

UNDERSTANDING HOW KURDISH WOMEN ARE TRANSFERRING
AGRICULTURAL KNOWLEDGE ABOUT LOCAL SEEDS TO THE NEXT
GENERATIONS FROM ECOFEMINIST
PERSPECTIVE: A CASE STUDY OF DOSKİ CUCUMBER

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ABSTRACT

UNDERSTANDING HOW KURDISH WOMEN ARE TRANSFERRING AGRICULTURAL KNOWLEDGE ABOUT LOCAL SEEDS TO THE NEXT GENERATIONS FROM ECOFEMINIST PERSPECTIVE: A CASE STUDY OF DOSKİ CUCUMBER

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Rural women play an important role in preserving local seeds and transmitting them to the next generation. In order to understand how the seeds are transmitted by women, this thesis focuses on the seed of a cucumber, which is an endemic species and grows in the Doski region of Hakkâri's Yüksekova district, locally called '*Doski cucumber*'. It is known that this seed has begun to disappear as the many of the local seeds in the world. In order to analyze the relationship between women and the seed, this thesis puts Ecofeminist theory at the center and asks the following questions; '*Why women have main role of keeping it?*', '*How women are transmitting their knowledge on Doski Cucumber to next generation?*' and '*Why the use of Doski cucumber seed has decreased?*'. This research was conducted by using semi-structured interview technique with women who living in Doski region in Yüksekova district of Hakkâri.

The results of this research show us that, Doski women are protectors and transmitters of the seeds. However, the reason why women are assigned to these

roles is patriarchal system that attributed to women to this role, which is seen as belonging to the private field. One of the biggest reasons that seeds began to disappear was the evacuation of the villages in Doski Valley, the main source of seeds, in the 1990s. Therefore, even though Doski women try to protect the Doski cucumber, the seeds of Doski cucumber started to disappear due to the political and social reasons.

Keywords: Local Seed, Ecofeminism, Traditional Knowledge, Kurdish Women, Migration.



ÖZ

KÜRT KADINLARININ YEREL TOHURLAR İLE İLGİLİ TARİMSAL BİLGİLERİNİN BİR SONRAKİ NESİLLERE NASIL AKTARILDIĞINI EKOİEMİNİST PERSPEKTİFTEN ANLAMAK: DOSKİ HİYARI ÜZERİNE BİR VAKA ÇALIŞMASI

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Yerel tohumların korunmasında ve kuşaktan kuşağa aktarılmasında kırsal bölgede yaşayan kadınların önemli bir rolü olduğu bilinmektedir. Bu tez, kadınlar tarafından tohumların nasıl saklandığını ve kuşaklar arası aktarımın nasıl yapıldığını anlamak için, endemik bir tür olduğu düşünülen ‘*Doski hıyarı*’ tohumuna Ekofeminist perspektiften odaklanmıştır. Öte yandan, dünyanın birçok kırsal bölgesinde kaybolmaya başlayan diğer yerel tohumlar gibi, bu tohumun da kaybolmaya başladığı bilinmektedir. Bu anlamda bu tez, Doski kadınları ile yerel tohum arasındaki ilişkiyi analiz edebilmek için Ekofeminist teoriyi odak noktasına oturtarak, şu soruları sormaktadır: “*Doski hıyarı tohumu neden daha çok kadınlar tarafından saklanıyor ve kuşaklar aktarımı neden daha çok kadınlar tarafından yapılıyor?*”, “*Doski hıyarı tohumunun kuşaklar aktarımı kadınlar tarafından nasıl yapılıyor?*” ve “*Doski hıyarı tohumunun kaybolmaya başlamasının arkasındaki faktör veya faktörler nelerdir?*”. Bu araştırma, Doski hıyarının kaynağı olarak bilinen ve Hakkâri’nin Yüksekova ilçesinde yer alan

Doski bölgesinde yaşayan kadınlarla yarı yapılandırılmış görüşme tekniği kullanılarak yapılmıştır.

Araştırma sonucu gösteriyor ki, Doski kadınları yerel tohumların hem koruyucuları hem de kuşaklar arası aktarımcılarıdır. Fakat kadınların bu rolleri üstlenmelerinin sebebi, ataerkil sistemin cinsiyetçi rol dağılımı dolayısıyla kadınların özel alanlara itilmiş olmasıdır. Doski tohumunun kaybolmaya başlamasının en büyük sebeplerinden biri 1990'lı yıllarda, tohumun ana kaynağı olarak bilinen Doski Vadisindeki köylerin boşaltılmasıdır. Dolayısıyla Doski kadınları, Doski hıyarı tohumunu korumaya her ne kadar gayret etseler bile, Doski hıyarı tohumunun kaybolmasına sebep olan politik, sosyal ve ekonomik bileşenlerden oluşan bir yapı mevcuttur.

Anahtar Kelimeler: Yerel Tohum, Ekofeminizm, Geleneksel Bilgi, Kürt Kadını, Göç.



ICAT

To The Ones Who Forced to Migrate

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CHAPTER 1

INTRODUCTION

Seed is the beginning and source of life. Seed represents prosperity and abundance in every aspect of life. Since millions of years, seeds could manage to exist, evolve in the nature and yield resistant and more productive plants. For this reason, a seed contains in itself the millions of years' evolutionary knowledge and transformation. Seeds cannot survive when isolated from their living environments, because they are in constant relation with the forms of life and the territories they were born in. In that sense, there is both past and future of in a seed. The reason which brought this thesis research in existence, is the Doski Cucumber seed. Doski Cucumber has a similar story; it has a long and challenging journey with the earth and people of Doski Valley and their past.

Agriculture, the knowledge to develop food, has emerged by being transmitted from past to our day with accumulating experience, and became the main area of nutrition. Agriculture has also been a source of livelihood for most of the world's populations, with women at the fore. As the primary food producers, women have had, and keep having a central role in the food production system with the duties they fulfilled in the food chain (Shiva, 2014). Also, women who stored the seeds ensured that genetic diversity and nutrients would be protected over the years (Shiva, 2014). However, the local seeds and its traditional knowledge is under threat of being lost in these days. Even though there are many reasons behind this, both the predomination of agricultural system in capitalist economy's rule, and the 'objectification' and registration of seeds as part of 'private property' rights, caused the decrease of seed diversity and the disappearance of traditional agricultural knowledge mostly, which has developed with the centuries' knowledge accumulation. From this perspective, this study focuses on a cucumber seed; with an aim to uncover the main role women have

been taking in protecting the seeds and transferring them to the upcoming generations. This thesis argues that even though Kurdish women in Doski region are trying to protect the Doski cucumber seed, there is a combination of factors behind the loss of Doski cucumber.

The thesis focuses on a particular area and a local seed, to understand how women are transferring their traditional knowledge based on a local seed to the next generation and also identify the possible reasons behind the loss of local seed and traditional knowledge, having impact on women's losing knowledge. In that sense, the first research question of this thesis is, '*How Kurdish women are transferring their traditional agriculture knowledge based on a seed to the next generation?*'. Kurdish women who are leaving Southeastern Turkey in Doski region located in Hakkâri /Yüksekova have been protecting an endemic species of cucumber which is called by locals as 'Doski Cucumber' throughout the years. As being protectors of Doski Cucumber, Kurdish women are actively sharing the seeds and traditional methods of cultivation through cultural transmission to the next generation. In that way, they were providing biodiversity and sustainability of the natural resources in Doski region. However, there is a combination of factors behind the disappearing of Doski cucumber seed. Those factors can be explained as; the capitalist market economy, climate changes, immigration of young people from the villages to the cities, policy deficiencies to protect the local seed and the evacuation of Kurdish villages. The evacuation of Kurdish villages seems to be one of the most important reasons of behind the disappearing. Therefore, this thesis is asking the following research questions; how '*Kurdish women are transferring their agriculture knowledge to the next generation?*', '*What is the main role of Kurdish women as protector of the seeds?*' and '*What are the reasons behind the losing the seeds?*'.

By asking those questions, this thesis came up with the following main objectives to explore:

- i. Understanding the local women's role as protector of the traditional agriculture knowledge.
- ii. Analyzing how this knowledge is been transferred between generations.
- iii. Finding out the possible reasons behind the loss of both the seed and its traditional knowledge

Furthermore, this research seeks to answer these specific questions:

- a. How/ Where women get the Doski Cucumber seed?
- b. Do women share their seed with anyone else?
- c. What is the role of women in the transmission process of the Doski cucumber?
- d. Have women ever used the corporation seed? If yes, when did it start first?

