


The feminist perspective in food security: an analysis of the links between the SDG 2 and the SDG 5

A perspectiva feminista em segurança alimentar: uma análise das interligações entre o ODS 2 e o ODS 5


Carolinna Maria

Pontifícia Universidade Católica de Minas Gerais, Belo Horizonte – MG, Brasil
(carolinnamaria1@gmail.com)

 <https://orcid.org/0000-0003-0790-5083>

Julia Thassya Theodoro Soares

Universidade Federal de Minas Gerais, Belo Horizonte – MG, Brasil
(juliathst@gmail.com)

 <https://orcid.org/0000-0002-7779-3008>

Abstract

This article aims to answer the question: how can the feminist perspective help to understand Food Security? Statistical data from the Food and Agriculture Organization on two Sustainable Development Goals: SDG 2 and SDG 5 was analyzed to answer this question. The article also promotes a discussion based on literature analysis that links both SDG. Two main issues were observed: (1) that Food Security can be analyzed under a holistic view, involving all levels; (2) objects assume a different interpretation analyzed through a feminist perspective.

Resumo

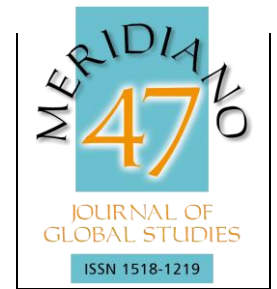
Este artigo tem por objetivo responder à pergunta: de que forma a perspectiva feminista pode auxiliar na compreensão da Segurança Alimentar? Para responder ao questionamento, foram feitas análises estatísticas de dados da Organização das Nações Unidas para a Alimentação e Agricultura sobre dois Objetivos do Desenvolvimento Sustentável: ODS 2 e o ODS 5. O artigo também propõe uma discussão baseada na revisão literária que relaciona os ODS. Dois pontos principais foram observados: (1) que a Segurança Alimentar precisa ser analisada através de uma perspectiva holística, envolvendo todos os níveis; (2) objetos assumem interpretações diferentes quando analisados pela perspectiva feminista.

Keywords: Food Security; Feminism; Sustainable Development Goals.

Palavras-chave: Segurança Alimentar; Feminismo; Objetivo de Desenvolvimento Sustentável.

Submetido em 09/06/2023

Aceito em 27/12/2023



Introduction

Since the creation of the International Relations field, the International Security Studies (ISS) has based itself on fundamental questions that promoted the debate in the study area, and approaches known as traditionalists had been used as answers to those questions for a while. Those approaches are based in a state-centric conception of International Security, what means that the state is the main referent object¹ in the center of those theories. The external world is treated as a permanent threat to the state, and military power is the best way to deal with this scenario.

In the 1980's, scholars found the need of enlargement of the ISS, and other perspectives, that were not focused on the state emerged, giving space to subjectivity. Authors such as Ullman (1983) and Buzan (1983; 1991) begun to update the field of ISS in order to incorporate other actors beyond those linked to the military power, as well as new threats such as environmental threats, threats on the availability of food and domestic threats.

The idea of Human Security emerges as an answer in this scenario. There were, also, the necessity to understand the level of individual analysis on no-western and marginalized perspectives on International Relations, giving space to the Postcolonial and Feminist schools.

The present aims to explore an idea of Food Security as part of ISS debate using the Feminist school perspective. The question that underlines this research is: how the feminist perspective can help on the understanding of the Food Security debate? In order to answer this question and reach the research objective we used a statistical data analysis on the SDG 2 (zero hunger) and on the SDG 5 (gender equality) from the Food and Agriculture Organization (FAO), as well as a literary analysis on the theme was done.

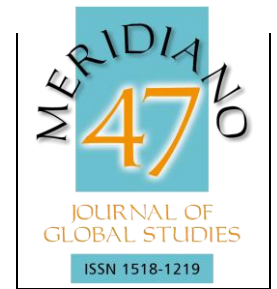
1. International security and its different referent objects: reviewing concepts

1.1 The state security

ISS as a study field grew considerably during the second half of the 20th century and a lot of it is credited to the Cold War scenario. In this context, the field of ISS rose as an answer to this bipolar world. In a time marked by an arms race between the two great powers, the process of securitization revolved around issues tackling military power and arms race dilemma (Morgenthau, 2003). Those issues are deeply related to an idea of protecting the sovereign state, rather than those individuals living within it.

Buzan and Hansen (2009) divide the ISS into four main themes: "to privilege the state as the referent object, whether to include internal as well as external threats, whether to expand security beyond the military sector and the use of force, and whether to see security as inextricably tied to a dynamic of threats, dangers and urgency" (Buzan and Hansen, 2009, p.10). The focus on the first theme

1 The referent object is the actor that shall be protected from a given threat.



was prominent in the ISS until the decade of 1970s, when the debate shifted to encompass a reformulation of classical realist thought, known as neorealism.

Kenneth Waltz's book *Theory of International Politics* turned neorealism into a predominant school of thought, offering a systemic interpretation of international politics. This approach replaced the emphasis in human nature to explain the state's behavior for the anarchic structure of the international system. The idea of anarchy as an intrinsic feature of the international system would make the pursuit of the state's security even more conflictful, and this structure would be a fundamental cause for wars (Wohlforth, 2010), once it compelled states to act based on the principle of self-help.

However, the neorealism theory was not enough to answer questions that arose in the international system after the Cold War (Wohlforth, 2010). This context created a symbiosis between the increasing bellicose power of the countries and the insecurity installed in the international system, it justified the behavior of the states in an environment of quarrelsome relations – characterizing the security dilemma (Herz, 1950). For the (neo)liberals, this dilemma was a distortion of the reality in which the states interpreted as offensive the defensive intentions of others, which could be repaired by the creation of international institutions and accords (Buzan and Hansen, 2009). Even though neoliberalism included new variables to the debate on international security, it is, still, has the state as its central referent object.

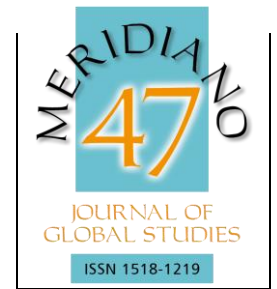
With the enlargement of the conception of security and the perception that a lot of the threats were happening inside the states, and not between them new approaches arose (Buzan, 1991; Buzan; Hansen, 2009; Lago, 2013). The studies of Judith Ann Tickner are inserted in this context of an expanded debate on international security. To Tickner (1992), the reformulation of the security definition was necessary to address the level of gender hierarchy² and gender domination of the ISS field, which can be an obstacle to a broader definition of security threats – considering the terms of Buzan (1983).

To Buzan (1983), the individual aspects of security draws upon social threats, that are: "those arising from the fact that people find themselves embedded in a human environment with unavoidable social, economic and political consequences" (Buzan, 1983, p.19). Buzan (1983) presents these social threats in four main themes: physical threats (pain, threats to rights guarantees), economic threats (access to work, resources, and propriety), threats to rights (civil freedom) and threats to the individual's position or status (humiliation and degradation). Considering these threats, the author links the individual level and the state level of analysis, which we will discuss later in this paper.

Barry Buzan (1983) argues that five big sectors affect the security of human collectives: the military, the economic, the societal, and environmental sector³ (Buzan, 1991). The enlargement of the

² The idea of gender compass structural relations of power in the security issues – which includes dynamic relations of power between the identities of men and women embodied in the concept of gender.

³ Environmental, here, refers to the maintenance of the local and planetary biosphere as the essential support to all human activities.



concept of security allowed the insertion of populations as subjects of the security debate and the possibility of a broader referent object “combining threats that affect the individual directly (for example, the ethnic violence or genocides promoted by a state) or indirectly (as the lack of resources provoked by environmental degradation)” (Rodrigues, 2012, p.16, free translation)⁴.

