

Security and Gender in Bio-ecopolitical Strategies

Dárcia Amaro Ávila¹
Paula Regina Costa Ribeiro¹
Paula Corrêa Henning¹

¹Rede Municipal de Itajaí/SC – Brazil

¹Universidade Federal do Rio Grande (FURG), Rio Grande/RS – Brazil

ABSTRACT – Security and Gender in Bio-ecopolitical Strategies¹. This paper problematizes the operation of bio-ecopolitical strategies that mobilize security and the concept of gender to regulate populations. The strategies, which belong to global program documents issued by two international authorities – the International Union for Conservation of Nature (IUCN) and the United Nations Development Programme (UNDP) –, operate for the security of a sustainable future on the planet. Based on tools of Michel Foucault's biopolitics and of ecopolitics, this study highlights women as a vulnerable population in environmental programs as shown by statistics and the concern for the future on the planet. Attention is paid to the way in which gender and environmental relations are developed.

Keywords: Gender. Sustainable Development. Environmental Education.

RESUMO – Segurança e Gênero nas Estratégias Bio/Ecopolíticas. O artigo problematiza a operação de estratégias bio/ecopolíticas que mobiliza a segurança e o conceito de gênero para a regulação das populações. Essas estratégias presentes no tecido documental de programas globais de duas autoridades internacionais – União Internacional de Conservação da Natureza (UICN) e Programa das Nações Unidas para o Desenvolvimento (PNUD) – operam para a segurança de um futuro sustentável do planeta. A partir das ferramentas da biopolítica de Michel Foucault e da ecopolítica – uma ampliação do conceito foucaultiano com deslocamentos para o nosso tempo histórico – destaca-se a presença das mulheres como populações vulneráveis nos programas ambientais a partir do saber da estatística e da preocupação com o futuro do planeta. Atenta-se para a forma com que as relações de gênero e ambientais são produzidas.

Palavras-chave: Gênero. Desenvolvimento Sustentável. Educação Ambiental.

Introduction

Truth is a thing of this world, stated Michel Foucault (1990). The discourse on sustainable development (SD) is one of the truths that circulates and exerts effects of power on our present time. Since it introduces polemic issues related to political, social, environmental and economic spheres, attention must be paid to its discursive power over our ways of being in the contemporary world.

The discourse on SD had its ideas introduced in the concept of ecodevelopment² and was reinforced when the report *Our Common Future* was published (COMISSÃO, 1987). It has been in the 2030 Agenda for Sustainable Development (ONU, 1983) since 1987, a fact that justifies its analysis and problematization in the field of Environmental Education (EE).

We believe that EE is a strong field of knowledge that teaches us truths about the environment, nature and relations between humans and nature. However, this very field may be used as an instrument to cause tension to established truths and to look carefully at what we construct to constitute our ways of life. This is the reason why this paper sees EE as the field that may contribute to problematize SD lessons that spread and construct contemporaneous subjects by producing new conceptions, such as security and gender in environmental programs.

Paradoxically, SD aimed at showing ways of joining sustainability and economic development. Ignacy Sachs (2009), the author of the concept of ecodevelopment, states that SD is a challenge to the planet, mainly because of relations between developed and developing countries. The challenge shows that “[...] the environmental issue is located on the broadest threshold of social relations which acknowledges that both inequality among countries and increase in poverty are threats to a socially and environmentally balanced future to everyone” (Scotto; Carvalho; Guimarães, 2007, p. 29). The environmental agenda for SD focuses on regulating populations, mainly in developing countries, in an attempt to fight poverty and social problems.

This study originates from the problematization of effects of discursivity propagated by the discourse on SD. Based on contributions given by the philosopher Michel Foucault, we address intervention of some strategies that aim at regulating the population, mainly the so-called vulnerable groups, such as women in developing countries. Therefore, we use some of the author’s tools, such as biopolitics, politics on life, on life management, which aims at constantly enhancing it. Based on this analytical tool, we believe that biopolitical strategies act strongly to ensure that lives are defended.

Some authors (Malette, 2011; Passetti, 2013; Veiga-Neto, 2014; Henning, 2019) have led their analyses to broaden Foucauldian concepts and to insert them in our historical times. In times of an environmental crisis and SD, the authors state that this power produces ecopolitics which focuses not only on populations but also on the planet. Poverty, loss of biodiversity, environmental disasters and climate changes are

phenomena that affect populations and threaten lives. Thus, ecopolitics shall rule populations for the sake of life and the planet.

This study highlights two international organizations, i. e., the International Union for Conservation of Nature (IUCN) and the United Nations Development Programme (UNDP), which are global authorities on issues related to nature, environment and human development. We understand that they are involved in developing biopolitics and ecopolitics or bio-ecopolitics that mobilize security, based on risk calculation and social and gender measurements for the future on the planet.

The IUCN, and international civil organization, aims at nature conservation and equitable and sustainable use of natural resources. In this study, we analyzed the programs available on the IUCN's virtual platform: *Programa Cuadrenal de la UICN 2001-2004* (UICN, 2000); *El Programa 2005-2008 de la UICN* (UICN, 2004); *Programa de la UICN 2009-2012* (UICN, 2008); and *Programa de la UICN 2013-2016* (UICN, 2012). The four programs under investigation address the theme of gender as necessary for SD since it produces and disseminates information on gender equality and on women. The IUCN has a specific office that deals with such issues in order to guide and share knowledge about gender and environment. The institution has aimed at integrating issues related to gender for about 20 years.