With those questions, this thesis aims to understand, first of all, how Kurdish women are transferring their knowledge on agriculture from one generation to other. Secondly, the thesis aims to investigate the reason behind the women's role as seed protector in the community. Thirdly, the thesis underlines the reasons behind the loss of local seed, Doski Cucumber, and its impact on women's role in the society. This thesis aims to explore all those questions with the insights of Ecofeminist perspective. According to Harding, the first feature of feminist methods should be adding women' experiences into the existing traditional methodologies in women's studies. Since the perspective of the bourgeois men is misleading, the feminist method must be based on women's experiences (Harding, 1987). Regarding Harding perspective, this thesis is focusing on women's experiences.

The Ecofeminist approach, which was developed after the 1970s, seeks to link gender issues and ecological destruction in order to find solutions to today's problems. According to this understanding, there is a connection between the domination of women and domination of nature. Ecofeminists argue that the world's political and economic order caused a system which is based on this

domination. In this sense, the focus of feminism should be on transformation which is needed on male-minded political, gender and ecological-based sovereign structures (Mellor, 1993). Especially in 1990's, Ecofeminism wave sprang from feminism. Feminism responds to the theories of ecology that emerged in the 1960s the 1970s. Ecofeminism in the 1970s, criticized patriarchal, mainstream and social sciences and started to highlight that human-centered life should be changed. Ecofeminist wave was not embraced in a broader scale, at first place during 1960s-1970s. The possible reason was its relation with biological determinism that was defended by some feminist ecologists (Demir, 2013). Ecofeminism has evolved over time and has been accepted by many groups and individuals.

Ecofeminists, who criticize the sexist discourse based on the nature-culture distinction, argue that this distinction was rooted in Western patriarchal culture. According to this analysis, women were placed in subculture and made more vulnerable to exploitations. While values and judgments associated with nature are identified with women, cultural values are identified with men. In this structure, nature is worthless, but culture and spirit cover the center of the system. While men and culture have settled in the center of the patriarchal system, nature and women have been placed in the secondary position. Nature and women are perceived as being subordinated to men. As Warren noted, "At the heart of the patriarchal system lies the justification and exploitation of the privilege and power of the male sex"(Warren, 1994, p.181). For those reasons, Ecofeminists consider the Western society's patriarchal structure, as responsible from the exploitation of women and for the exploitation of nature with the support of capitalism. Different approaches to the exploitation of nature and the women have appeared in the historical processes of Ecofeminism. These different perspectives provide us an understanding on the origins and the solutions on women's and nature's domination process.

According to the first strand of ecofeminism represented by Cultural Ecofeminists, the reason for the affinity between women and nature is the

biological deterministic one that claims women have different biological and psychological characteristics than men. The second strand claims that, affinity between nature and women is caused by historical and social processes that formed patriarchy. According to the third strand, there can be a link between the first two strands: the affinity between women and nature can be explained with biological deterministic arguments, but this bond is created by patriarchy that was formed through historical and social processes (Çetin, 2005). All these strands will be analyzed in the following chapters. This analysis may contribute to the current discussion on Ecofeminist thought and practices in the circumstances of growing importance of Ecofeminist studies.

The subject matter of this thesis focuses on women's traditional knowledge based on the seeds from an Ecofeminism view of point. Since traditional way of living has lost its paths to reach sustainable environment and biodiversity on earth, the traditional knowledge has been an important way of keeping sustainability and biodiversity in both environment and food system. In parallel, women's knowledge and its practices has been undervalued, even though there have been many researches showing (e.g. Montanari and Bergh, 2019) how effective it is to use women's knowledge especially in terms of suitability and biodiversity.

Women play a key role as the main transmitters of traditional knowledge within their communities. They are regarded as the main caregivers, but also the holders and custodians of traditional knowledge and culture (Am, 2019, p.8).

Moreover, cultural transmission functions as a key factor in the transference of traditional knowledge to others through active learning and teaching and change in behavior and attitude.

There are many elements that pave the way for the loss of traditional knowledge. For example, the privatization of land and natural resources, and the disposition of them to non-indigenous people, leads to the deprivation of traditional people due to commercial concerns. In this process, economically powerful countries

might influence the culture, economy and social structure of others. As Mittelman stated:

Economy, politics, culture and ideology of one country penetrate the other.
(Mittelman, 1997, p.3).

It is possible to perceive how the oppressed countries have been boiled down to the sameness in this power relationship and how the idea of globalization affected this process. As it's important to show the importance of traditional knowledge based on women's experiences and the reason behind its loss of traditional knowledge, all these points will be discussed in next chapters.

In the light of above-mentioned Ecofeminist perspective, the argument of the thesis will be analyzed by focusing on Doski region in Yüksekova in Eastern Turkey. The research field, Doski region, has been facing intensive conflict since 1990s. East and Southeast regions with a majority of Kurdish population¹, are among the socially most vulnerable regions of Turkey due to several political, socio-economic and cultural problems that have been continuing without resolutions throughout the history of Republic. Turkey's east and southeast have particular characteristics defined with striving from having lower socio-economic indicators than the rest of Turkey, its historical and social structure, and the impact of the conflict that has been present in the years between 1984 and 1999. Some of the main problems present in the region are, insufficient economic, health and infrastructure services (lower in comparison to Turkey's west); concentration of state's efforts around the manifestation of military existence in the region instead of economic and social service investments; and denial of diverse identities in the region including Kurdish identity (Kurban et al., 2006). These problems have turned more devastating particularly in the environment of clashes which started with the establishment of armed movement of PKK (Partiya Karkerên Kurdistan) in 1984 and the

¹ The majority of population in Eastern and Southeastern regions of Turkey consists of Kurds. For the statistical assumptions about the ethnic structure in the region's population see Mutlu (1996).

following period of struggle of security forces against PKK starting from the declaration of State of Emergency (OHAL) in 1987 (Kurban et al., 2006). During the years when state of emergency was on force, several rural settlements were evicted. The region of Doski, placed in Yüksekova town of Hakkâri province is one of them. The massive forceful displacement of people has not solved the emerging problems, but instead brought about new ones. After all, besides the historical, political, ethnic, cultural and social problems forced displacements caused in East and Southeast regions, the present study also puts forward the ecological aspect of the forced migration's consequences in terms of paving the way for the eradication of traditional agricultural methods and local seeds.

In the light of this research questions, this thesis is composed of seven parts. After this brief introduction, Chapter 2 provides a theoretical framework of the thesis. In this chapter, the focus will be on the relationship between the Feminist movements and Ecology. In this sense, the emergence of Ecofeminist thought and the relationship between gender and nature will be analyzed. The context in which the relationship between women and nature is established is still an area of debate in Ecofeminist studies. For that reason, the historical process of Ecofeminism and its separated variations and methods will be examined. The main framework that the Ecofeminist theory is based on is the affirmation of the female-nature connection that has been negated in the dominant discourse (Üzel, 2006). However, there are differentiations on this positive value in many respects (Plumwood, 2004). Yet, the whole discussion of Ecofeminism will focus on the axis of debate between those who think that the relationship between women and nature is socially constructed and that it can be solved socially in this sense, and those who see the relationship between woman and nature in biological and spiritual.

In Chapter 3, women's traditional knowledge, which is a cumulative body of knowledge, practice and belief of the land as vital for our lives at almost every stage of in management and consumption of natural resources, will be analyzed in terms of women' roles in patriarchal societies. The effect of the climate

change and the ecological crises is increasing day by day. On the other hand, consequences of the industrial agriculture system have been showing itself on the debate of ‘food safety’. In these circumstances, the importance of traditional knowledge has been accepted by the policy makers. Accordingly, in this chapter, women’s contribution to the transmission of traditional agriculture and ecological knowledge in terms of biodiversity and sustainability will be underlined.

Chapter 4 focuses on the disappearance of the traditional knowledge and its possible effects on women. Baggethun, Corbera and García underline the reasons behind the disappearance of the traditional knowledge by highlighting these points: the loss of local languages, dominant religions, changes in land use, market integration, and more generally, industrialization and globalization processes (Baggethun, Corbera and García, 2013).

Chapter 5 provides brief information about the interview process and methodology. In the beginning of this chapter, significance of this thesis is going to be underlined. Then, the profile of Doski region, the interview process and participators in the research will be explained. Moreover, the research area and its political and cultural background will be elaborated.

Following Chapter 6, the findings obtained during the field research will be analyzed within those theoretical background of the thesis. In order to understand how Kurdish women transfer their knowledge about local and traditional seeds, this section will cover three main parts respectively. First, it explores the reasons behind why Kurdish women acting as seed protector. Then it analyzes the transmission of cultural knowledge between generations. Finally, the possible reasons behind the loss of the seed and traditional knowledge will be covered. All the research results will be interpreted within the ecofeminist perspective.