1.2 Environmental Security

Between the decades of 1950 and 1970, the world faced a series of environmental accidents and disasters. The world was facing the consequences of industrialization, such as the rising levels of atmospheric pollution and acid rain. In these scenarios emerged a greater number of scientific works related to these threats.

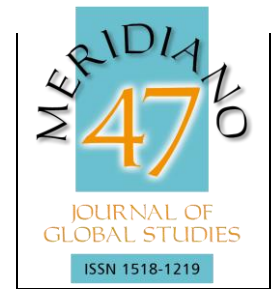
In the year of 1968, The Club of Rome debated the impact of environmental changes in the politics and in the economy of developed countries. Between 1971 and 1972, the study called Limits to Growth gained importance, paving the path to the United Nations Conference on the Human Environment (Lago, 2013).

During the Stockholm Conference, the industrialized countries and the underdeveloped countries disassembled and each pursued only their own group interests. This conference was an important step to the Environmental Security study field, since it was the first major conference that debated issues on environmental threats on the international level. In the conference, the members debated themes surrounding how human action influenced environmental degradation and led to threats against the well-being of the humankind, as well as the association between humans and nature.

The Stockholm Conference paved the way for the securitization of environmental matters and generated content for studies. Twenty years later, in the United Nations Conference on Environment and Development, the main topic was no longer atmospheric pollution, but sustainable development and climate change. The International Climate Change Regime was created as well as its principal tool, the United Nations Framework Convention on Climate Change – UNFCCC. The UNFCCC has in the International Panel on Climate Change – IPCC – the agent responsible for compiling the data on the impact of human activity on the system ground-plant-atmosphere.

Securitizing environmental issues means placing them at the top of the priority agenda, giving a sense of priority to policies on the environmental security (those expected brief period) and on indirect environmental threats (the ones expected in a larger time horizon) (Carrapatoso, 2011; Lodgaard, 1990). To Buzan, Wæver, and De Wilde (1998), three elements define environmental security: the ones that exist without human intervention; the human activities in the natural systems that depict existential threats to (parts of) the civilization; and those caused by human exploration in the regional and local level. Scholars also point out that the complexity of the environmental issues is

⁴“combinando ameaças provocadas diretamente sobre os indivíduos (por exemplo, a violência étnica ou genocídios perpetrados por um Estado) ou indiretamente (como a escassez de recursos derivada da degradação ambiental)” (Rodrigues, 2012, p.16).



due to the variety of problems that exist in this agenda. Those issues are often overlapped among each other, such as the population issues, problems on the food supply, and civil conflicts (Buzan, Wæver and De Wilde, 1998).

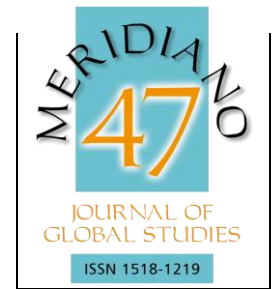
The reflections on Environmental Security can be traced back to the UN acting to mediate policies based on the interests of each state with the necessities of global environmental politics and the future of the Earth's residents (Zwierlein, 2018). In 1971, Sprout and Sprout (*apud* Tickner, 1992) argued that the interdependence of the global ecosystem through borders prevents the separation of the domestic and international matters in environmental matters. In 1987, the Brundtland Relatory asked for more commitment from international institutions and more willingness from the states to commit to these institutions. On the other hand, some believed that the supervision of the environment should begin on the local level, with the involvement of civilians (Buzan, Wæver and De Wilde, 1998).

It can be observed that, Environmental Security is related to the preservation of the environment itself, but another concern is on the preservation of civilization. In that matter, two referent objects are proposed by Buzan, Wæver, and De Wilde (1998): the environment and the link between environment and civilization. Whenever environmental issues are brought to a smaller level, as when desertification is replaced by a more local issue like the impoverishment of the soil, it's noticeable that Environmental Security is a problem to the lives of individuals. However, when treating securitized issues, some actions can impact men and women in different ways, especially if security is widely conceptualized (Hansen, 2006).

In this context, the analysis of Environmental Security through a feminist perspective presents a peculiar understanding of the matter, since the rise of both fields in the international politics sphere happened at the same time. Nicole Detraz (2009) investigates the relation between security and the environment, bringing up feminist critics to the academic debate on three themes: environmental conflict, environmental security, and ecologic security. On the first approach, the possibility of violent conflicts increases while the natural resources storage decreases, in this case, feminism critics the statecentrism and negligence to understand gender as a prompter to environmental conflict. To the feminists, the supporter scholars of this idea wrongly understand security, once they use only the state as a level of analysis, ignoring other levels, as well as how women understand these scenarios. Also, the mobilization of ideas such as "scarcity", also, does not consider links between nature and humans, once it implies that nature is a storage of resources prone to be used by humans.

In the second approach, the concern is with the negative impact of environmental degradation on humans, which is more related to the human security debate because of themes such as globalization, the rise of population, and sustainable development. The feminist perspective and the second approach are closer to each other, but this approach also ignores the gender analysis in the human/nature relation, the specific necessities of women, and a bottom-up analysis (Detraz, 2009).

The ecologic security approach, on the other hand, treats the natural resources as part of the whole environment, and not as things available to human consumption. According to Detraz (2009), the rejection of the idea of exploring those resources reflects the feminist rejection of the dominant



patriarchal society established in the relation between man/nature. However, the ecologic security approach does not encompass the different impacts of environmental degradation on men and women. According to the author, there are still a considerable gap in the incorporation of gender into the security and environmental debate. The incorporation of the feminist perspective can be very enlightening on the links between these spheres.

To think of a gender focused Environmental Security, some relevant points can be observed: a multilevel analysis of security, with special attention to the individuals and social groups that face insecurity; understanding the individual as close to the environment and not departed of it; understanding of the relation of the individuals among themselves and other groups that also face insecurity; taking into account historical and contextual factors that have an emphasis on gender relations; finding solutions to the environmental security that rejects the social/institutional dominant structure (Detraz, 2009).

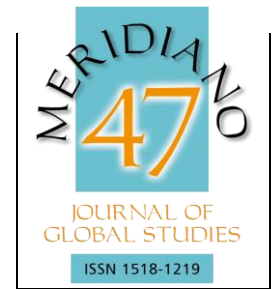
The realist perspective, on the other hand, sees natural resources as a source of power for the state or as a lucrative space on the verge of domestication. Emphasizing nature self-sufficiency in wartimes, feminist perspectives can offer insights on how understanding the natural environment can be useful to think a holistic and systemic idea of Environmental Security (Tickner, 1992).

In 2015, some of those insights were inserted in the 2030 Agenda. Through 169 objectives distributed between 17 Sustainable Development Goals, this agenda embodies the goals that were not reached on the Millennium Development Goals list and aims to ensure human rights to all individuals. The 2030 Agenda also integrates and merges three dimensions of sustainable development: the economic, social, and environmental, promoting actions in crucial areas for humanity and the planet in the next 15 years, such as end hunger, promote sustainable agriculture (SDG 2), and reach gender equality and feminine empowerment (SDG 5).

It is important to observe that the conceptions of Environmental Security presented here are greatly based on Tickner's book, *Gender in International Relations: Feminist Perspectives on Achieving Global Security*, from 1992. In 1994, the United Nations Development Program – UNDP published the Human Development Report, which encompassed the idea of Environmental Security within the idea of Human Security, which will be treated in the next section.