The UNDP is one of the UN agencies that works to achieve human development and eliminate poverty. It is one of UN main programs which is connected to goals of SD. The *Plan Estratégico del PNUD, 2014-2017* (PNUD, 2014b), which is available on the platform, is a reference to sustainable human development. It addresses gender equality as one of the main themes that needs priority in projects of human development. The program works on women's empowerment and aims at making them become change agents. It developed a specific action plan for gender equality from 2014 to 2017 and the Gender Equality Index, which measures loss of human development in 145 countries, mainly in developing ones.

Therefore, we used contributions brought by some studies that intertwine gender and environment in order to question positions held by women in programs that aim at regulating the population for the security of the planet (Braidotti; Charkiewicz; Hausler; Wieringa, 1994; Velázquez, 1996). Thus, the analysis of the programs shall consider their nature as historical monuments resulting from force relations found in our society (Foucault, 1999). Based on Foucault's statements about *population, security, gender and women*, we problematized bio-ecopolitical strategies found in programs that put security and gender in practice to regulate the population, mainly women in times of SD.

Finally, we emphasized EE to problematize issues that involve gender, security and SD in our society because we believe that EE is an important field of knowledge which may potentialize critical analyses of established truths, from gender to environmental issues, and of discursivity that highlights social problems by connecting them to environmental ones.

For the sake of life and the planet: on bio-ecopolitical strategies and potentiality of EE

EE has undoubtedly contributed to the debate about SD in the present. Several studies (Henning; Ferraro, 2022; Bastos, 2016; Meira; Sato, 2005, Sauv ; Berryman; Brunelle, 2008) have addressed EE mainly because Education has lately articulated issues of SD and, thus, produced Education for SD³.

EE is fundamental to face challenges offered by the discourse on SD in the production of different sorts of EE. Projects of sustainable schools in formal Education or environmental programs under investigation are committed to the aforementioned production since they teach lessons and search for another way of relating to life and to the planet. Thus, we see EE as a strong field of knowledge that has made us think about and question environmental issues since the 1970's, as stated by Mauro Grun (1995), Marcos Reigota (2012) and Michele Sato (2005). As a result, we ask ourselves: which force games are found in the discourse on SD and make it a truth in our time?; and how does this truth penetrate social, economic, environmental and cultural spheres and highlight gender?

When we addressed these issues, we kept a dialogue with Michel Foucault in the environmental field and used his clues to effects of truth and relations of power to carry out analyses of current social, economic and political relations. By highlighting productivity of power beyond a State, government or institutions, the philosopher studies its extremities.

From this perspective, in one of the lectures *Society must be defended* given on March 17th, 1976, at the *College de France* (Foucault, 1999), Foucault points out the emergence of something new over the notion of power, i. e., assumption of life. He emphasizes limitations of discipline or disciplinary power that settled in the 17th and 18th centuries. It is enlargement of the disciplinary power which operates at the level of entire populations. Foucault called it biopower, which operates through biopolitics.

The first interventions of biopolitics are problems of birth rate, reproduction, morbidity, etc. Besides, it is potentialized by knowledge introduced by statistics, i. e., the first demographic studies which led to political life strategies, such as campaigns of hygienization, medicalization and contraception. The author highlights that another field in which biopolitics intervened consisted of phenomena, such as industrialization, old age, accidents and adverse diseases, that took place in the 19th century (Foucault, 1999). The means of existence of a population also becomes an intervention of biopolitics.

Concern for the environment, or rather, for effects of the environment, “[...] crude effects of the geographical, climatic, hydrographic environment: problems, for instance, of swamps and of epidemics linked to the existence of swamps throughout the first half of the 19th century” (Foucault, 1999, p. 292), makes us think about biopolitics applied to se-

curity. It plans, organizes and mitigates undesirable effects of the environment. “To be secure” will be ensured by the State, according to Foucault (2008a), as a pact with the population to provide security, rather than a territory. The goal of the government is to ponder, manage and know its variables. When the population becomes the object of investment of the government, its great concern, we may perceive potentialities of biopolitics and security.

Based on aforementioned readings and studies, we understand that environmental and social phenomena that affect the population’s means of existence will be the target of biopolitics in times of SD. Some authors (Scotto; Carvalho; Guimarães, 2007) have highlighted that the dispute over effects of the developmental model and environmental degradation used to focus on risks posed to the population. They pointed out the Meadows report, which was debated by the Club of Rome⁴, to contribute to reflect on the issues since the study “[...] calculated that the limit of the planet’s development would be reached in the next 100 years, leading to sudden decrease in the world’s population and industrial capacity” (Scotto; Carvalho; Guimarães, 2007, p. 21).

Thus, the SD agenda designs an action plan to make governments and States reach development sustainability with the use of environmental and social policies. The economic-social-environmental triad starts to incorporate policies that aim at defending life against environmental phenomena that affects the population.

Considering the potentiality of biopolitics towards strategies that regulate the population in times of SD, some authors (Passetti, 2013; Veiga-Neto, 2014; Malette, 2011; Henning, 2019) have given important contributions to this study and to EE. Inspired by this theorization, the authors problematize the ecological dimension that incorporates biopolitics. From this perspective, the concept of ecopolitics has been understood as a horizon or a dimension of this way of managing populations. According to Veiga-Neto, ecopolitics “[...] broadens horizons and carries together everything that has already been thought and said about biopolitics” (Veiga-Neto, 2014, p. 33). It broadens practices of biopolitics by developing a set of policies that aim at controlling life in the environment on the planet. Ecopolitics concerns for “[...] ecological awareness, planet conservation, mitigation of partisanship, security, respect for ethnocultural differences, attention to local needs, sustainability and anti-utilitarianism” (Veiga-Neto, 2014, p. 40). It changes interests bestowed to life on the planet by transforming the population’s subjectivities, relations and interactions.