In the conclusion chapter, Chapter 7, the finding of the research will be provided.

CHAPTER 2

THE CONNECTION OF FEMINISM WITH ECOLOGY: ECOFEMINISM

2.1. Introduction

The most striking aspect of feminist thinking would be that it has a beginning but has no end (Donovan, 1997). Feminism offers new possibilities for relationships and structures for personal and political ways of living. In that sense, we cannot speak of one kind of feminism. There are many strands of in feminist theory. Thus, these strands and divisions caused conflicts, transformations and enrichment after feminist theory got acquainted with race and class theories (Plumwood, 2004).

Ecofeminism, which emerged from a feminist perspective based on ecological perspectives, has been gained the focus of attention in recent years on the understanding women's struggle. In this chapter, the theoretical approach of Ecofeminism, which examines the looting of nature with male domination from feminist perspective, is provided. This discussion is important for this thesis from two perspectives. First of all, ecofeminism claims that the exploitation of women and of the nature originates from the same thinking system. For example, there is a relationship between the loss of the traditional knowledge of women, and the loss of local seeds. This would also highlight the theoretical background of this relationship. Secondly, it is evident that women are one of the social groups that were the most affected by the ecological crisis because they are 'the poorest in the society' as Mellor highlighted (1993). In this respect, this research aimed to perceive the ecological crisis from the women's perspective.

Furthermore, this thesis defines that the ecological theories focus on “people-oriented” perspective. However, with the feminist intervention in the field of ecology, the responsibility of destruction turned out to be “man-centered” rather than basic “human-centered” argument. In other words, it was argued that the core of the problem is not originated from human beings only, rather it might be the Western, patriarchal white male (Ferry, 2000).

2.2. Patriarchal Oppression and Nature

The current ecological crisis is a sufficient reason for feminists to address this issue and it is equally important for feminist politics and philosophy (Berkday, 1996). The work of Ecofeminist anthropologist Yayo Herrero nourished by the legacy of the ecological theories of the 1960s, started to perceive women and nature together and combined ecology and feminism in the 1970s. Because, according to feminists, the ecological destruction and crisis were caused by white, Western and patriarchal mind sets (Herrero, 2019).

2.2.1. Male Domination Over Nature and Women

Bookchin explained the situation we live in as follows:

The historic thema that civilization must inevitably be pitted against the nature, indeed, that it is corruptive of human nature, has re-surfaced in our midst from the days that reach back to Rousseau- this, precisely at a time when our need for a truly human and ecological civilization has never been greater if we to rescue our planet and ourselves (Bookchin, 1990, p.21).

In many doctrines, the idea of dominating the nature is mentioned and this was perceived as the be the salvation of humanity. In 16th century, the ways and forms of domination over nature was stated as “overcoming” or “possessing” or to “rape” nature and this formed the rape culture that dominates nature. The idea that humanity will realize its own potential through dominating nature has begun to be mentioned. The humanity’s ideal of ruling the nature, has played a

major part in the emergence of ecological problems that we experience in the present.

The industrial revolution sharpened the division of labor between women and men and caused clear cut definition on labor (Üzel, 2006). The nature's mechanization have started in this period. At the same time, the imprisonment of women at home as their traditional role in the division of labor required, will become a current issue in this capitalist system and era.

Women who were pushed to the private sphere are identified with nature through their feminine identities such as being productive as nature and providing nutrition as nature. This creates the idea of women's and nature's subordination in parallel in the same systematic thinking. In the 18th century, the idea that the women are identified with nature and belonged to their home as wives and mothers became universalized in theory and practice. As Ortner pointed out biological determinism made the male of the species as the naturally dominant sex, on the other hand females are naturally subordinated (Ortner, 1997). It was even internalized by humanity as a natural method of exploitation of women (Akal, 1998). In this context, the idea that both women and nature can be exploited was accepted in the dominant tradition.

2.2.2. Theoretical Pioneers of Domination Over Women-Nature

At this point it would be worth mentioning the roles of the social contract theorists who have contributed to pave the way for the domination over women and nature. Hobbes claims that, states are formed by father rather than mothers. Women's secondary positions in society are also present in his understanding of nature (Hobbes, 1995). Hobbes, who defines the status of women and nature as secondary in society, defines both fields as areas which can be dominated.

According to Locke, who was another philosopher of the Enlightenment period, women having equal political power means that the world's becoming upside

down. Locke states that the woman who obeys her husband cannot rule the family as a parent because the power is in the hands of the man (Locke, 2004). In this sense, we can state that these thinkers paved the way for women's exploitation. Likewise, the nature was accepted as orphaned and deprived of its own values by Locke (2004). Rousseau argues that women are inherently docile. He also claims that the man has been given the ability to govern by the Supreme Being, and if women leave the private sphere for the public sphere, it will harm the general will. The governor- strong male will- end up subordinating the women. He also argues that the women are different from men in terms of talent and intelligence, by emphasizing the duty of the women should be to obey the man and to take care of her children and family (Sonnet, 2005).

Ecofeminist thinker Carolyn Merchant claims that modern positive/natural sciences especially mechanics and physics are all based on demolition and subordination of the nature, as a living, female organism. She highlights, how nature has been perceived as inanimate raw material, disintegrated into smaller pieces and have been put together by the white engineer who obtains high position in the society. In that sense, Merchant mentions how Francis Bacon perceived women and nature (Merchant, 1983). Bacon has been perceived as the pioneer of the new science based on experimentations. He recommends his pursuers to perceive natural methods that have been utilized for centuries as taboos and superstitions (Merchant, 1983). On the other hand, Evelyn Fox Keller, evaluates the science that exploits nature and created by patriarchal way of thinking, from the perspective of psychology. She claims the fathers of natural sciences; do not perceive nature sexless. She concludes that the nature is an evil and dangerous woman who must be forced to obey according to those natural science thinkers (Keller, 1995).

The level of the exploitation of women and nature, as Marie Mies states by using biotechnologies, led to integration and exploitation of nature and women's bodies. Mies claims modern science's popular slogan 'knowledge is power ', tend to expose their relation with science as violent and destructive. She

continues by saying that they cannot understand nature and natural phenomenon by leaving them exist in their own environment, therefore violence and exploitation are used to ensure the domination over nature and the female body. Otherwise, man and modern science would not be able to rise and act as the “master” of nature and women without utilizing violence (Mies, 2018).

2.3. Fighting Against the Subordination Over Women and Nature: Ecofeminism

In the 1970s, ecology and the women's movement, gradually became more significant in radical movements. These movements are still waiting for solutions to the problems they underlined, as both sexism and domination over women and destructive activities on nature occur as the most important problems of the world's agenda. Moreover, since these problems are not solved, they cause for emergence of new problems such as food crisis.

The development of the ecological perspective in feminism takes place in the late 1970s and early 1980s (Donovan, 1997). Before all these, feminisms' criticism on male dominated science and the switch from 'human oriented approach' to 'male oriented approach' were accepted (Üzel, 2006). In 1962, one of the most influential ecologists of the time, Rachel Carson, brings up the issue of negative effects of chemical use in agriculture on human and environmental health in her book '*Silent Spring*'. Although one of the most influential ecologists of the time was a woman, the forming of ecological approach in feminist circles start to emerge in the early 1970s with a delay of five to ten years, but the main development occurs in the early 1980s (Donovan, 1997). Therefore, we can say that a connection between the environment and feminism was formed in the 1970s.

According to Françoise d'Eaubonne, who was accepted as the first person to use the term ecofeminist, the cause of ecological destruction might be the increase in production and excess populations under the male domination (Çetin, 2005).

Stating that the problem stems from the patriarchal system, Françoise d'Eaubonne proposes gender related equality and ecological revolution under women's leadership for the liberation of women and the environment, instead of depending on male power. In other words, in order to reshape and formulate social order, one must start by reorganizing the overall patriarchal order, not by substituting women for male power (Mellor, 1996).

There are various ideas on how ecofeminism developed. For example, according to Merchant, ecofeminism was firstly developed by Ynestra King in 1976 at the Vermont Institute of Social Ecology. In contrast, according to Barbara Holland-Cruz and Ariel Salleh, the Ecofeminist movement emerged spontaneously in various parts of the world in the mid-1970s (Çetin, 2005, p63). As Plumwood states, an integrated framework for the critique on domination of both women and nature has required an expanded feminist theory that incorporates race, class and gender analysis. Plumwood claims, if the nature can be perceived from this framework, the domination would be perceived more comprehensively (Plumwood, 2004).