1.3 The individual security

The studies on Human Security are relatively new in the ISS, even when considering the enlargement of themes that are encompassed by the security studies (Ullman, 1983; Buzan, 1983). UNDP conceptualized Human Security in 1994, through the Human Development Report, and embodies the individuals as the analytic focus. It is concerned with "how people live and breathe in a society, how freely they exercise their many choices, how much access they have to market and social opportunities and whether they live in conflict or in peace" (PNUD, 1994, p. 23). This caused an increase in the number of referent objects, threats and extends the possibility of securitization to other



sectors, such as food security, health, environment, population growth, economic inequalities, drug trafficking, and terrorism (Buzan and Hansen, 2009).

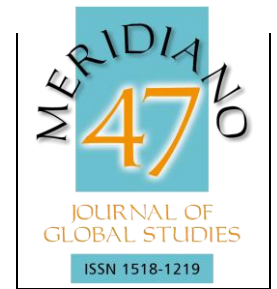
The UNDP's Report (1994) stated that Human Security studies base themselves on seven main points of analysis: economics, food, health, environment, community, political and personal points for security. Alencar (2015) proposes to understand Human Security through a relation of interdependence, considering the level of linkage between the points presented by UNDP. This means that when one of them is threatened, this status of insecurity expands to other points. In this scenario, the threats could be considered transnational, once that borders can not be ascribed to such threats (Oliveira, 2009). This argument reflects an interdependent world since preventing these threats needs to be done through cooperation between the states. According to Gasper and Gómez (2015):

A focus on how people live and can live, and the function of looking at priority values and priority threats, require a transdisciplinary holistic perspective, at least periodically, in order to see linkages and to draw comparisons across 'sectors' to try to ensure priority attention to the threats most relevant in the given time and place (Gasper and Gómez, 2015, p.100).

State security, also, is linked to individual security. As presented by Buzan and Hansen (2009), the state acts as a solution to personal insecurity. Considering a Hobbesian approach: in the state of nature, the individuals lived in constant fear of each other because of the lack of authority to ensure survival or promote sanctions. In this scenario, a sovereign institution would grant the necessary security for those under its protection, decreasing their vulnerability. In return, those individuals would legitimize the institution's authority to use violence.

However, insecurity can come from the state itself and be experienced in different ways. Buzan and Hansen (2009) present two arguments that validate this point: one that states are incapable of supplying the promised security to those under its protection; other that states – especially the non-democratic ones, but not only those – frequently threaten their own citizens, either through arbitrary decisions or by attacking their personal security through political persecutions. Therefore, analyzing, and understanding, security by employing new approaches beyond the state-centric ones, is essential. The enlargement of the security agenda and the focus on the individual allow the analyst to integrate the non-state perspectives into security theories. According to Owen (2004), security should be set through levels of severity, not distinguishing deaths caused by environmental disasters, sickness, or war, because all these factors have the same potential to threaten Human Security. Owen (2004) argues that such threats would be determined by international organizations, NGO's or governments. This type of top-down analysis of threats doesn't have the necessary holistic extension, as observed by Hoogensen and Stuvøy (2006). Bringing gender to the Human Security analysis allows a more empirical and contextualized definition to the individual level.

The Feminist Security Studies (FSS) emerged at the end of the decade of 1970 and is defined by the emphasis on the differences rather in the similarity between it and the other theories of International Security (Griffiths et al., 2009; Wibben, 2011). The basis of this difference is the fact that women have knowledge and experiences that must be conveyed in the studies of International



Relations, especially in the ISS field. The feminist school of thought in this study field advocates for an enlarged concept of security able to strengthen simultaneously the different levels of analysis – the international, the domestic, and the individual. Feminist theories build knowledge through investigations based on listening and understanding the subjective meaning that women assign to their experience.

The feminist perspective is transdisciplinary and aims to understand unequal gender hierarchies and their effects on societies (Narain, 2014). This approach also defies and deconstructs traditional concepts centralized in external threats to the state, redefining security to include historical inequalities of race, class, and gender (Tickner, 2001). In every country, threats against human lives take on different forms, but the worst ones are the ones that victimize women (UNDP, 1994). According to the UNDP Report (1994), there is no equal treatment of women in any society: At work, they are the last to be hired and the first to be fired. And from childhood through adulthood, they are abused because of their gender. (...) True, women are getting better educated and entering employment, often as primary income-earners. Millions of women are now heads of households—one-third of households in the world as a whole, and up to one-half in some African countries, where women produce nearly 90% of the food (PNUD, 1994, p.31).

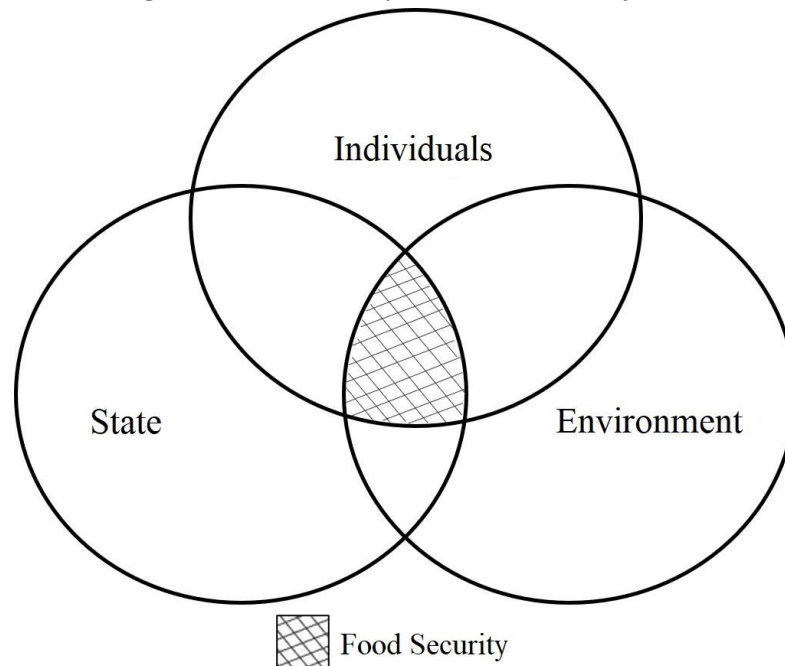
The gender analysis aims to reframe the definition of security to reflect the world of those that experience all manifestations of insecurity in their day-by-day (Hoogensen and Stuvøy, 2006). In this context, it is important to understand that different experiences among women generate different points of view and narratives to the idea of security, defying the traditionalist approach and bringing the individuals to the political arena. The relation between the individual and the collective level needs to be considered since the security dynamic happens between societies as well as inside them (Buzan, 2004).

The concept of individual security is inwardly interlinked to other concepts such as states and the international system. In this scenario, holistic analysis are needed. Even though it is possible to understand individual security, national security, and international security as different, reaching a complete understanding of each of these concepts can only happen if they are related to each other, or if the influences they have on each other are understood. Thus, the objective of this paper is to employ the feminist perspective to understand Food Security at the individual level, but respecting the analytical multiplicity and influence of the other two levels of analysis. Along these lines, the next section will explore a holistic perspective of International Security.

2. Food security and the feminist perspective: the link between SDG 2 and SDG 5

The Food Security definition is aggregating once it makes possible the study in different levels of analysis considering that the concept assembles multiple referent objects, such as the individual, the state, and the environment, as illustrated in Figure 1:

Figure 1: Food Security and its referent objects.

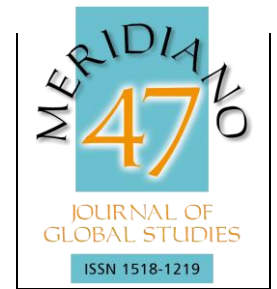


Source: Created by the authors

FAO (1996) defines Food Security as the access of everyone, at all times, to enough food to sustain a healthy and active life. Three points need to be taken into account: (1) the availability of food (effective supply); (2) access to food (the ability of individuals to obtain enough effective demand); (3) the reliability of the two latter points (the use of food). In this context, food insecurity is a failure in the availability, access, and reliability of nourishment, or a combination between any of those factors (FAO, 1996).