In the era of environmental governmentality or ecogovernmentality, as pointed out by Sébastien Malette (2011), there is a new way of managing populations. According to Passetti (2013), ecopolitics should not be considered a discipline or mere governmental management, but a governmental practice. This, problematization of ecopolitics enables broadening and re-signification of forms of government in the contemporary world.

This study includes global programs of both international authorities IUCN and UNDP so that our analyses may enable to investigate the ways used for regulating our times. They are policies on the population's life and on the planet which are produced amid a form of governing that aims at integrating the economic-social-environmental triad.

Programs issued by the IUCN highlight the importance of balance among the SD pillars that it follows while it criticizes the juxtaposition of the economic dimension over the others. In all its programs, the IUCN emphasizes that SD is the goal that enables societies to live without harming the planet. Therefore, it develops strategies, assistance, information and collaboration to be used by States as sustainable policies to ensure the future of the current generation and of the next ones.

Concerning the UNDP, we cannot disregard the amplitude of its actions and its articulation with a specific theme: human development. However, in times of SD, concern for humankind broadens and becomes sustainable human development. In its program *Cambiando con el Mundo* (2014-2017), the UNDP refers to sustainable human development which means "El proceso de ampliar las alternativas de la gente aumentando sus capacidades y oportunidades de manera tal que sean sostenibles desde el punto de vista económico, social y ambiental, y que favorezcan el presente sin comprometer el futuro" (PNUD, 2014b, p. 1). Thus, SD is also the goal of the program.

As a result, discourse on SD got stronger and incorporated international programs addressed to governments and States. They state that the discourse is a goal to be reached to replace threats to life and to the planet. According to Passeti (2013, p. 19, author's italics), "Population regulation is not restricted to biopolitics anymore, but connected to a new production of truth about capitalism and *environment*, of workers as entrepreneurs, of democracy with planet management, with feelings and affection".

From this perspective, another aspect may be noticed when ecopolitics goes beyond biopolitics: emphasis on neoliberal rationality which has incorporated international actions since the 1970's and the 1980's to produce a new global order (Passeti, 2013). From now on, it focuses on the production of an entrepreneurial subject and the conception of enterprise incorporates the social dimension, as proclaimed by Foucault (2008b).

We have been ruled by a form of sustainable government based on international actions, a fact that has been highlighted by the formulation of an environmental agenda which moved away from the Agenda for the 21st century (Agenda 21) to the SD Agenda for 2030 as an action plan addressed to people, the planet and prosperity. In the agenda, gender ranks 5th in goals to reach gender equality and women's and girls' empowerment. Reflection on the reach of the discourse on SD and articulation between security and gender in everyday policies and the belief that it is a discourse on truth in our time trigger the need to problematize it through EE. We believe that EE may help us question not only learning about relations with the environment but also economic and

social intertwinement that SD puts into operation. In addition to EE, we use Foucauldian teaching about specific effects of power with operating bio/ecopolitics to analyze the discourse on SD in the intertwinement between security and gender.

Discussions about women's rights have come up in the society since the first and second waves of the feminist movement. Several themes, such as voting, contraception, abortion, Education, health, violence and work, are used for problematizing issues that involve forms of being and living as feminine and masculine in different cultures. Studies of gender highlight its historically constructed nature since we are not born this gender or that gender: we are produced by cultural codes and social rules (Scott, 1995; Butler, 2003).

Therefore, when issues of gender intertwine with discussions about the environment, they contribute to understand women's forms of life which have been ruled by hierarchy and privation – due to their gender – in several fields, such as loans, land distribution, division of labor in specific places and management of natural resources. In addition, they show that the inclusion of discussion about gender in the environmental field is not enough since it means mere development of environmental policies which do not consider women's means of subsistence, existing relations of power and their subjectivities while discussions brought up by EE aim at reflecting on relations and diversity of social groups (Braidotti; Charkiewicz; Hausler; Wieringa, 1994; Velázquez, 1996).

Thus, analysis and problematization of global programs immersed in the discourse on SD which articulates gender considers that effects of power are attributed. By following Foucauldian clues, we face the challenge of analyzing global programs issued by the IUCN and the UNDP based on their declarations about *population, security, gender and women*.

Analyzing IUCN's and UNDP's programs: security and gender

Based on Foucault's contributions, we look suspiciously at “[...] those divisions or groupings with which we have become so familiar” (Foucault, 2002, p. 24). From this perspective, to analyze the empirical corpus means to deeply explore what was said in an attempt to comprehend social, political, economic and cultural conditions that enabled gender to be part of the discourse on SD. How can we understand discursivity on the environment and on gender based on strategies of bio/ecopolitics? Which truths are produced?

We propose to operate some of Foucault's analytical tools to problematize what is said. By considering monumental reading part of the analysis of programs, declarations and agenda, we must pay attention to simplification and naivety that are often related to the texts. The empirical material that we analyze is treated as a multiplicity of events amid relations of power. As a result, our methodological clue is the process of looking at our material meticulously to understand statements

that give visibility to the discourse on SD and on gender. Therefore, we clarify that our methodology aims at problematizing certain statements that give visibility to the articulation between SD and gender, instead of carrying out an analysis of discourse to find certain statements.

While reviewing documents of global programs issued by the IUCN and the UNDP, we identified discursive production that refers to environmental, social and economic problems while aiming at governing populations. When the diagnosis of our time is presented by global programs, problems of the population's life are highlighted. An example is the statement⁵ below:

The International Energy Agency predicts a 50% increase in energy demand for 2030, a demand that would be satisfied by 80% by fossil fuels. The World Energy Council has prepared several scenarios and the majority of them predict a considerable expansion of energy based on the biomass, especially between 2050 and 2100. This demand is generated mainly by population dynamics, the needs of development and patrons consumption (UICN, 2008, p. 31, our translation).