Françoise d'Eaubonne who was a member of the French Communist party, was firstly emphasized the concept of ecofeminism in 1974, according to the generally accepted view (Ferry, 2000). Although the foundation of the theories was established by Françoise d'Eaubonne, Ecofeminism was defined by Karren, who is one of the key theorists Ecofeminism. She explained the term ecofeminism to demonstrate a constitutional attitude to the following theses:

- i. There are important links between the oppression of women and the oppression of nature;
- ii. Understanding the status of these ties is compulsory for all kinds of initiatives the oppression of nature, such as the oppression of women;
- iii. Feminist theory and practice must contain an ecological perspective;
- iv. Solutions to ecological problems must have a feminist perspective (Warren, 1987).

In 1974, Shelia Collins's evaluated gender discrimination and ecological destruction on the same basis in '*A Different Heaven and Earth*'. In this study, the structures such as class exploitation, ecological destruction and gender perceived as interlocked and evaluated in the same structure (Collins, 1974). Rosemary Radford Ruether, author of '*New Women New Earth*' that was published in 1975, invites women to unite with social ecological movements. According to her, in the modern industrial society, women have to understand that they will not be receiving freedom. Therefore, she brings the ecological crisis and the women's movement together under the same roof and argues that the feminist movement and the ecological movement must be united (Üzel, 2006).

Merchant's '*Women and Nature*' (1980), states the dominance of women and nature comes from the same thinking system (Cited in Shiva, 2018, p.102). Merchant claims that the humankind's demands disintegrate pieces of the *Mother Earth*, and it has been perceived as raw material in this process. According to Merchant, this domination is only possible hand in hand with violence. For example, digging mines from *Mother Earth*, to extract metals is one of them. The land was compared to the wicked woman image who hides treasures for herself and hiding from her children (the sons), and its domination has been legitimized as a result of the idea of seizure of the secrets of nature (Cited in Shiva, 2018).

The growing interest on Ecofeminism has enabled many studies to be conducted. Vandana Shiva, whose work is based on India, did not remain silent about the Chipko movement in India in 1974, and became one of the most contemporary Ecofeminists. Shiva underlines that women's struggle against ecological destruction is not only a reaction to the environmental problems. In the *Ecofeminism* (2018) that have been co-edited with Marie Mies, Shiva emphasizes that the central issue of the Ecofeminism is very ancient and that women always struggled to protect their livelihoods and secure their communities (Shiva, 2018). Thus, ecofeminism that was ideologically grounded,

and it deals with the relationship between woman and nature. The relationship between ecology and male domination came to be deeply and intensively analyzed from various perspectives (Donovan, 1997).

2.3.1. The General Hypothesis of Ecofeminism

Ecofeminism focuses on the causes of domination by claiming there is a relationship between domination over women and domination over nature. In this sense, it challenges the male-dominated system and the hierarchical and dualist structure it has formed. As Mies pointed out, to address the unequal hierarchical structure in the society in general, one has to seek for the origin of the asymmetric division of labor between men and women. In this sense, thinking about this hierarchy would be as political and strategic aspect of women's liberation (Mies, 1986).

2.3.1.1. The Existence on Hierarchal Structure

There are some perceptions that ecofeminists often limit the idea of hierarchy to men's hierarchy over women, ie. Patriarchy. However, there are different and more comprehensive views on the emergence of hierarchy among ecofeminist scholars. Among them, there are Ecofeminists who seek the roots of this hierarchy in Western dualist way of thinking. For example, Plumwood states that Western culture has perceived the relationship between human and nature as duality (Plumwood, 2004). The Western approach to nature tries to solve most of the problematic aspects of the environmental crisis by excluding humankind. According to Plumwood, dualism created by the Western way of thinking, constitute a unifying and defining contrast such as the concept of husband versus wife, West versus East, logic against the nature (Plumwood, 2004). In this dualism, nature is not only about non-human beings, but it is also the multiple domains of control and exclusion. In this context, the field defined by the nature is in fact not a subject. The nature has been defined as the invisible or background against the mind/logic and cultural achievements. Thus, the

domination over nature has become normalized where individuals are not held accountable for their actions and where they can instrumentalize nature however they like. As a result, this dominant way of thinking created by Western culture shaped the concept of nature and legitimized all kinds of dominations (Plumwood, 2004). Likewise, ecofeminists such as Ortner and Salleh perceive the causes of domination over the nature in relation to the dualist division that also led to the birth of the modern patriarchal system of Western society (Ortner, 1997).

On the other hand, Janet Biehl, who raised comprehensive critiques to ecofeminism, criticized ignorance on the development of the scientific thought and the democratic ideas that were dominantly developed by Western cultures in '*Rethinking Ecofeminist Politics*' (Biehl, 1991). While acknowledging the destructive effect of domination on women and nature, Biehl highlights that ecofeminists should not overlook the Enlightenment's emancipatory effects and liberal democracy (Biehl, 1991).

Vandana Shiva aims to point out the distinction between North-South in relation to the analysis of origin of hierarchy. Shiva mentions, concepts of industrial development in the West naturalize the humankind's dominance over nature, man's dominance over woman and the North's dominance over the South, adding that Western kind of development might not be applicable for all contexts in the world. In that sense, she expresses both the insufficient resources and the impossibility of closing the gap between the countries considered as developed and underdeveloped. In this sense, contradictions and the hypocrite relationship with the environment should be focused by the "developed countries." She strikingly describes the nature, all the emotions that people experience or sufferings that were caused by the destruction of nature. These are considered irrational by the same Westerns dominant way of thinking. To sum up, it is relevant to various facades of hierarchy that evolved differently. It is obvious that ecofeminists did not consider patriarchy as the only criteria for development of hierarchy.

2.3.1.2. Dualist Mindset

Berkday mentions that nature and women have faced exploitation with similar tactics and the underlying cause of this systematic eradication is the dualist mindset of the West. Berkday argues that the dual (binary) way of thinking in the Western philosophies, have classified things as male-female and good-bad; classified women and nature as 'inferior' and "subordinated"; whereas same theory classifies men and culture with the 'upper' part and "the mind" that discipline (Berkday, 1996). Particularly in the duality of logic and nature, the logic has been defined as 'superior' while the nature has been defined as 'inferior'. In this dualism, domination over the 'inferior' has been naturalized since 'the superior,' the master (masculine) could instrumentalize the latter. However, this dualism was not been created out of thin air; it takes advantage of existing differences, such as biological difference, and transforms them into a basis for hierarchical domination (Plumwood, 2004).

In the history of male-dominated science and philosophy; in other words, throughout the history, the women have been constructed as the other of men, their free subjectivity have been denied, have been classified as secondary and irrational. As a result, women have been positioned as inferior in the hierarchal structure (Berkday, 2003).

The devaluation, externalization and instrumentalization of nature flourished starting from the birth of rationalism in Greek culture, which is also the roots of the Western tradition of philosophy and science (Plumwood, 2004). In that manner, as I mentioned above, the origins of nature's and women's domination were found in enlightened philosophers arguments, such as Plato and Descartes, who have been perceived as the architects of dualist thought and the Western patriarchal system. Plato and Descartes, who constitute the basis of the western patriarchal system which is the dominant view of the dualist mindset which is shown as the cause of the domination of women and nature, are shown. The society was designed as a result of the structures formed as in opposition

and these oppositions play an important role in understanding the social structure (Ferry, 2000). This way of thinking, is intertwined with the dominance and oppression of the 'inferiors,'ie the lower classes, colonized people, women, animals, and the nature as a whole (Üzel, 2006).

Plumwood underlines the dual exploitation of women and nature through legitimization of Western philosophy (Plumwood, 2004). In this sense, Western philosophy and technology are formulated on the division between human / nature, culture / nature, order / chaos, man / woman, death / life. Nature and women are defined as exploitable in this dualist structure. Western-based science and philosophy should be hold responsible for this process. One of the relevant points underlying this dualism and the premise of this research is the confinement of women to the 'private'. This private sphere assessed negatively with nature, body, emotion and spirituality. With this process, one-dimensional public world order was created in which men organized public opinions that embodied culture, mind, science and logic. In this sense, the ecofeminists highlighted the increase of environmental problems exponentially in a public order that does not value women in policy-making processes (Mellor, 1993).

2.4. Strands of Ecofeminist Theory

After the early 1970s, when ecofeminist theory first emerged, different ecofeminist approaches emerged from the debates especially in the 1980s. One of the Ecofeminist thinkers Merchant examines ecofeminism in four groups. The four streams, which are grouped as cultural, social, socialist and liberal ecofeminism, focus on the development and regulation of the relationship between the humankind and the nature (Cited in Üzel, 2006). These strand of mainly focus on understanding roots of the relationship between women and nature.