Besides, food insecurity can be observed in the different levels of analysis (World Bank, FAO and IFAD, 2009). At the international level, the availability of food is affected by the growing world population and the insufficient productivity of agricultural production, the susceptibility to plagues and vegetal diseases, and the bad use of the soil, among other factors. At the national level access to food can be affected either by the national production as by the state's access to food in the global market, the gains in foreign currency, and the population's expenditure choices. At the individual level, the use of food in the family environment is conditioned by food production and the ability to obtain quality nourishment with the necessary nutritional diversity.

However, stronger analysis can be executed at the individual level "because only through understanding who consumes what can we appreciate the impact of sociocultural and gender inequalities on people's ability to meet their nutritional needs" (World Bank, FAO and IFAD, 2009, p.14). As stated by Tickner (2004), we observe the world in a dichotomic way, and it reflects on the way we understand gender, especially considering how knowledge and behavior are structured in our



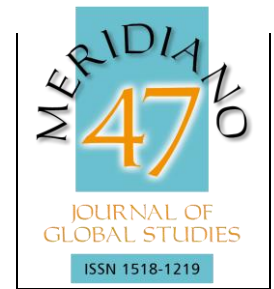
society. As a society, we associate the category “man” with being a protector and a provider, while “woman” is associated with vulnerability and the inability to manage resources. These characteristics used to describe men and women, reinforce the patriarchal structure of social relations, and on agricultural societies justifies the lack of public policies to assure access to land and credit to women, decreasing women's autonomy. As agriculture became a manufacturing industry that requires the use of technology to manage nature, this social sphere was even more associated with men, the defender of the state. Hence, women were excluded from this process and were assigned to chores of coordination and care in the private sphere, as the provider of necessities and defenders of moral values that don't find a place in the market economy (Tickner, 1992).

Some scholars divide the feminist school of social sciences in generational cuts called waves (Krolokke and Sorenson, 2006). The first two waves, which happened respectively in the beginning of the XXth century and middle to second half of it, focused on the need of political and social rights, as well as on inequality, violence and discrimination against women. The third wave, that begun in the 1990s, debated issues surrounding race, class, ethnicity, religion, and nationality. The fourth wave is currently in construction, but there are some divergences in its actual existence, as presented by Shiva and Kharazami (2019).

Those that use the separation of third and fourth wave, relate the 4th wave to the combat of violence against women, payment inequalities and online movements. This paper, so, is inserted in the fourth wave of feminism, encompassing discussions from the second and third wave, but under a new perspective connected to technological innovation. Bringing up the empiric data on women's experience in Food Security allows the enlargement of the idea of “security”, as well as makes it possible to understand gender hierarchy in the scenario of agriculture evolution, a necessary point to understand the holistic relation between feminine protagonism and Food Security.

This paper, so, is inserted in the fourth wave of feminism, encompassing discussions from the second and third wave, but under a new perspective connected to technological innovation. Bringing up the empiric data on women's experience in Food Security allows the enlargement of the idea of “security”, as well as makes it possible to understand gender hierarchy in the scenario of agriculture evolution, a necessary point to understand the holistic relation between feminine protagonism and Food Security.

An analysis that interlinks the Agenda 2030's SDGs allows observations of the connections in the social, economic, and environmental aspects of the world. As stated by Griggs et al. (2017), all SDGs interact with each other, because they are an integrated set of interdependent global priorities and goals. Even though most of the 17 SDGs have a clear central point, based on one of the three main aspects of sustainable development (social, economic, and the environmental sphere), most of them encompass all three aspects. So, reaching the goals of SDG 2 will make it possible to reach women's empowerment and gender equality, because it creates opportunities for women's development; reaching SDG 5, on the other hand, ensures more sustainable food production through women's participation in agriculture (Griggs et al., 2017).



Griggs et al. (2017) propose a score to identify the level of causal and functional relations on the progress of the achievement of the SDG, varying from +3 to -3 (Table 1).

Table 1: Interaction scores of SDG 2 and SDG 3

Score	Interactions	Description	Goals	
			SDG 2	SDG 5
-3	Canceling	The progress on achieving one SDG makes it impossible to achieve the other, canceling the second one.	-	-
-2	Counteracting	Achieving one SDG neutralizes the other (or gives space to a potential collision to the other).	-	-
-1	Constraining	Achieving one SDG creates a restriction to reach other SDG.	-	-
0	Consistent	There are no meaningful interactions between one SDG and the other (or the interactions are not considered either positive or negative).	-	-
+1	Enabling	Reaching one SDG creates conditions to promote another.	2.a	5.b
+2	Reinforcing	Reaching one SDG creates direct conditions to reach another SDG.	2.1	5
			2.2	
			2.3	5.5 5.a
+3	Indivisible	Reaching one SDG is inextricably linked to the conditions to reach the other SDG.	-	-

Source: created by the author, based on Griggs et al. (2017).

Complementary, some dimensions affect this score and describe the interactions and their context, as time, geography, governance, technology, and targeting. Through the score, it is possible to perceive how influential an SDG can be to another (Griggs et al., 2017). According to the authors, the structure of the score was projected to detect interactions between the SDGs either in a broad level, as in a smaller level, such as perceiving individual action, making it possible to apply this model in different geographic scales (the local and the global scale).

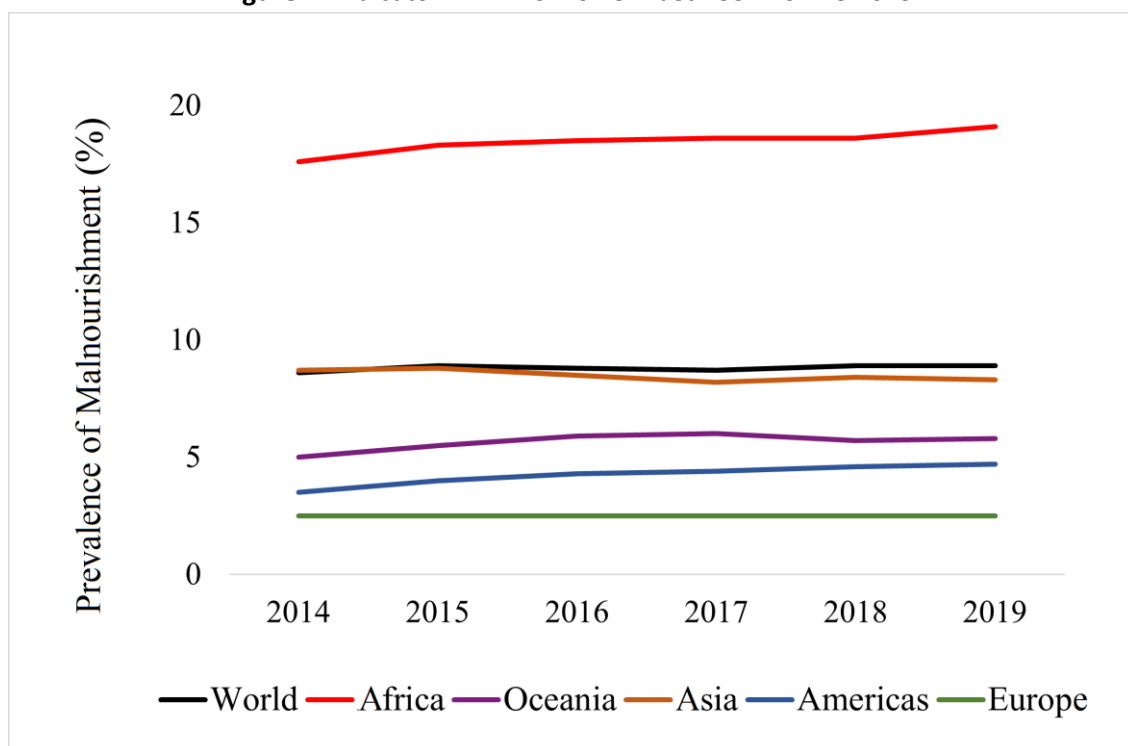
As presented in Table 1, Griggs et al. (2017) identify interconnections between SDG 2 and 5 with a positive score. Ending hunger, reaching Food Security, promote better nutrition, and promote sustainable agriculture are the proposals of SDG 2. On the eight smaller goals present on this SDG, four interact directly to three smaller goals of SDG 5, beyond the main proposal of the SDG itself – reach gender equality and empower girls and women.