Problems emphasized by the programs refer to the population mainly due to its growth or dynamics. We have seen discursive proliferation about the population which has become an object of state intervention and regulation in the environmental sphere since the 1970's when the UN conferences started to address environmental issues.

Emma Foster (2014) highlights a cycle of conferences that called mechanisms of power to defend the population's life. The World Population Conference held in Bucharest in 1974 related the population to scarcity of resources. It was considered technocratic because it just focused on data. The International Conference on Population, which was held in Mexico City in 1984, was based on updated demographic data and addressed issues of health and Education but also focused on the view of the previous conference. Considering movements of these conferences on the population, we may perceive that, up to the publication of the report *Our Common Future* which disseminated the concept of SD in 1987, the view of how to govern the population was connected to demography, or rather, to demographic data on population growth, the result of discursivity of the Meadows report ordered by the Club of Rome.

According to Foster (2014), in the International Conference on Population and Development held in Cairo in 1994, post-Rio 92 and post-SD (1987), other themes were brought up by discussions about the population, such as health, Education, jobs, reproductive health and women. The conference is known as the largest one on population and the one whose focus moved from population growth to human rights and broadening of women's participation (Foster, 2014). Although the focus has changed, problems of population keep being the target of intervention of bio/ecopolitics strategies in the wish to govern.

From this perspective, when global programs show that half the world's population will be affected by water shortage, that there will

increase of 50% in energy consumption by 2030 and measurements of limits of poverty worldwide, they produce data immersed in discursivity that aims at managing the population based on measurements, numbers and statistics to prevent their risks.

Work on forecast and statistics to measure global phenomena is powerful for bio/ecopolitics strategies. When we reflect on statistical knowledge in the light of Foucault (2008b), we consider the effort to decipher, measure and examine phenomena thoroughly. Statistics becomes powerful knowledge that operates the power over the population's life. The study carried out by Tom Popkewitz and Sverker Lindblad (2001) contributes to reflect on manipulation of numbers and statistics to be more than a government's tool, but a field of cultural production and reproduction that deals with social administration despite classifying, dividing and normalizing individuals and populations.

Both authors highlight statistics as the key element needed to govern. Thus, we understand its recurrent use in global programs to address problems that affect the population's life and means of existence. Threats, such as increasing urbanization, food distribution, water shortage, loss of biodiversity, migration, increase in energy demand, increase in population, vulnerability of population groups and other phenomena, are elements addressed by the programs with great impact on the world's population. As a result, they highlight several words, such as loss, decrease, concern and shortage, related to phenomena that threaten the population's life and the planet. We may perceive the dimension of security that articulates fear. Security will operate in the fear for loss or shortage of resources and threats resulting from social problems.

Throughout history, environmental insecurity and resource scarcity have contributed to generating violent conflicts. This trend continues. According to the UNDP, at least a third of the planet's terrestrial surface is threatened by desertification and 900 million people suffer its consequences (UICN, 2000, p. 124, our translation).

Personal security continues to be a concern in many countries where we operate. The UNDP, together with the Security Department of the United Nations Secretariat, will continue to give priority to measures aimed at reducing personnel vulnerability and promoting the continuity of operations (PNUD, 2014b, p. 62, our italics, our translation).

Shortage, violent conflicts, vulnerability, threats and consequences are emphasized and ask for emergency actions. In view of it, events that pose risks to the population must be prevented or predicted. Popkewitz and Lindblad (2001, 2001, p. 139) stated that the notion of risk is often used as a statistical category. According to them, "risk integrates a personal way of classifying by using population reasoning. It is not just a way of ordering people since it also integrates the capacity of changing how people see themselves as actors in the world. This notion of risk is important to Foucault in security operation, considering

that risks must be calculated to establish who is at risk and which places pose risks, for instance (Foucault, 2008a). When we see what is desirable and undesirable, we may identify an excerpt in the diagnosis of the world's population carried out by global programs. An excerpt that aims at specific interventions in certain population groups to modify current events for future generations.

Ensure *participation* and voice with equitable access to development opportunities and benefits for the entire population, working with the poor and other excluded groups, including women, young people, indigenous and disabled populations, as agents of their own development (PNUD, 2014b, p. 17, our italics and translation).

Poverty and vulnerability are two words that have become part of characteristics of certain population groups, such as women. Poverty has been related to environmental issues since the mid 1970's when the conception of feminization of poverty was brought up and showed that women have become poorer than men. Even though there is no consensus, the International Center of Poverty⁶ defines feminization of poverty based on changes in poverty levels that disadvantage women (Medeiros; Costa, 2008). This view corroborates the first discussions carried out about the theme by Diane Pearce in *Feminization of Poverty*, published by the Urban and Social Change Review in 1978 (Novellino, 2004).

Novellino (2004) not only gave an overview of studies of the theme but also contributed to make us examine the relation between policies on gender and policies on the fight against poverty. There are fundamental differences among implications that result from the relation between gender and poverty. The author criticizes the fact that policies are more related to the survival of women and their children instead of focusing on gender. Criticism to this approach highlights gender and refers to the guidelines given to families relating women's practices to reproduction.

Problems of populations have placed women as targets of strategies of policies on life since the end of the 18th century along with demographic concern for the population's birth rates. In the 20th century, five years after the conference on population in Cairo – the Cairo+5 – emphasis was given to the need to intensify actions in some areas: “[...] decrease maternal morbidity and mortality, reinforce actions to meet adolescents' needs regarding reproductive health and HIV/AIDS prevention and provide care for women and youngsters in emergence situations” (Relatório, 1994, p. 35).