In this thesis, ecofeminist theory will be classified in three degrees, based on the affinity established between nature and women, rather than the classification

used by Merchant. The first classification explains the origins of women-nature with biological deterministic approach. Second one, as the opposite of the first one, claims that the bond between women and nature is socially constructed. Finally, the third classification; stands in between of the former distinctions that are counter to each other.

2.4.1. Biological Determinist Fraction: Essentialist or Cultural Ecofeminism

According to cultural or essentialist ecofeminists, women's bond with nature is based on their psychological and physiological different characteristics from men. In this fraction, ecofeminists perceive/explain women's affinity to nature with compassion, sentimentality, spirituality, which is perceived as part of women's characteristics. In other words, they underline that women are like nature because of their biological characteristics. Cultural or essentialist ecofeminists who explain affinity between women and nature on this basis, state that the female body has biological cyclic structure, and its similarity to nature that nurtures, protects and bestows life (Plant, 1989). According to this fraction, ecofeminists argue that there is a spiritual bond between the earth and women, and argue that the earth is like a thinking/experiencing female, and that bond connects women and the earth.

According to cultural or essentialist ecofeminists, there were beliefs that elevates the earth and women in the pre-monotheistic religions. In these beliefs before the monotheistic era, the existence of the female creator who gave life to the land and to the earth, predicted that society, women and nature should be approached peacefully and fairly. The values attributed to the female body had the highest social values in society (Eisler, 1990). In this sense, thinkers like Collard and Daly, who advocate the idea of biological determinism, which is a branch of Cultural Ecofeminism; lies in the brain, genes, and hormones (Üzel, 2006).

In monotheistic religions, while women form their societal roles and norms, they start to get inspired by patriarchal system that emerges in Mesopotamia (Berktaş,

2003). In this way, while the patriarchal system strengthened its place in society, patriarchal system institutionalized to control and exploit female body (in terms of reproduction and sexuality). At this point, first wave of Ecofeminism, which was highly referenced to the monotheistic pre-religious period, explains the order of patriarchal religions as the gods created everything on earth only for humanity. According to the belief in monotheistic religions, humans and especially men are on the top of every living creature on the Earth and it is based on the myth of creation by God in the heavens. Many of these myths, depicts earth as server of the humanity. In most of these myths, women and nature appear chaotic, incomprehensible and dangerous. It is imperative that men interfere with these incomprehensible beings; and in patriarchal monotheistic religions, “Men overruling the women and the nature” is one of the common patterns (Spretnak, 1993, p.271-272).

According to Ruether, one of the cultural ecofeminists, the source of the ecological crisis is the monotheistic religions that originate from Babylonian, Jewish and Greek cultures. It is important to examine these beliefs (Ruether, 1992). Because, these cultures form the basis of Western society, and this foundation forms the rest of the world with imperialist colonialism and neo-colonialism. Ruether underlines the solution for the ecological crisis that caused by this Western culture, a new spirituality should be created. It should be based primarily on the pre-Christian tradition and the earth goddess Gaia. However, bringing a female god may not solve the problem instead of “male god”. She also highlights that believing in the divinity within ourselves is one of the most important part of the solution (Ruether, 1992).

The history of the culture in feminism can be traced back to the mid-19th century. Advocates of the theory of cultural feminism continue to accept the view of liberal feminism’s views on equal rights and the importance of self-development, also emphasizing the irrational, intuitive and often collective aspects of life. They also suggested a world that emphasized collective understanding, emotional bonds, and the concept of an organic, holistic life

(Üzel, 2016). In this context, according to these cultural feminists, the aim of domination over nature, which is originated from Western male culture, is the main reason for the exploitation of women and nature (Donovan, 1997). In that sense, we can claim cultural feminists, like cultural ecofeminists, oppose the Western science and worldview that dominates both nature and women.

To summarize above mentioned issues, the first fraction in Ecofeminism reasons affinity between women and nature through psychological and biological characteristics. It also suggests the way to prevent the destruction of nature can be found in the integration of women with it, in a world where feminine values rise.

One of the greatest criticisms that essentialist or cultural ecofeminism faced was because of its biological deterministic perception on the affinity between women and nature. The idea that women are biologically affiliated to nature reinforces women's gender roles. The idea that women are more compassionate and being care givers confines women to the gender roles attributed to them. According to Plumwood, women should not be perceived as *"angels in the ecosystem"* (Plumwood, 2004). Because according to Bookchin, there is no homogeneous category of women. In this sense, defending the category of compassionate, innocent women and its values poses a problem for ecofeminism (Bookchin, 2013). Moreover, cultural ecofeminists' biocentric way of thinking brings paradoxical, essentialist and fatalist or woman-specific mysterious acceptance of power. This biocentric or biological deterministic approach has been harshly rejected and criticized by Firestone, Echols and Biehls (Plumwood, 2004). Because, according to them, such an ecofeminist argument helps women to be placed outside of culture (Üzel, 2006). In short, Cultural Ecofeminists are criticized for overemphasizing women and women's values/characteristics. At this point, the Materialist or Socialist Ecofeminists who construct the relationship between women and nature through social mechanisms and capitalism step into the discussion.

2.4.2. Patriarchal Affinity Between Women and the Nature: Materialist or Socialist Ecofeminism

Unlike cultural or essentialist ecofeminists, other ecofeminists do not perceive the relationship between women and nature in the terms of biological and psychological characteristics of women. The ecofeminist strongly oppose this idea of biological determinism and they criticized ecofeminists of the first strand for appropriating gender roles and their excessive emphasis on women's spirituality. Ecofeminists in the second strand, assess the reasons for affinity between women and nature, with historical processes and ideologies (Çetin, 2005). Socialist or materialist ecofeminists do not hold that the cause of the affinity between women and nature originates from a spiritual-natural relationship. On the contrary, they argue that the core of this relationship is the capitalist production relations and the social institutions that provide the continuity of suppression and exploitation culture on women and nature.

According to Biehl, the first fraction of ecofeminism glorifies the Neolithic era, causing a blockage in terms of scientific observation on nature; it prevents us from understanding nature through reasoning and science. According to Biehl, Ecofeminism restricts women in the passive positions. While the first wave fraction glorifies the myths of the goddesses, abundantly referring to early Neolithic period, women get stuck in irrational positions (Biehl, 1991).

In this fraction, Plummer claims by focusing on the dualist logic of the West, that perceiving the relationship between human and nature as dualistic might have many consequences. The analysis of Logic / Nature, I / Other, Private / Public, Reason / Emotion, Universal / Local leads to an instrumentalized the nature. This dualism of the creation and exclusion of the logical structure of the Other constitutes the base of modernity in relation to logic. The mindset in the Western tradition perceives nature as a woman or a material. (Plumwood, 2004) Similarly, Ynesta King also claims the causes of ecological crisis and the domination of nature and woman, is closely related to false dichotomies such as

logic/emotion, universal/local, self/ other, private/public. As a result of these dichotomies, the systematic humiliation of the working class, people of color, women and nature is enabled. In particular, she highlights the men's domination over women (King, 1990).

According to the Socialist Ecofeminists, patriarchy and capitalism use similar forms of exploitation on women. In fact, many socialist ecofeminists, refer to patriarchy and capitalism as the single system (Demir, 2013). Socialist Ecofeminists, add social and biological reproduction to Classical Marxism's concept of production. Thus, they explain how capitalism and patriarchy collaborate on exploitation of women's labour and nature through processes of de-legitimization and subordination. In this sense, women and nature are affiliated because they both suffer from the same things. They have been exploited by the same party, which are patriarchal institutions of the male-dominated system (Barry, 2007). One of the earliest theorists on capitalism and women's exploitation, Engels explains that in order for a better understanding on the dominance of women by men and the oppression of women by capitalism as he state that; the first class conflict that manifests itself in history coincides with the development of the irreconcilable opposition between man and woman in the marriage of husband and wife, and the first class oppression coincides with the oppression of the female sex by the male sex (Engels, 1992).

McDowell underlines that capitalism and patriarchy are systems that support each other drawing attention to the role of capital in the naturalization of women's labor. For the sake of profit, materials are supplied in the cheapest and most brutal way. This process causes destruction of nature while minimalizing women's labor indirectly by exploiting their labor in domestic spheres (McDowell, 1986). On the other hand, in Salleh's arguments, the woman problematizes the context of nature and capital, and explains the exploitation of women's labor as follows. According to her, capitalist accumulation and transnational hegemonic operations increase the exploitation of women and nature. But neither capitalism is the sole source of exploitation, nor capitalism

exploits only men (Salleh, 1997). Salleh links the patriarchal system with the capitalist system.

In short, socialist ecofeminists; criticize economic theories that ignores gendered division of labour, aim to step out of biological deterministic categorization of women, highlight the relevance of women's labour in production, work against patriarchal market conditions and work for change in policies both in domestic and public spheres. Ecofeminists were mostly criticized for focusing only on gender. Second criticism was their focus on economic conditions while moving away from ecological and feminist concerns.