Goal 2.1 from the SDG 2 has as its objective end hunger and grant access of all people to safe, nutritious nourishment enough for an entire year, in particular to poor people and people in vulnerable

situations, until the year 2030. Poverty must be considered not only through monetary measurements in order to perform a strong research, but other indicators also must be used to describe poverty, such as access to energy, nutrition, health, and the allocation of time, as well as social indicators as the mortality rate of both children and adults, and these indicators can diverge when gender is added to the analysis (DOSS et al., 2018; SEN, 1998). It's possible to identify the interlinks between gender and poverty through national researches, specially because those can recognize variations through countries and regions.

Besides, goal 2.1 incorporates two indicators that allow the measurement of its progress: Indicator 2.1.1, related to the prevalence of malnourishment, and indicator 2.1.2, related to the prevalence of severe or moderated food insecurity in the population. Prevalence of malnourishment is an estimation of the proportion of the population whose alimentary consumption is insufficient to provide levels of dietetic energy needed for a normal, active, and healthy life (Figure 2).

Figure 2: Indicator 2.1.1 from SDG 2 between 2014 e 2019.

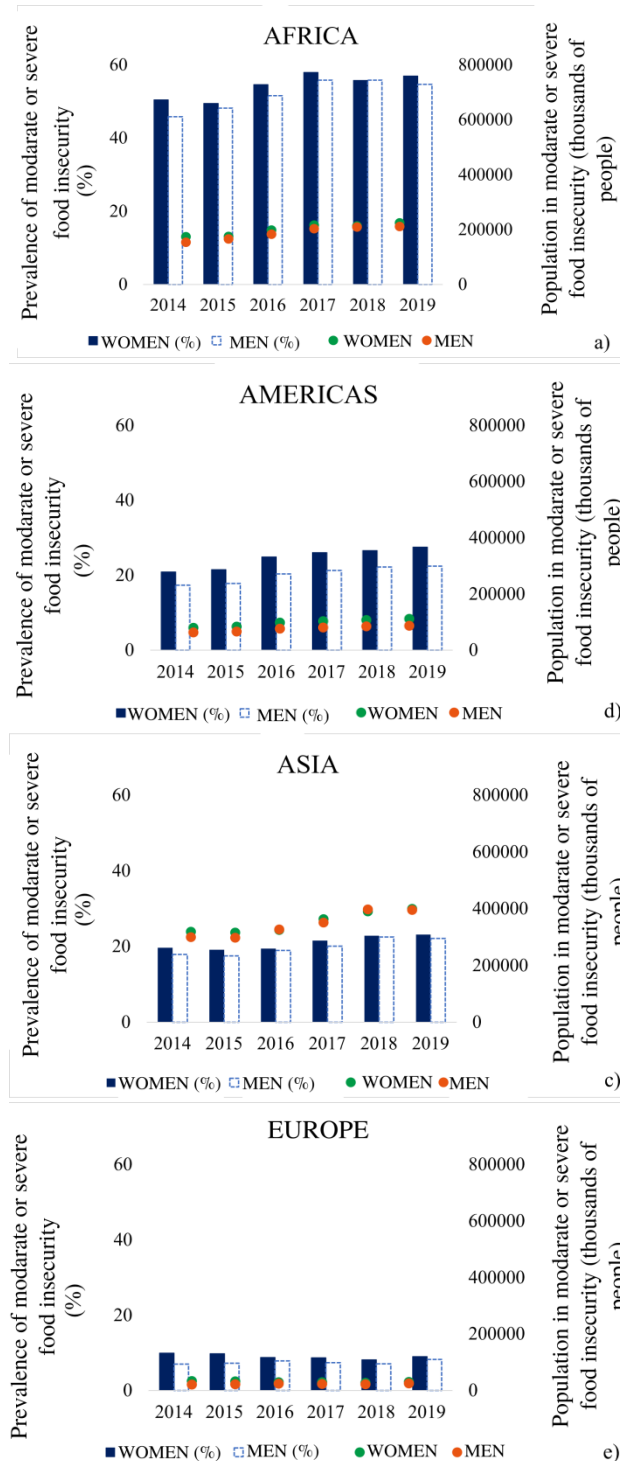


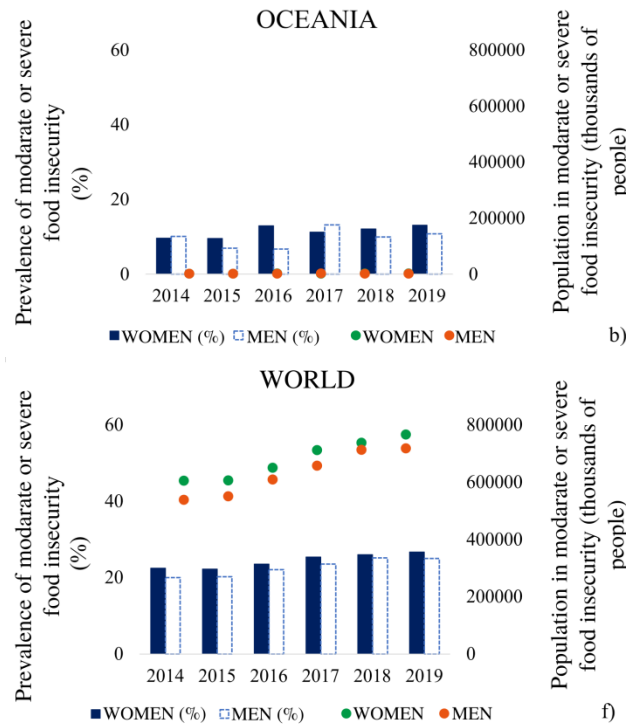
Source: created by the author with data obtained in the FAO (2020a) website.

In Figure 2 we can observe that between 2014 and 2019, the prevalence of malnourishment was bigger in Africa and smaller in Europe. This indicator is associated with the prevalence of people in food insecurity, which gives us data to compare the proportion of people that faces difficulties of access to food. With the data collected by FAO on the indicator (2020a; 2020b), it is possible to observe

the amount of population that faces food insecurity and the prevalence of food insecurity (Figure 3) by continent and by sex.

Figure 3: Indicator 2.1.2 of ODS 2

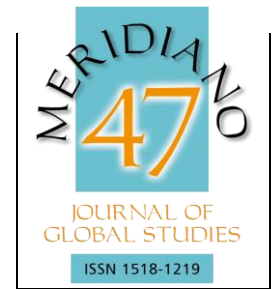




Source: created by the author with data from FAO (2020b).

In both indicators, women are considerably inserted in food insecurity contexts. We can conclude that malnourishment and food insecurity can be related: Both Africa and Asia have the biggest percentages of malnourishment and more people in food insecurity contexts. In Africa, the amount of people in food insecurity is about 200 million people (with 60% prevailing on food insecurity), in Asia this number is close to 400 million (with 20% prevailing on food insecurity). On other continents there are variations in the numbers: In Oceania, there is a considerable difference in the numbers (especially considering the differences between gender) and in the Americas, there are growing numbers of food insecurity. Food insecurity generate a considerable increase in malnourishment numbers, which can be related to poverty. According to Alderman (2005), having a nutritious diet can be economically expensive, costing almost 10% of a person’s income during their lifetime and about 2% to 3% of a country’s GDP in more affected countries.

