understanding that problems are complex, systemic, and are intertwined.

With regard to opportunities, there are indications that the economy can be green, that is, the environment is also an opportunity to do business, provided that territorial vocations are respected, which comprises the respective carrying capacities of their ecosystems and the established cultural traditions, as well as the social interests around issues of a public nature.

Given that Corporate Socio-environmental Responsibility raises some controversy, especially with regard to the boundaries between the public and private spheres, it is worth mentioning that private companies that operate in economic sectors of a public nature consider their clientele as the demand for goods and services from corporate interest. Unlike those who classify people as mere "consumers", restricted to the economic sphere. In other words, people are considered subjects of rights, therefore, citizens. In view of this, it can be said that organizations fall into the extra-organizational dimension, which associated with Corporate Socio-environmental Responsibility; which means that the experience is seen as being of Eco-socioeconomy.

In this sense, two activities of a public nature stand out: sustainable tourism and organic agriculture, which by its essence are territorialized products, resulting not only from a mercantile process but from a process with territorial identity, containing its own substance. For example, in organic agriculture, which in addition to the concern with the commercialization of its production, there is concern about social security, that is the quality and availability of food for consumption. While sustainable tourism suggests an awareness of socio-ecological dynamics, which overcomes the instrumental functionality of economic activity in the consumption of nature - as a mere resource - or of traditional ways of life - such as the spectacularization of culture.

There is, therefore, a shift towards substantive criteria (social, political, moral, ethical, and aesthetic) at the detriment of the criteria of economic rationality (effectiveness, proficiency, and performance). In this sense, the socioproductive and institutional arrangements established in the analyzed experiences are configured as an inter-organizational action with a substantive territorial pattern. The consumer/end-user, in turn, recognizes the geographical identity and ethical value of the product. There is no doubt that this agent, when it overcomes its merely economic role, can be a protagonist in order to influence the entire chain, exercising full, planetary, and intergenerational citizenship.

With regard to the management and governance of experiences, although there are difficulties in establishing a comparison based on indicators because they are still incipient, some are more procedural and others related to results, these indicate that there is a concern regarding the evaluation of the experience. Evidence points that in most of the experiences the educational focus is a central element for its management and governance and these are connected to the socio-environmental issue.

There is a predominance of the participatory approach to the consultation of problems. There is a presence of both voluntary and cooperative work in the execution of actions. There is concern about the financial sustainability of the project. When there is funding from the federal government, it is suggested as a threat, in the sense of dependence. There is a territorial focus on understanding the problem as well as its solution, which suggests that the territory can decide what it wants to be, large or small.

The issue of climate change is a recurrent theme in the experiments, but it is not known for sure how much it is a determining factor for the existence of the experience itself, the only concern is to observe that it should contribute to its mitigation.

Finally, the results suggest that in the North American experiences observed there is a correlation between instrumental and substantive action, however not reduced to the sphere of the economy, when it presents a purely commercial conception, disconnected from the other dimensions of the sphere of life, good living, and sustainability. The instrumentality of human action persists and becomes necessary when the intergenerational scale is understood. Although the experiences are comparative, presenting patterns, as previously suggested, they constitute their own territories, which suggests that each territory has a genesis that distinguishes it. By the very pragmatic essence of the eco-socioeconomies, that is, one will know what sustainable development is when it really exists.

Acknowledgments

Thanks to the Fulbright-CAPES Visiting Scholar Program for providing a scholarship held at Washington State University in 2015.

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