2.4.3. The Destabilization of the Affinity Between Women and the Nature

In the first strand of ecofeminism, the affinity between women and nature based on their psychological and psychological different characteristics from men. In opposition to that, materialist or socialist ecofeminism claims that the affinity between nature and women originates from the relations of material productions. There is also a third strand where ecofeminists do not seek to protect and return to the feminine values affiliated to nature. (Like what the cultural ecofeminists aimed), instead they try to reveal the historical, economical and political mechanisms that make women more affiliated to nature (like what the socialist ecofeminists aimed).

The gap between the two main approaches of ecofeminism was reconciled by ecofeminists such as Mellor which led to the third strand of Ecofeminism (Çetin, 2005). According to Mellor, patriarchal division of labor gives women the responsibility of reproduction for human existence. In this division of labor, the roles of women and men vary according to race, class, and even culture. However, what is relevant here is that women have created a common experience in this division of labor. The 'female' work which is generally regarded as unpaid/domestic labor, does not only have to be done by women, men can also take part in them (Cited in Çetin, 2015). Mellor claims it would be

beneficial for the society to assign these labors to both sexes. This is where the third fraction of ecofeminist theory emerges. According to Mellor, there is no instinctual or mystical impulses within women that forces them to take responsibility on “gendered jobs”. However, she also mentions that women give life and tend to nurture. Biological differences are real but not invariable. Women give birth, but they do so in very different social circumstances, with different attitudes and consequences (cited in Çetin, Mellor, 1992). In this sense, the convergence of women and nature has been blurred.

On the other hand, the third fraction of ecofeminism which emphasizes the stabilization of the difference between nature and women is more controversial than natural features or socio-economic conditions. They focus more on the textual and discursive aspects. In this fraction, the borders of the patriarchal system become blurred; any kind of identification and identity politics tried to be abandoned. Irony, performance, repetition, and parody are often referred way of doing politics. It avoids defining women and nature as specific beings (Demir, 2013). In other words, the distinction between the nature and woman becomes blurred; there is no categorical distinction and distinction becomes incarnate. For example, Rosi Braidotti states that the internal system of patriarchal societies is organized in different hierarchical functions. Here, the male is associated with universality and becomes the “abstract masculinity.” On the other hand, the women are perceived as “the second sex” similar to the description of Beauvoir (Çetin, 1996). This thinker, who may be involved in the third fraction of ecofeminism, claims that the price paid by women, is becoming excessively causes the loss of their subjectivity and imprisonment within determined gender roles (Braidotti, 1996).

A post-structuralist socialist feminist, Donna Haraway’s *Cyborg Manifesto* can be given as an example in this sense for the third fraction of ecofeminism. What she referred to as Cyborg; a cybernetic organism, a hybrid machine or organism should be evaluated as both the result of the creation of social reality and the result of fiction (Haraway, 2010). Haraway, through this ironic myth, opposes

the dichotomy between nature and culture; and the perception of nature's being a starting point (Çetin, 2015). It becomes even impossible to detect women's experience in this system. In the high-tech culture, everything became closely related to the economy of code, control and communication. In this sense, the biological is converted to the cryptologic. Human and other living things, the body and other inorganic materials are intertwined. In this sense, Haraway constantly criticizes feminists either because they construct a revolutionary subject from the perspective of domination hierarchies or because they keep wandering around the same fixed Western epistemological concepts of female-nature affinity. Thus, she stands against cultural ecofeminists in the first fraction and oppose their Gaia² that struggles with the patriarchal system. In fact, she mentions very clearly that she would rather be a cyborg than a goddess (Haraway, 2010). In this sense, she proposes us to put categories and dichotomies aside, and focus on the cybernetic world (Haraway, 2010). As a result, cyborg theory blurs all categorical distinctions, especially the one between nature and culture (Kull, 2001).

2.5. Conclusion

Ecofeminists generally perceive environmental problems as women's problems and women's being sacrificed. Patriarchy constitutes the convergence of nature and women and dominates both of them. Consequently, the dual exploitation of women and nature by patriarchy is the main concern of ecofeminism (Çetin, 2015).

One of the main reasons for the destruction is based on the dualist structure and way of thinking that was rooted in Western civilizations. According to this way of thinking, in the duality of body and mind; the mind should be identified with the man and the women should be identified with nature. In the 17th century, the mainstream naturalist philosophers, equalized female body and the

² Gaia means the ancestral mother of all life in Greek mythology.

nature, that legitimized subordination and restraint on both of them. It is impossible not to see how this transformation has caused catastrophes today.

Cultural ecofeminists argue that the existing relationship between women and nature exists both on a biological and cultural basis. On the other hand, materialist ecofeminists claim that this relationship is solely on the sociological aspect. However, the common point of both views would be devaluation and instrumentalization of women and nature that causes their domination. Socialists and social ecofeminists emphasize the need to fight against patriarchy, religion and capitalism for this. Cultural ecofeminists claim that domination can only end with women's return to their essence/self. According to the third fraction between these two, the bond/affinity between woman and nature becomes ambiguous and incorporeal.

This chapter underlined the theoretical framework of the thesis. It provided a theoretical discussion about the relationship between women and nature. Regarding the connection between nature and women from the ecofeminist perspective, the next chapter will be elaborate on the transmission of traditional knowledge by women in terms of biodiversity and sustainability of natural resources

CHAPTER 3

WOMEN'S TRADITIONAL KNOWLEDGE

3.1. Introduction

There is strong evidence that the world's climate is changing rapidly (Collings, 2009). Increased temperatures, sea level elevations, changing precipitation patterns and more frequent and severe extreme weather events are expected to have a major negative impact on key determinants of human health, including clean air and water, adequate food and shelter. Moreover, even though women who have unique knowledge and skills that can help make the response to climate change more effective and sustainable (Habtezion ,2013, p.1). They are more vulnerable in this scenario because of their secondary position (Acar, 2009). In this context, this chapter aims to highlight the discussion about the traditional knowledge based on women's experiences in terms of biodiversity and sustainability.

Feminist movement and feminist academic studies have shown that women have been historically exploited by the patriarchal ways of thinking. Moreover, as mentioned in the previous chapter, ecofeminist studies argue that women's and nature's exploitation are intertwined with same ideas. In this sense, ecofeminist research had to criticize the pre- dominantly patriarchy and positive sciences paradigms- mainly positivism-.According to the ecofeminist methodology, positivist scientific understanding makes women and nature and their contributions invisible. They were also full of prejudices with the generalizations while conceptualizing theories that were not necessarily inclusive of women (Shiva, 2018). Patriarchal ways of thinking also contributed to the invisibility of the traditional knowledge practices compatible with the nature which women

have developed over the years. This led to subordination of women's knowledge to male dominant knowledge production.

In this chapter, I would like to review the discussion about knowledge, particularly traditional knowledge regarding of women's experiences. I see the value of the traditional knowledge in terms of women's experience because women's value and experiences has been underestimated or in some areas even invisible. Moreover, this chapter shows that traditional knowledge of women has been protecting the environment in terms of suitability of natural resources and biodiversity. By doing this, first of all, this chapter provides an elaboration of the term of traditional knowledge and its significance in terms of women's knowledge. Then I will focus on women's ecological knowledge, particularly indigenous women's, regarding agriculture and environment.

3.2. The Concept of Traditional Knowledge

Traditional knowledge that I would like to point out here, at its core, contains knowledge, experience and applications of local and indigenous communities in rural areas. Almost 20% of the world contains 370 million indigenous people that have cultural bonds with the places they inhabit (UNESCO, 2016a). To articulate more on the concept of "indigenous" was defined by Martínez Cobo:

Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non- dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system (as cited in DESA,2009, p.4).

For centuries, indigenous people's knowledge formation was neglected mostly because they were belittled by Western perception (Magni, 2017). However, from many aspects, reliability of traditional knowledge is accepted, especially in

terms of ecology, biodiversity and environmental conservation, land and natural resources management, health and education. As a result, the contribution of traditional knowledge in the conservation of environment has been accepted and supported in the last years (Berkes, Colding and Folke, 2000).

Traditional knowledge often shows itself as the knowledge and experience of indigenous people living in the rural areas and as a way to decrease the effect of the ecological-based crisis in the world for the last couple of years. The advocacies in those areas tend to gain their autonomy day by day. For example, International Congress and Convention Association (ICCA) started to call out for protection of indigenous and local areas and to ground knowledge production on their traditional knowledge. As a result of the advocacy on traditional knowledge, the International Congress and Convention Association started to focus on the issue in the last decades (Am, 2019). According the leaflet from Convention on Biological Diversity, traditional knowledge, innovation and practices has been explained briefly:

Traditional knowledge refers to the knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds. Traditional knowledge is mainly of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, and forestry (“Traditional Knowledge”, 2010).