However, we can associate poverty with a lot of different elements in each region, so, it is necessary to analyze each person’s context to understand food security objectively. Agbodji, Batana, and Ouedraogo (2013) have stated that individual’s privation of different dimensions of welfare changes according to the locality, however, it’s possible to observe elements of gender inequality on all of them. Employment, education, and access to credit are the topics in which we can observe most inequalities, indicating that women face multidimensional privation in different patterns. Furthermore, Agdodji, Batana, and Ouedraogo (2013) stated that rural households tend to be poorer than urban households in the countries studied.

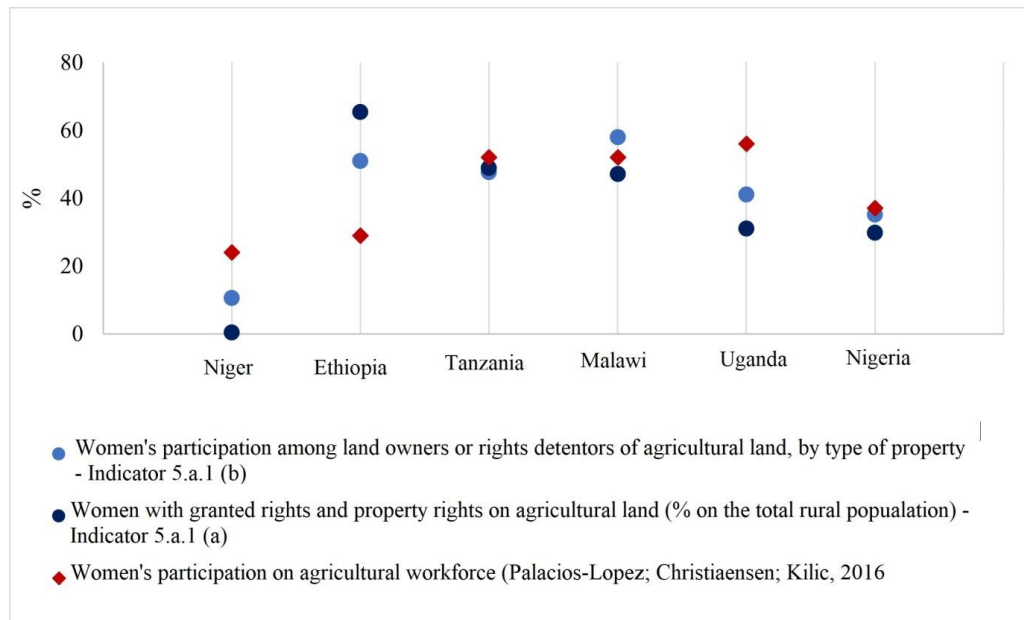


To have “End world hunger” as a goal, it's necessary to understand who is hungry, how food will be delivered to these people, the availability of nutritious food, and the groups that face the most hardships. Understanding the influence and the weight of such dimensions in each country and individual context can help create policies directed to Food Security, as well as to provide reforms and economic incentives needed to tackle it. Applying these matters, it is possible to fulfill goal 2.2. Goal 2.2 aims to end all types of malnourishment until 2030, including ending chronic malnourishment of kids under five years and meeting the nutritious needs of girls, teenagers, pregnant and lactating women, and elderly people. The fulfillment of SDG 2.1 and 2.2 creates direct conditions to reach gender equality and empower women and girls.

Goal 2.3 aims to double the agriculture productivity and small producer's income, and also scores +2. The category of small producers includes women, indigenous farmers, shepherds, and fishers. Goal 2.3 plans to increase productivity and income through safe and equal access to land and to productive resources, knowledge, financial services, markets, opportunities of value aggregation, and non-agriculture employment. Reaching this goal create conditions to guarantee the full participation of women in leadership roles in all levels of decision-making (goal 5.5).

According to Doss et al. (2018), to reach Food Security, it's necessary to understand the restrictions associated with gender and work to decrease their impact on women's agricultural work. Understanding those restrictions is important to formulate specific policies for rural women's access to decision-making mechanisms. By recognizing that agriculture is crucial to rural women, it's possible to increase agricultural productivity and decrease the time spent on domestic services, as well as the load of work attributed to women (Doss et al., 2018). Increasing productivity in women's and small producers' agricultural production can create direct conditions to undertake structural reforms and grant them equal rights to the economic resources, as well as access to land and economic resources such as credit and heritage. In Figure 4, we can observe that there is a relation between the rights of women to control land and their participation in agricultural work.

Figure 4: Women’s participation in agricultural work and possession rights to agricultural land

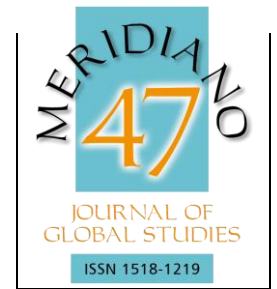


Source: created by the author with data from FAO (2020c; 2020d) and Palacios-Lopez, Christiaensen and Kilic (2016).

Most of the agricultural work in Africa is attributed to women (FAO, 2011), which motivated researchers to understand their role in agricultural activities. This is necessary to both increase female empowerment and reach a satisfactory supply of food to the continent, linking SDG 2 and 3. Palacios-Lopez, Christiaensen, and Kilic (2016) found a considerable difference among six Sub-Saharan African countries, using individual data from domiciliary researches. To review the belief that women are generally responsible for between 60% and 80% (UNECA, 1972) of agriculture work in Africa, the authors were able to observe that there wasn’t any pattern among countries.

Niger, Ethiopia, Tanzania, Malawi, Uganda, and Nigeria are all Sub-Saharan African countries with a large variety of environments and that had a large variety of outcomes in the research on feminine participation in agricultural work. Feminine participation was bigger in Uganda (55%), Tanzania (52%), and Malawi (52%) (Palacios-Lopez, Christiaensen and Kilic, 2016). On the other hand, feminine participation was smaller in Niger (24%), Ethiopia (29%), and Nigeria (37%). Relating the data obtained by Palacios-Lopez, Christiaensen, and Kilic (2016) on their research with FAO’s Indicator 5.a.1 (FAO, 2020c), we can observe that the number of landowner women with propriety rights to their land were bigger in the three countries with larger feminine participation on agriculture.

This preliminary observation may have influence of other variables and contexts – once more researches and data are necessary to make a stronger comparison. However, it is important to reflect on the observations made in this paper, once there is a noticeable link between SDG 2 and 5. Beyond that, even if it contradicts the idea of women’s acerbate participation in African agriculture, understanding these differences in a regional level and using the real numbers on their participation



can be fundamental to direct investment and public policies to reach more equality. We need researches at the local level to understand gender inequality when it comes to Food Security.

At last, we can observe an interaction with a +1 score between goals 2.a and 5.b. Goal 2.a aims to increase investment in rural infrastructure, research, and expansion of agricultural and technology development services, as well as the expansion of gene banks of animals and plants to increase agriculture capacities in developing countries. The path to reach this goal can positively impact goal 5.b, which aims is to increase the use of base technology, especially technologies of information and communication, to promote female empowerment.