According to Rosi Braidotti, Charkiewicz, Hausler and Wieringa (1994), population growth was found to be the major problem for countries to develop and the cause of the environmental crisis. To contain the growth, mainly in developing countries, has become part of international agencies. They cite the British economist and the so-called father of demography Thomas Malthus (1766-1834), who stated that “[...]”

the working class in northeastern Europe, in the process of proletarianization during the industrialization and urbanization era in the 19th century, was poor because people had too many children” (Braidotti; Charkiewicz; Hausler; Wieringa, 1994, p. 199). Thus, he produced the theory of Malthusianism to control the population and avoid the relation that identified population growth with the underemployment crisis and child mortality.

The authors highlight that the Neomalthusian pointed out that contraception was the response to life conditions faced by the poor at the turn of the century. As a result, they developed issues of family planning which influenced women’s ways of life. According to the author, “[...] it implies that women are, simultaneously, the problem – as child educators and users of resources – and the solution – able to limit births and recover their environment” (Braidotti; Charkiewicz; Hausler; Wieringa, 1994, p. 202).

The Human Development Report (PNUD, 2014a) addresses poverty and states that the poor are the most vulnerable human beings but adds that all people may be vulnerable in several parts of the world – even in developed countries. However, it highlights who is vulnerable, to what and why. In the report, women’s vulnerability is restricted to “[...] natural catastrophes, climate changes and industrial hazards” due to “[...] location, status in society and sensitive periods in their life cycles” (PNUD, 2014a, p.7). The more susceptible to risks, the more vulnerable the groups. In this case, we perceived the direct relation established by the report between women and issues of climate changes, catastrophes and industrial hazards. According to Foucault “[...] there are therefore differential risks that reveal, as it were, zones of higher risk and, on the other hand, zones of less or lower risk. In other words, we may identify what is dangerous” (Foucault, 2008a, p. 80). The closer women are to these factors, the more vulnerable they are: “los grupos desaventajados, como los pobres, las mujeres y las minorías étnicas, son especialmente vulnerables ante los cambios de las condiciones ambientales” (UICN, 2004, p. 42).

Therefore, security will not end risks but manage them. Thus, this administration establishes who needs more intervention and delimitation of space of security, mainly in countries with the highest rates of poverty and vulnerability in different geographical spaces.

In this scenario, gender is present due to variables of populations of poor women aiming at recovery of their environment and elimination of risks of poverty and vulnerability.

Given that most of the poor are women (according to the PNUD Human Development Report), the measures must also incorporate gender equity standards and ensure that women benefit directly from poverty reduction [...] (UICN, 2008, p. 33, our translation).

Poor, indigenous women and local communities are mentioned in programs as groups that need some intervention due to effects of

environmental disasters, climate changes and poverty. Even though the programs show some images of men carrying out work that beats gender stereotypes, as highlighted by the UNDP, or conducting some work on renewable energy, such as the IUCN, men are not mentioned by our descriptors. It makes us question, in the relational dimension highlighted by Joan Scott (1995), what establishes gender relations in our society. After all, where are men if women are more affected by disasters, poverty, catastrophes and industrial hazards? Besides, are there less affected women?

The gender dimension addresses other aspects of relations between women and men and intra-gender ones; it shows the social construction in which relations are produced amid power forms that operate them and constitute them. Thus, issues that involve studies of gender and articulate environmental issues aim at problematizing socio-environmental issues in a relational way, which leads to the following question: which bases support those relations and produce subjects who are more vulnerable than others?

Therefore, gender must be problematized with other markers, such as class, race/ethnicity, sexuality, caste and religion. Some studies have doubted this use of gender as a reference to women. Kimberlé Crenshaw (2002) contributed by examining intra-group differences that accentuate racially marginalized women in the world. She states that a problem is often emphasized as if it belonged to the women's group but no attention is paid to other forms of subordination. When we look at women who are identified as vulnerable, we may notice social and racial marginalization which is not considered by the approach which the author calls super-inclusion. Another approach highlighted by her refers to sub-inclusion, i. e., "[...] the gender dimension of a problem makes it invisible as an issue of race and ethnicity" (Crenshaw, 2002, p. 175).

Thus, we may highlight the importance of not considering issues of gender something isolated and/or representative of all women in the same way when we deal with environmental problems. The author calls us to examine the concept of intersectionality which "[...] aims at capturing structural and dynamic consequences of interaction between two or among more axes of subordination" (Crenshaw, 2002, p. 117). It is important to take the intersections into account, for instance, to develop policies that do not pose over-responsibility to women. This discussion has been ignored by studies of gender and the environment, i. e., care for excess of women's responsibility for management of natural resources, population growth and the environment.

From this perspective, both the significant growth of the world's population and problems of vulnerable populations are threats to the population's life and the planet. "Sieving" the population to delimit its problems, regulating its variables and intervening in threats are a new way to govern the population, the result of 18th-century economists' thoughts. More than the number of people or docile workers to maintain good economy, a certain number of people – which varies, depending on resources, work, consumption and prices – is needed.

Therefore, population regulation has become one of the main concerns for the future. Keeping both the population and the planet *secure* has become the main concern of global programs. Citizen security, human security and food security are terms that are often used for calling attention of countries to problems that may pose hazards and threats to life. Thus, an action plan is needed to defend life and the planet. To carry it out, all institutions, such as governments, non-governmental organizations, the civil society, companies and the media, must be called to implement security plans for a sustainable future.

Food security is the theme that programs highlight the most. As an object of public policies, food security is intertwined with everyone's access to a healthy diet to enable active and healthy life. Brazil developed the program called Fome Zero⁷ in 2003 to implement food security. In 2014, Latin American and Caribbean countries launched an action plan to fight against hunger and obesity up to 2025.