In short, traditional knowledge gives practical information that allows us to have formation about how to manage environment with particular areas such as; agriculture, gardening, harvesting. Moreover, traditional information systems are dynamic, continuously new information are added. These systems internalize the information, and modify them depending on the context. That process enables them to have more endurance against modification of communities. (Am, 2019) The information that the traditional knowledge has internalized and modified

depending on the setting enabled it to work in the compatibility with the ecosystem for centuries.

The debates on necessity of traditional, local or indigenous knowledge generally form around their potential of sustainability and innovativeness (Ludwig and Macnaghten, 2019). This traditional information system can support the complex structure of modern life, especially in terms of management of the forest, mountain and arid ecosystems (WCED, 1987). Moreover, traditional knowledge systems might provide information on sustainable agriculture, and climate change.

As diminishing biological diversity and the disappearing traditional knowledge are becoming main concerns of our today's world; food safety and ecological destruction are two main topics that are affected by industrial production forms. In this sense, the fact that the traditional knowledge can affect the climate change and sustainable development that modern societies have faced and might enable sustainable agriculture to provide the indigenous and local communities gained acceptance. Following this thread, next I will discuss the contribution of the traditional knowledge to ecosystem and agriculture.

Traditional knowledge is important source for the conservation of biodiversity and sustainability. Biodiversity is very important because the most of it comes from indigenous communities' specialty on natural sources (Berkes, Colding and Folke, 2000). While traditional knowledge maintains food safety and sources of income for millions of people, at the same time, it becomes a source for both traditional and modern medicine (UNEP, 2003). The relationship between the relevance of the traditional knowledge and sustainability is also important. Traditional knowledge is vital for the sustainable natural resources such as the forests, water and overall for all ecosystems in the world (Ahirwar, 2015). As the indigenous communities have broad information about the region they inhabited , and this serves for protecting ability and sustainability of natural resources. The

significant contribution of traditional knowledge to sustainable development and biological diversity has been briefly explained in the leaflet from Convention on Biological Diversity:

Traditional knowledge can make a significant contribution to sustainable development. Most indigenous and local communities are situated in areas where the vast majority of the world's genetic resources are found. Many of them have cultivated and used biological diversity in a sustainable way for thousands of years. Some of their practices have been proven to enhance and promote biodiversity at the local level and aid in maintaining healthy ecosystems. However, the contribution of indigenous and local communities to the conservation and sustainable use of biological diversity goes far beyond their role as natural resource managers. Their skills and techniques provide valuable information to the global community and a useful model for biodiversity policies. Furthermore, as on-site communities with extensive knowledge of local environments, indigenous and local communities are most directly involved with conservation and sustainable use ("Traditional Knowledge", 2010).

In fact, the potential contribution of traditional knowledge would protect the diversity by their strength of modifications on social and ecological systems and world's ever changing nature. Throughout the history, the traditional knowledge, applications and experiences that have been developed by local communities who lived in harmony with the ecosystem dynamics, have protected the biological diversity and secured their sources of income (Gómez-Baggethun, Corbera, & Reyes-García, 2013). On the other hand, traditional knowledge is not only crucial for indigenous individuals who use that information in daily life. Modern industry and agriculture also may need traditional agriculture. For example, some medicines or cosmetic products that are being used widely in everyday lives, consist of traditional knowledge that have been provided by traditional methods ("Traditional Knowledge", 2010). Therefore, traditional knowledge provides sources of income for some groups. The only reason that Traditional Knowledge has survived to this day is that this information has been transmitted from generation to generation. In that sense, As Claude Levi-Strauss points out, the traditional knowledge that has been in danger of disappearing for the last 30 years must be preserved (Petrini, 2017).

3.2.1. How Traditional Knowledge Survives

Traditional knowledge represents knowledge experience and applications in communities in rural areas. In order to keep this knowledge's ontology, people have been transferred it verbally throughout generations (Hoşgör, 2019). The verbal transmissions that are being transmitted as historical narratives or legends, shapes traditional knowledge forms that can carry and reinforce other information as well (Vansina, 1985). This information are constantly confirmed and repeated by the most knowledgeable and mostly the oldest female member of the community (Bruchac, 2014). Cultural Transmission:

The process of acquisition of behaviors, attitudes or technologies through imprinting, condoning, imitation, active teaching and learning, or combinations of these (Cavalli-Sforza and Feldman, Chen, 1982, p.19).

Behaviors, technological formations and perception of the world in the community would affect the diffusion in this way of processes of the knowledge (Hewlett, Cavalli-Sforza, 1986). Cultural transmission generally happens from parents to children but at the same time it can be inter-generational (Boesch, Tomasello, 1998).

3.2.2. Cultural Transmission & the Old Women in the Process of Transmission

Many research show that women have great role in the process of transmission of traditional knowledge (Am, 2019). According to those research, all over the world, women are the main collectors of plants or indigenous foods. For example, according to the research which was conducted in Mexico on mushroom collectors; the main mushroom collectors are women (Orijel, Terrazo and Velázquez, 2012).

This research shows how women own traditional knowledge and how they combine it with their experiences and cultures:

They combine this information with their own cultural background as well as external knowledge to improve their subsistence. By doing so, they not only possess local mycological knowledge but also actively influence its evolution and transmission. (Orijel, Terrazo and Velázquez, 2012).

In many societies' women, especially old women are being in charge of vital and social necessities. Old women's lifelong informal learning make them experts in the fields such as food, medicine and nutritional security. While old people share their experiences, they also guarantee the sustainability of cultural knowledge transmission (Canatan, 2008). Especially old women's status in societies can be described as "living encyclopedias" in traditional knowledge systems (Singh, Rallen and Padung, 2013). Those women in indigenous societies are known as transmitters of indigenous cultures and traditional knowledge about biodiversity to the next generations. Those old women know how to protect and direct the sources of biodiversity (Berkes and Turner, 2006). For example, generally, women in rural areas have more knowledge on medical plant, because they have more responsible about taking care of their family health status than men (Howard, 2003).

Old women in indigenous communities' combine years of experiences on agriculture and eco-friendly traditional knowledge and transmit them to the next generations (Singh, Rallen and Padung, 2013). In traditional rural areas this happens orally as well as through physical contacts (Hoşgör, 2019). In oral transmissions one can perceive the elements of social consciousness and elements that support feelings of unity. Having the common history also means having similar mind sets and identities.

3.3. The Role of Women in Transmission of Traditional Knowledge

As mentioned, women have important role in the cultural transmission of the traditional knowledge (Am, 2019). In many societies, women are seeing as gatekeepers of traditional knowledge linked to the agriculture, and environment resources (Howard, 2003). In particularly, women in the rural areas are tend to be

more linked with traditional knowledge. An example, according to Mies, for many cases women's relationship with nature can be explained through gender roles, it can be equally explained by bodily relations throughout history such as; menstruation cycles, pregnancy, giving birth and so forth. Those aspects on experience and women's knowledge on the soil, animals, plants, water and air, might be enabling more commonalities between women and nature in terms of fertility of the world (Mies, 2018).

Furthermore, feminist studies have shown that even though women are responsible for finding and sustainability of natural sources, they cannot participate in decision makings, access and direction of sources (Molden, Verma and Sharma, 2014). But on the other hand, there are many research show that if women's traditional knowledge could be recognized, it would have made more contribution to the world. For example, Howard, claims that Convention on Biological Diversity goals can be achieved if women's traditional knowledge can be consider:

Only by giving serious attention to women's knowledge, rights and needs with respect to local plant biodiversity can two of the major goals of the Convention on Biological Diversity be met: the sustainable use of its components, and fair and equitable sharing of the benefits from its use (Howard, 2003, p.112).

Also according to FAO:

If women in agriculture would have the same amount of land and same access to productive resources as men, they could increase yields on their farms by 20–30 percent and the production gains of this magnitude could reduce the number of hungry people in the world by 12–17 percent (FAO, 2011, p.5).

As hearth of world focus on the debates of biodiversity and suitability of natural resources, women knowledge of tradition should be in every stage of production, development and management of natural resources.

Traditional Ecological Knowledge (TEK) is the term utilized for the knowledge kept by indigenous people for years and which have been transmitted through the

generations (Menzies, 2006). TEK requires the alliance between society and nature. As a result of this alliance, local communities have used the knowledge which comes throughout centuries that has the direct connection with nature (Joyal, 1996). This system of knowledge composes the traditional agriculture knowledge and spiritual, and cultural manners. According to Bombay, Ecological traditional knowledge:

A body of information about the interconnected elements of the natural environment which traditional Indigenous people have been taught, from generation to generation, to respect and give thanks for (Bombay,1996 in Menzies, p.6).