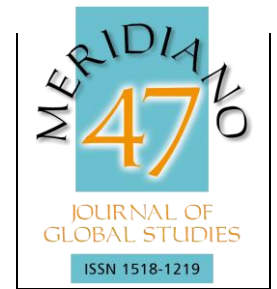
According to FAO (2020c; 2020d;), investment in agriculture aims to increase the production capacity in the sector. To reach it, it is necessary scientific knowledge to better conduct the invested money. The fourth wave of feminism, as previously stated, is based on a strong technological use, as in considerable growth in access to information. Knowledge can be a strong tool for feminine empowerment in Food Security. Reconciling the empiric reality of women and the transmission of professional knowledge can link individuals, the environment, the state, and Food Security in a way that is sensitive to gender inequality.

Conclusion

The state's sovereignty and territorial defense are still on the top of most security agendas. Even though some authors are giving space to new perspectives, the fear of the "other" and the defense of what is "mine" is still a primary concern for countries – maybe in a less aggressive way, but still present even when unsolved questions such as the crescent population growth and the persistence of hunger on more the 820 million of people are still around (FAO, 2019). In the current situation, with environmental negotiations being pushed to the next generations and gender equality is still not a reality, there is a need for integration of this subjects to ISS.

Food Security is a great example of a subject to a holistic analysis of International Security when it comes to cooperation and comprehension between the research levels. It's a chain reaction: the issues related to food supply can impact the state, as well as on its sovereignty; these issues also influence the environment; it also allows the access and supply of food to the individuals. Feminism's role is fundamental to understand the dynamics of gender in this scenario, bringing these issues to the center of the political debate to create positive decision-making scenarios for the state, the individuals, and the environment. Adding debates on gender to matters of security does not create an analysis with a smaller scope, instead, it creates possibilities for policies and political programs with more accurate targets.

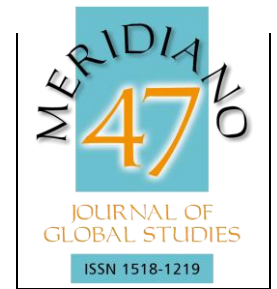
The links between the SDGs strengthen the understanding of feminine protagonism in Food Security. Adding women as contributors to Food Security can prevent distortions on policies that disregard heterogeneity among women. Considering variables beyond gender can also be relevant to create policies, both for the domestic and the international sphere (Chant, 2008; Doss et al., 2018; Tickner, 2005;)



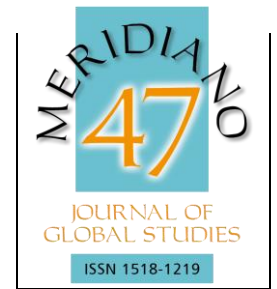
According to Tickner (1992), the feminist school of thought states that a state's domestic policies can't be separated from its behavior in the international system. Understanding how the SDG work and interact on the local level and what are the dimensions that influenced its indicators, it's possible to understand better what are the necessities of a location when it comes to reaching the main objective here, end hunger and reach gender equality. To do so, it's necessary to increase the amount of research on the interaction between SDGs, as well as on the development of theoretical approaches and methodological tools that guide policymakers, investors, and actors to identify and administrate the actions to achieve the goals in question. The understanding of nature and the dynamics of interaction between the SDGs must go beyond the trade-offs and synergies, it is necessary to understand the different implications that may exist among the contexts in which they are inserted. The construction of this specific knowledge basis can be a key to understand the particularities of each reality and allow those policymakers to support decisions, policies, and implementation strategies to reach those goals, as well as to increase the interaction scores among the SDGs.

References

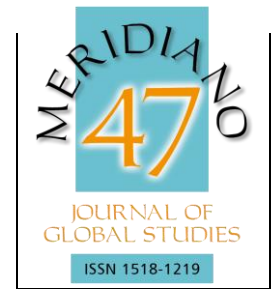
- Alencar, M. N. (2015) 'Debates dos Estudos de Segurança Internacional e Segurança Humana: uma breve análise sobre a evolução dos Estudos de Segurança'. *Conjuntura Global*, v.4, n.2, p.185-195.
- Agbodji, A.E.; Batana, Y.M.; Ouedraogo, D. (2013) 'Gender Inequality in Multidimensional Welfare Deprivation in West Africa: The Case of Burkina Faso and Togo'. Oxford Poverty and Human Development Initiative [Online] <https://ophi.org.uk/gender-inequality-in-multidimensional-welfare-deprivation-in-west-africa-the-case-of-burkina-faso-and-togo/> (accessed 15/03/2021); DOI: [10.1596/1813-9450-6522](https://doi.org/10.1596/1813-9450-6522).
- Alderman, H. (2005) 'Linkages between poverty reduction strategies and child nutrition'. *Economic and Political Weekly*, v. 40, n.46, p. 4837-4842.
- Baumgardner, J. (2011) 'F'em!: Goo Goo, Gaga, and Some Thoughts on Balls'. Seal Press, Seattle.
- Buzan, B.; Hansen, L. (2009) 'The Evolution of International Security Studies'. Cambridge University Press, Cambridge.
- Buzan, B. (2004) 'A Reductionist, Idealistic Notion That Adds Little Analytical Value'. *Security Dialogue*, v.35, n.3, p. 369-370; DOI: [10.1177/096701060403500326](https://doi.org/10.1177/096701060403500326).
- Buzan, B.; Wæver, O.; De Wilde, J. (1998) 'Security: A New Framework for Analysis'. Lynne Rienner, Boulder.
- Buzan, B. (1991) 'People, States and Fear: An Agenda for International Security Studies in the Post-Cold War Era'. 2^a ed. Harvester Wheatsheaf, London.
- Buzan, B. (1983) 'People, States, and Fear: The National Security Problem in International Relations' Harvester Wheatsheaf, London.
- Carrapatoso, A. (2011) 'Security and the environment: what is at stake?' in Schuck, C. (ed). *Security in a changing global environment: challenging the human security approach*. Nomos Publishers, Baden-Baden, p. 211-233.
- Chamberlain, P. (2017) 'The feminist fourth wave: Affective temporality'. Springer, New York City.
- Chant, S. (2008) 'The 'feminisation of poverty' and the 'feminisation of anti-poverty programmes: room for revision?' *Journal of Development Studies*, v.44, n.2, p.165-197.



- Charles, N.; Wadia, K. (2018) 'New British feminisms, UK Feminista and young women's activism'. *Feminist Theory*, v.19, n.2, p.165-181; DOI: [10.1177/1464700117723592](https://doi.org/10.1177/1464700117723592);
- Cochrane, K. (2013) 'All the rebel women: The rise of the fourth wave of feminism'. Guardian Books, London.
- Detraz, N. (2009) 'Environmental Security and Gender: Necessary Shifts in an Evolving Debate'. *Security Studies*, v.18, p.345-369; DOI: 10.1080/09636410902899933.
- Doss, C. et al. (2018) 'Women in agriculture: Four myths'. *Global Food Security*, v. 16, p.69-74; DOI: 10.1016/j.gfs.2017.10.001.
- FAO – Food and Agriculture Organization of United Nations. (2020a). 'Indicator 2.1.1 - Prevalence of undernourishment'. [Online] <http://www.fao.org/sustainable-development-goals/indicators/2.1.1/en/> (accessed 19/08/2020).
- FAO – Food and Agriculture Organization of United Nations. (2020b) 'Indicator 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale'. [Online] <http://www.fao.org/sustainable-development-goals/indicators/2.1.1/en/> (accessed 19/08/2020).
- FAO – Food and Agriculture Organization of United Nations. (2020c) 'Indicator 5.a.1 - (a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure'. [Online] <http://www.fao.org/sustainable-development-goals/indicators/5.a.1/en/> (accessed 19/08/2020).
- FAO – Food and Agriculture Organization of United Nations. (2020d) Indicator 5.a.2 – 'Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control'. [Online] <http://www.fao.org/sustainable-development-goals/indicators/5.a.2/en/> (accessed 19/08/2020).
- FAO – Food and Agriculture Organization of the United Nations. (2019) 'The State of Food Security and Nutrition in the World 2019: Safeguarding against economic slowdowns and downturns' [Online] <https://www.fao.org/3/ca5162en/ca5162en.pdf> (accessed 19/08/2020).
- FAO – Food and Agriculture Organization of the United Nations. (2011) 'The State of Food and Agriculture 2010–2011 – Women in Agriculture: Closing the Gender Gap for Development'. [Online] <https://www.fao.org/3/i2050e/i2050e.pdf> (accessed 20/08/2020).
- FAO – Food and Agriculture Organization of the United Nations. (1996) 'Declaration on world food security'. [Online] <https://www.fao.org/3/w3613e/w3613e00.htm> (accessed 20/08/2020)
- Gasper, D.; Gómez, O. A. (2015) 'Human Security Thinking in Practice: personal Security, citizen Security and Comprehensive Mappings'. *Contemporary Politics*, v. 1, n.21, p.100-116; DOI: 10.1080/13569775.2014.993906.
- Griffiths, M. et al. (2009) 'Fifty key thinkers in international relations'. Routledge, New York City.
- Griggs, D.J. et al. (2017) 'A guide to SDG interactions: from science to implementation'. International Council for Science, Paris.
- Hansen, L. (2006) 'Security as Practice: Discourse Analysis and the Bosnian War'. Routledge, New York City.
- Harari, Y. N. (2018) 'Sapiens – uma breve história da humanidade'. 38ª ed., Editora L&PM, Porto Alegre.
- Herz, J. (1950) 'Idealist Internationalism and the Security Dilemma'. *World Politics*, vol.2, n.2, p.157-160; DOI: 10.2307/2009187.