Human security was a term coined by the UNDP in 1994 to refer to human beings and their development, inclusion and fight against extreme poverty. It aims at focusing on populations and defending them against disasters and climate changes that threaten survival and ways of life. The Human Development Report states that:

[...] good performance in terms of human security implies to reach both a good level of human development and relative security of populations against risks posed by the economy, diseases, violence and environmental degradation (PNUD, 2014a, p. 18).

Citizen security, together with the fight against risks posed by violence, aims at respect and human rights with reference to criminological issues (Comissão, 2009). It is mainly used by the UNDP to address issues of violence, armed conflicts and peace. “Los intentos por mejorar la autoorganización de la comunidad, la participación y la labor policial para la reducción del delito y las conductas y actitudes antisociales mejorarán considerablemente las perspectivas de éxito en lo que se refiere a la seguridad ciudadana” (PNUD, 2014b, p. 31). These strategies aim at reaching SD for the sake of life and the planet. To implement it, the programs recommend monitoring: indicators, departments and research in all countries.

Investments in monitoring and guidelines given to States and countries by the programs show concern for the future. According to Foucault (2008a, p. 26), we must “take into consideration what may happen”. Reflecting and projecting the future, creating expectations and organizing life for the future show constant concern of the strategies: conducting food security so that people do not die due to hunger and extreme poverty; implementing projects of human security to have healthy and secure life against climate changes and environmental disasters. They are related to a way of making life happen in a future that is considered sustainable. This process only takes place when risks posed by hunger, disasters, shortage and armed conflicts are administered.

From this perspective, when Emma Foster (2014) analyzed some UN documents, she contributed to make us reflect on discourses that have connected and regulated the population to SD, normalizing subjects in terms of gender, race and sexuality. Monitoring is an example of population regulation since it identifies situations of risks, potential subjects of transformation and prescription to countries. As a strategy of regulation, monitoring aims at producing a certain subject; in this case, a certain group of women. Concern for gender equality is based on a project of production or training to reach SD. Women that belong to vulnerable groups are highlighted due to their production potential. Edson Passeti (2013, p. 13, author's italics), based on contributions of ecopolitics, enables us to identify re-dimensioning of populations at the present time since "it is not about government of the population, as in biopolitics, but government *with* every population so that people may live as a group, mobile, *resilient*, participatory to care for everyone, their groups and planet conservation".

Thus, we have got restless regarding how EE performs in times of gender, security and SD in population regulation.

Finally, EE in times of gender, security and SD

Gender, security and SD have been established by programs and have constituted policies for populations of so-called vulnerable women. EE is also produced in this context. It is an important field of knowledge produced within the bio/ecopolitical discursivity (Henning, 2019). As a result, it is fundamental to problematize the way how we have taught about the environment based on a model of development that captures populations to better regulate.

The exercise of analyzing the programs enabled us to tension – as environmental educators – what has been instituted in society by SD and to talk about issues of gender by giving visibility to the nature of truth and expansion in the contemporary world which constructs environmental policies and teaches about populations of women as excluded and vulnerable groups. Some studies enabled us to acknowledge processes and mechanisms of power that potentialize this discursivity. The authors expanded the idea of governmentality to studies of ecogovernmentality or environmental governmentality and enabled us to question that concern for loss of biodiversity and natural resources do not need to be better administered but they do need environmental and economic balance to reach sustainability on the whole planet (Malette, 2011).

Tensioning this governmentality and its strategies is fundamental to doubt ways of capturing and subjectivation of subjects these days, ways of understanding and managing environmental issues and positions taken by countries and population groups. It means that relations of power that place men and women in levels of vulnerability and poverty must be taken into consideration, together with the historical relation between northern and southern countries and their implications on life on the planet.

Notes

- 1 This paper resulted from the doctoral dissertation written by the first author under the guidance of the other authors. The complete reference is in the section References.
- 2 Concept introduced by Maurice Strong in 1973 in an attempt to overcome debates about development with no restrictions and catastrophism of the environment.
- 3 In 2002, the United Nations General Assembly nominated UNESCO as the agency which would be in charge of promoting the Decade of Education for Sustainable Development (2005-2014). In 2015, when the 2030 Agenda was created, Education became the fourth goal for sustainable development.
- 4 The Club of Rome was founded in Italy in 1968 to enable renowned persons to debate environmental issues. Its debates led to one of the main documents that produced international environmental discourses: the Meadows report or The Limits of Growth.
- 5 Program statements used in the text were kept in Spanish – because it is their original language – and in italics to distinguish them from the others.
- 6 A project of the United Nations (UNDP) and the Brazilian government in the South-south Cooperation.
- 7 The program is a governmental strategy to promote action against hunger and to enable the poor to have access to staple food.

References

- ÁVILA, Dácia Amaro. **Gênero nas Malhas Discursivas do Desenvolvimento Sustentável: emergências, bio/ecopolíticas e dispositivos**. 2018. 163 f. Tese (Doutorado em Educação Ambiental) – Programa de Pós-Graduação em Educação Ambiental, Universidade Federal do Rio Grande, Rio Grande, 2018. Disponível em: <http://repositorio.furg.br/handle/1/8786>. Acesso em: 26 jun. 2023.
- BASTOS, Alexandre Marucci. **Dossiê DEDS (2005-2014) – A Década da Educação para o Desenvolvimento Sustentável no Brasil: uma análise pela perspectiva estratégica**. 2016. 361 f. Tese (Doutorado em Educação Escolar) – Programa de Pós-Graduação em Educação Escolar, Universidade Estadual Paulista Júlio Mesquita Filho, Araraquara, 2016.
- BRAIDOTTI, Rosi; CHARKIEWICZ, Ewa; HAUSLER, Sabine; WIERINGA, Saskia. **Mulher, Ambiente e Desenvolvimento Sustentável**. Para uma síntese teórica. São Paulo: Instituto Piaget, 1994.
- BUTLER, Judith. **Problemas de Gênero: feminismo e subversão da identidade**. Rio de Janeiro: Civilização Brasileira, 2003.
- COMISSÃO MUNDIAL SOBRE MEIO AMBIENTE E DESENVOLVIMENTO. **Nosso Futuro Comum**. Rio de Janeiro: Editora da Fundação Getúlio Vargas, 1987. Disponível em: https://www.academia.edu/39001224/Nosso_Futuro_Comum_relat%C3%B3rio_brundlandt. Acesso em: 26 jun. 2023.
- CRENSHAW, Kimberlé. Documento para o Encontro de Especialistas em Aspectos da Discriminação Racial Relativos ao Gênero. **Revista Estudos Feministas**,

- Florianópolis, n. 10, p. 171-188, 2002. Disponível em: <http://www.scielo.br/pdf/ref/v10n1/11636.pdf>. Acesso em: 20 jan. 2023.
- FOSTER, Emma A. International Sustainable Development Policy: (re)producing sexual norms through eco-discipline. **Gender, Place & Culture A Journal of Feminist Geography**, Canadá, v. 21, p. 1029-1044, 2014. Disponível em: <http://www.tandfonline.com/doi/full/10.1080/0966369X.2013.810593?scroll=top&needAccess=true>. Acesso em: 18 jan. 2023.
- FOUCAULT, Michel. **Microfísica do Poder**. Rio de Janeiro: Graal, 1990.
- FOUCAULT, Michel. **Em Defesa da Sociedade**: curso no Collège de France (1975-1976). São Paulo: Martins Fontes, 1999.
- FOUCAULT, Michel. **A Arqueologia do Saber**. Rio de Janeiro: Forense Universitária, 2002.
- FOUCAULT, Michel. **Segurança, Território, População**: curso no Collège de France (1978). São Paulo: Martins Fontes, 2008a.
- FOUCAULT, Michel. **Nascimento da Biopolítica**. São Paulo: Martins Fontes, 2008b.
- GRUN, Mauro. A Produção Discursiva sobre Educação Ambiental: terrorismo, arcaísmo e transcendentalismo. In: VEIGA-NETO, Alfredo. **Crítica Pós-Estruturalista e Educação**. Porto Alegre: Sulina, 1995. P. 159-184.
- HENNING, Paula Corrêa. Estratégias Bio/ecopolíticas na Educação Ambiental: a mídia e o aquecimento global. **Educação Unisinos**, São Leopoldo, v. 23, n. 2, p. 367-382, 2019. Disponível em: <http://revistas.unisinos.br/index.php/educacao/article/view/edu.2019.232.11> Acesso em: 18 jan. 2023.
- HENNING, Paula Corrêa; FERRARO, José Luís Schifino. As Lutas Políticas da Educação Ambiental nas Universidades Brasileiras: provocações à governamentalidade neoliberal no âmbito da Educação para o Desenvolvimento Sustentável. **Ciência e Educação**, Bauru, n. 28, e22028, 2022. Disponível em: <https://www.scielo.br/j/ciedu/a/GWG5RxxZjphFRcwhbL8zShF/?format=pdf&lang=pt> Acesso em: 18 jan. 2023.
- MALETTE, Sébastien. Foucault para o Próximo Século: ecogovernamentalidade. **Revista Ecológica**, São Paulo, v. 1, p. 4-25, 2011. Disponível em: <https://revistas.pucsp.br/index.php/ecopolitica/article/view/7654/5602>. Acesso em: 18 jan. 2023.
- MEDEIROS, Marcelo; COSTA, Joana. O que Entendemos por “Feminização da Pobreza”? **Centro Internacional de Pobreza**, Brasília, n. 58, 2008. Disponível em: <http://www.ipc-undp.org/pub/port/IPCOnePager58.pdf>. Acesso em: 20 jan. 2023.
- MEIRA, Pablo; SATO, Michèle. Só os Peixes Mortos não conseguem nadar contra a Correnteza. **Revista de Educação Pública**, Cuiabá, v. 14, n. 25, p. 17-31, 2005.
- NOVELLINO, Maria Salet Ferreira. Os Estudos sobre Feminização da Pobreza e Políticas Públicas para Mulheres. In: ENCONTRO NACIONAL DE ESTUDOS POPULACIONAIS, 14. Caxambú, 2004. **Anais [...]**. Caxambú: ABEP, 2004. Disponível em: <http://www.abep.org.br/publicacoes/index.php/anais/article/viewFile/1304/1268>. Acesso em: 20 jan. 2023.
- OEA. Organização dos Estados Americanos. **Relatório sobre segurança cidadã e direitos humanos**. Comissão Interamericana de Direitos Humanos. Washington: OEA, 2009. Disponível em: <http://cidh.oas.org/pdf%20files/seguridad%20ciudadana%202009%20port.pdf>. Acesso em: 26 jun. 2023.

ONU. Organização das Nações Unidas. **Relatório da Conferência Internacional sobre População e Desenvolvimento**. Cairo: ONU, 1994. Disponível em: <http://www.unfpa.org.br/Arquivos/relatorio-cairo.pdf>. Acesso em: 26 jun. 2023.

PASSETTI, Edson. Transformações da Biopolítica e Emergência da Ecopolítica. **Ecopolítica**, São Paulo, n. 5, p. 2-37, 2013. Disponível em: <https://revistas.pucsp.br/index.php/ecopolitica/article/viewFile/15120/11292>. Acesso em: 18 jan. 2023.