- Hoogensen, G.; Stuvøy. (2006) 'Gender, resistance and human security'. *Security Dialogue*, v.37, n.2, p.206-228; DOI: 10.1177/0967010606066436.
- Hoogensen, G.; Rottem, (2004) S.V. 'Gender Identity and the Subject of Security'. *Security Dialogue*, v.35, n.2, p.155-171; DOI: 10.1177/0967010604044974.
- Kaplan, E. A. (2003) 'Feminist futures: trauma, the post-9/11 world and a fourth feminism?' *Journal of International Women's Studies*, v.4, n.2, p.46-59.
- Krolokke, C.; Sorenson, A.S. (2006) 'Three waves of feminism: From suffragettes to gender communication theories and analysis, from silence to performance'. Sage Publications, Thousand Oaks.
- Lago, A.A.C. (2013) 'Conferências de desenvolvimento sustentável'. FUNAG, Brasília.
- Lodgaard, S. (1990) 'Environmental Conflict Resolution'. Paper presented at the *UNEP meeting on Environmental Conflict Resolution*. 30 March 1990, Nairobi, Kenya.
- Morgenthau, H. (2003) 'A Política Entre as Nações: a luta pelo poder e pela paz'. Editora Universidade de Brasília, Brasília.
- Munro, E. (2013) 'Feminism: A fourth wave?' *Political insight*, v.4, n.2, p.22-25; DOI: 10.1111/2041-9066.12021.
- Narain, S. (2014) 'Gender in International Relations: Feminist Perspectives of J. Ann Tickner'. *Indian Journal of Gender Studies*, v. 21, n.2, p.179-197; DOI: 10.1177/0971521514525085.
- Oliveira, A. B. (2009) 'O fim da Guerra Fria e os estudos de segurança internacional: o conceito de segurança humana'. *Revista Aurora*, n. 5, p.68-79; DOI: 10.36311/1982-8004.2009.
- Owen, T. (2004) 'Human Security – Conflict, Critique and Consensus: Colloquium Remarks and a Proposal for a Threshold-Based Definition'. *Security Dialogue*, v.35, n.3, p.373-387; DOI: 10.1177/0967010604047555.
- Parry, D.C., Johnson, C.W.; Wagler, F. (2018) 'Fourth wave feminism: Theoretical underpinnings and future directions for leisure research'. In Parry, D.C (ed.). 'Feminisms in Leisure Studies: Advancing a Fourth Wave'. Routledge, London, p.1-13.
- Palacios-Lopez, A.; Christiaensen, L; Kilic, T. How much of the labor in African agriculture is provided by women? *Food Policy*, v.67, n.1, p. 52-63; DOI: 10.1016/j.foodpol.2016.09.017.
- UNDP. (1994) 'Human Development Report: New Dimensions of Human Security'. Oxford University Press, New York City.
- Redfern, C.; Aune, K. (2010) 'Reclaiming the F word: The new feminist movement'. Zed, London.
- Rivers, N. (2017) 'Between 'postfeminism(s)': Announcing the arrival of fourth wave'. In Rivers, N. 'Postfeminism(s) and the Arrival of the Fourth Wave'. Palgrave Macmillan, New York City, p.7-28.
- Rodrigues, T. (2012) 'Segurança planetária, entre o climático e o humano'. *Ecopolítica*, v.3, p.5-41.
- Sen, A. (1998) 'Mortality as an indicator of economic success and failure'. *The Economic Journal*, v.108, n.446, p. 1-25.
- Shiva, N.; Kharazmi, Z.N. (2019) 'The Fourth Wave of Feminism and the Lack of Social Realism in Cyberspace'. *Journal of Cyberspace Studies*, v.3, n.2, p.129-146; DOI: 10.22059/JCSS.2019.72456.
- Smith, E. (2015) 'The traditional routes to security: Realism and Liberalism'. In Hough, P. et al. 'International Security Studies: Theory and Practice'. Routledge, London, p.12-31.
- Tickner, A. J. (2005) 'What Is Your Research Program? Some Feminist Answers to International Relations Methodological Questions'. *International Studies Quarterly*, v.49, n.1, p.1-21.
- Tickner, A. J. (2004) 'Feminist Responses to International Security Studies'. *Peace Review*, v.1, n.16, p. 43-48; DOI: 10.1080/1040265042000210148.



- Tickner, A. (2001) 'Gendering World Politics: Issues and Approaches in the Post-Cold War Era'. Columbia University Press, New York City.
- Tickner, J. A. (1992) 'Gender in international relations: Feminist perspectives on achieving global security'. Columbia University Press, New York City.
- Ullman, R. (1983) 'Redefining Security'. *International Security*, vol.8, n.1, p.129-153; DOI: [10.2307/2538489](https://doi.org/10.2307/2538489).
- Waltz, K. (1979) *Theory of International Politics*. Addison-Wesley, Menlo Park.
- Wibben, A. (2011) 'Feminist Politics in Feminist Security Studies'. *Politics & Gender*, v.7, n.4, 590-595; DOI: 10.1017/S1743923X11000407.
- Wohlforth, W. C. (2010) 'Realism and Security Studies'. In Cavelty, M.D.; Mauer, V.(eds). 'The Routledge Handbook of Security Studies'. Routledge, London, p.9-21.
- World Bank, FAO; IFAD. (2009) *Gender in agriculture sourcebook*. The World Bank, Washington.
- Zwierlein, C. (2018) 'Historicizing Environmental Security'. *European Journal for Security Research*, vol.3. n. 1, p.1-13; DOI: 10.1007/s41125-017-0026-4.
- UNECA. (1972) 'Women: the neglected human resource for African Development'. *Canadian Journal of African Studies*, v.6, n.2, p. 359-370; DOI: 10.2307/484209.



Copyright: This is an open-access article distributed under the terms of a Creative Commons Attribution License, which allows unrestricted use, distribution, and reproduction in any medium, provided that the original author and source are credited.

Este é um artigo publicado em acesso aberto e distribuído sob os termos da Licença de Atribuição Creative Commons, que permite uso irrestrito, distribuição e reprodução em qualquer meio, desde que o autor e a fonte originais sejam creditados.