PNUD. Programa das Nações Unidas para o Desenvolvimento. **Sustentar o Progresso Humano: reduzir as vulnerabilidades e reforçar a resiliência**. Relatório do Desenvolvimento Humano 2014. Nova York: PNUD, 2014a.

PNUD. Programa das Nações Unidas para o Desenvolvimento. **Cambiando com el Mundo**. Plan Estratégico del PNUD: 2014-2017. Nova York: PNUD, 2014b. Disponível em: http://www.undp.org/content/undp/es/home/librarypage/corporate/Changing_with_the_World_UNDP_Strategic_Plan_2014_17.htm. Acesso em: 18 jan. 2023.

POPKEWITZ, Tom; LINDBLAD, Sverker. Estatísticas Educacionais como um Sistema de Razão: relações entre governo da educação e inclusão e exclusão sociais. **Educação & Sociedade**, Campinas, v. 22, n. 75, 2001. Disponível em: <http://www.scielo.br/pdf/es/v22n75/22n75a08.pdf>. Acesso em: 18 jan. 2023.

REIGOTA, Marcos. Educação Ambiental: a emergência de um campo científico. **Perspectiva**, Florianópolis, v. 30, n. 2, p. 499-520, 2012. Disponível em: <https://periodicos.ufsc.br/index.php/perspectiva/article/download/2175-795X.2012v30n2p499/23328>. Acesso em: 18 jan. 2023.

SACHS, Ignacy. **Caminhos para o Desenvolvimento Sustentável**. Rio de Janeiro: Garamond, 2009.

SATO, Michèle. **Educação Ambiental**. São Carlos: Rima Editora, 2005.

SAUVÉ, Lucie; BERRYMAN, Tom; BRUNELLE, Renée. Tres Décadas de Noratividad Internacional para la Educación Ambiental una Crítica Hermenéutica del Discurso de las Naciones Unidas. In: GONZÁLEZ GAUDIANO, Édgar Javier (Coord.). **Educación, Medio Ambiente y Sustentabilidad**. México: UANL, 2008. P. 25-52.

SCOTT, Joan. Gênero: uma categoria de análise histórica. **Educação & Realidade**, Porto Alegre, v. 20, n. 2, p. 71-99, 1995.

SCOTTO, Gabriela; CARVALHO, Isabel Cristina de Moura; GUIMARÃES, Leandro Belinaso. **Desenvolvimento Sustentável**. Petrópolis: Vozes, 2007.

UICN. União Internacional para a Conservação da Natureza. **Diseñando un Futuro Sostenible**. Programa de la UICN 2009-2012. Adoptado en el Congreso Mundial de la Naturaleza Barcelona, España, 5-14 de octubre de 2008. Suiza: UICN, 2008. Disponível em: <https://portals.iucn.org/library/sites/library/files/documents/WCC-4th-006-Es.pdf>. Acesso em: 18 jan. 2023.

UICN. União Internacional para a Conservação da Natureza. **Programa Cuadrienal de la UICN 2001-2004**. Proyecto aprobado por el Consejo de la UICN para su consideración y aprobación por el Congreso Mundial de la Naturaleza Amman, Jordania, 2000. Suiza: UICN, 2000.

UICN. União Internacional para a Conservação da Natureza. **Muchas Voces, una Tierra**. El programa 2005-2008 de la UICN. Adoptado em el Congreso Mundial de la Naturaleza Bangkok, Tailandia, 17-25 de noviembre de 2004. Suiza: UICN, 2004. Disponível em: <https://portals.iucn.org/library/sites/library/files/documents/WCC-3rd-002-Es.pdf>. Acesso em: 18 jan. 2023.

UICN. União Internacional para a Conservação da Natureza. **Naturaleza +**. Programa de la UICN 2013-2016. Adoptado por el Congreso Mundial de la Na-

turaliza de la UICN, septiembre de 2012. Suiza: 2012. Disponível em: <https://portals.iucn.org/library/sites/library/files/documents/WCC-5th-003-Es.pdf>. Acesso em: 18 jan. 2023.

VEIGA-NETO, Alfredo. Ecopolítica: um novo horizonte para a biopolítica. **RE-MEA – Revista Eletrônica do Mestrado em Educação Ambiental**, Rio Grande, volume especial, p. 208-224, 2014. Disponível em: <https://www.seer.furg.br/re-mea/article/view/4860/3045>. Acesso em: 18 jan. 2023.

VELÁZQUEZ, Margarita. **Género y Ambiente em Latinoamérica**. Cuernavaca: UNAM, 1996. Disponível em: <https://ru.crim.unam.mx/handle/123456789/1188>. Acesso em: 18 jan. 2023.

Dárcia Amaro Ávila teaches in a public city school in Itajaí, SC, Brazil.

ORCID: <https://orcid.org/0000-0001-9605-3008>

E-mail address: darciamaroavila@gmail.com

Paula Regina Costa Ribeiro, M.Sc., Ph.D., is a tenured professor in the Post-graduate Program in Education in Sciences at the Universidade Federal do Rio Grande (FURG) in Rio Grande, RS, Brazil. She has a fellowship grant from the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Produtividade 1C).

ORCID: <https://orcid.org/0000-0001-7798-996X>

E-mail address: pribeiro.furg@gmail.com

Paula Corrêa Henning, M.Sc., Ph.D., is a pedagogue, researcher and associate professor in the School of Education and in the Post-graduate Programs in Education in Sciences and in Environmental Education at the Universidade Federal do Rio Grande (FURG) in Rio Grande, RS, Brazil. She has a fellowship grant from the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) (Produtividade 1D).

ORCID: <https://orcid.org/0000-0003-3697-9030>

E-mail address: paula.c.henning@gmail.com

Availability of research data: the dataset supporting the results of this study is published in this article.

Editor in charge: Fabiana de Amorim Marcello