Therefore, this body of information is growing with the accumulation of knowledge for centuries. This accumulative information has been transmitted to other generations by cultural transmission (Berkes, Colding and Folke, 2000). In contrast to Industrial agriculture production, Traditional Ecological Knowledge is based on cumulative and long-term growing body of knowledge that is coming from over many generations (Menzies, 2006). TEK also offers brief information about the territory and the community which is lived together for many years. It contains long histories which refers many sets of knowledge in local communities. Those kinds of knowledge that have reached today also have a dynamic in nature. This dynamism might also contain experiences of users and transmitters of knowledge (Menzies, 2006).

Ecological traditional knowledge's protection and transmission have been attributed to women (Howard, 2003). The reason behind this might be women's traditional daily routines such as providing food needs of the family and so on (Montanari and Bergh, 2019). Other explanation provided by Mies that equates women's bodies' with planet earth on being fertile might be also relevant (Mies, 2018). Because of their traditional gender roles, women tend to have a distinct relationship with the nature and more occupied with natural sources' protection, storage and transmission to other generations (Howard, 2003). For example, in Argentina, a study conducted on Pilcaniyeu community shows that women are

main collectors of local plants and intergenerational transmitters of traditional knowledge (Eyssartier, Ladio and Lozada, 2008). Another research in Mexico on mushroom collectors of gender roles shows that in many regions of the world women are often the main collectors of mushrooms. This is also the case for plant gathering and organizing; women have been recognized as custodians of agro-biodiversity over much of the world (Orijel, Terrazo and Velázquez, 2012). Another case study (Pilgrim, Smith & Pretty, 2007) focuses on ecological traditional knowledge highlight gender's effect on the issue. On the India part of this study, highlights both men and women's labor in agriculture, but men tend to take part in breeding because of their gender. This highlights traditional ecological knowledge on breeding is pre-dominantly male knowledge. On the other hand, one can claim that because of their gender roles as caregivers, women may have expanded their knowledge on ecology. For example, if women need to take care of sick or old people, they need to trust their own knowledge on local curative plants and utilize them. Women and men, who have similar traditional knowledge, seem to become experts on different fields (Pilgrim, Smith and Pretty, 2007).

Women having knowledge on plants that have been collected in terms of their nutritional characteristics or safety puts them in crucial positions in societies (Am, 2019). They become involved in many communities' health and food issues. In sum, previous research indicate that women contain the traditional ecological knowledge and function as managers and collectors of the natural sources all over the world. Women's knowledge and experiences are being ignored in pre-dominantly in patriarchal systems; causes them to be perceived in lower statuses, whereas, one of the most important inventions of the humankind for two centuries,; agriculture is perceived as "*invention of women*" (Shiva, 2014). Some narrations explain the accidental nature of the first start of agriculture. It is claimed that it started when a woman first tripped and dropped the seeds she collected, and realized how new plants grew there in the following years in the fertility of Mesopotamia (Aysu, 2015). According to the most of these myths, invention of agriculture serves for higher status of women. With

this invention, humankind started to dominate the nature. In that sense, women started to collect plants and fruits while at the same time learned how to plant them. In short, in Neolithic Age, gendered divisions of labour have been already set up : men tame or hunt animals, while women focus on nature, plants and agriculture (Yıldırım, 2019). The start of planting might be perceived as first productions in society .Women did not only consume the nature rather they contributed to production (Mies, 2018).

In line with these explanation, feminist thinkers, such as Sandra Harding and Evelyn Fox Keller, argued that animal husbandry, hunt animals or pottery have invented by women's experiences, in the Neolithic period In contrast modern science, accepted the invention came out by men's experiences (Hartsock, 2019). Sandra Harding is one of the authors who criticized the traditional aspects of different types of feminism in their handling of women's experience. Harding argues that 'women's contribution' into the theories have been undervalued and miss approached by some gender theories only by looking

In abolition and temperance struggles, in "gathering" activities within so-called hunter cultures, in the work of significant literary circles (Harding, 1986, p.30).

According to her, the first feature of feminist methods should be adding women's experiences into the existing traditional methodologies in women's studies. Since the perspective of the bourgeois men is misleading, the feminist method must base it's on women's experiences (Harding, 1987). Regarding Harding perspective, this thesis is focusing on women's experiences.

In many parts of the world, women utilize their knowledge on traditional agriculture systems to supply food for their families and create sources of income. Agriculture as the main source of income for 135 different societies, %79 of the enable plant species are collected by women according to farming and hunting statistics (Barry and Schlegel, 1982). Women continue to use their knowledge on plants and collecting in various fields in life. This knowledge

affects their status in society as well. For example, in Great Lakes region between USA and Canada which was owned by indigenous people, a specie of feral rice had been planted before the area kept by white people (Vennum, 1988). After the start of colonialism and this rice becoming a consumer product and had value in the market; indigenous women were swept a side in production (Vennum, 1988).

Women having the traditional agriculture knowledge enabled their tribe to survive for centuries and have lifted their status in their community. Women's agricultural knowledge directly affects culinary habits. Although the decision making might be associated with men, women are perceived as gatekeepers of food flow (Howard, 2003). Howard mentions how culinary traditional knowledge have been transmitted through generations, and highlighting its flow as mother to daughter(s) (Howard, 2003). Throughout the history, women tend to have a lot of traditional knowledge about plants and agriculture Howard explains, highlighting that one should comprehend this wisdom:

Understanding women's influence on plant biodiversity is essential to our ability to conserve plant genetic resources, especially those plants that are useful to humans (Howard, 2003, p.2).

Women's expertise on plants covers a relevant ground on eco-diversity as well. Shiva, highlights the guidance and expertise of women for preparation and production of nutritional plants; preparation of seeds, protection and storage of seeds for the following years, following the weather forecast for plantation are women's responsibility since they have the knowledge (Shiva, 2019). In short, planting requires knowledge on climate and weather and enrichment on soil and seeds. Additionally, planting requires follow up on provision on sufficiency of water and the right time to harvest. Knowledge on storage and breeding is efficient as well. According to Shiva, women are gatekeepers of seeds for a long time; thus, they have come to know all of those formations (Shiva, 2019).

3.4. Women's Knowledge Based on Natural Sources Protection

3.4.1. Women's Traditional Knowledge Based on Sustainability Development

Women who inhabit in rural areas, become the protectors (gatekeepers) of biodiversity and because of that, they cover a relevant ground on development of ecological sustainability, protection and production (Shiva, 1992). Sustainability Development has become issue after 1987, with Brundtland Report and has defined in many ways. According the Report, sustainable development:

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, 1999).

For centuries, women and indigenous people have been producing and transferring the information of economic, cultural and environmental issues with the relationship of natural resources. They aim to manage this in an eco-friendly manner for its sustainability. In the process they use flexible and cost effective methods. At the end they have variety of products. The methods they embraced both protect the diversity of indigenous individuals and the world, while at the same time enabling food security (Nakashima, 2012).

In the indigenous communities, women mostly take part in food security and management of sources. For example, indigenous women are %70 responsible for picking up the first seed species, storage/protection of these seeds, collection and processing of the product in cultivation processes. (Erni, 2014) According to the previous research was conducted in Laos in India in Asia, women are perceived to have deep knowledge on seeds, crops and plants in the process of agriculture. Since women transmit their knowledge to the younger generations, their importance on protection of biodiversity highlighted constantly (Erni, 2014).

3.4.2. Women's Traditional Knowledge Based on Biodiversity

Biodiversity in the world is constantly decreasing; humankind is fed on only with 12 species of plants (Shiva, 2018). Analysis on protection of world's biodiversity, highlights the relevance of local farmers' and women's traditional knowledge. As mentioned, women in rural areas, generally take part in collecting plants, farming and storing the seeds. Thus, despite the climate change and decrease of biodiversity, women are able to find alternatives to the existing sources (McIntyre, 2009).

It has been clearly stated in the international documents that women's traditional knowledge protects and sustains biodiversity.

The relevance of rural women in the reproductive and productive sphere of agriculture, their knowledge of the value and use of local plant and animal resources for nutrition and their role in preserving agro- biodiversity has been highlighted and appreciated in many international documents like CEDAW Article 14, Agenda 21, Rio+20 and Agenda 2030 (UN 1979; 1992; 2012; 2015) (Oedl-Wieser, 2017, p.811).

Also, Berkes explains:

Much of the world's biodiversity has been in the hands of traditional peoples, societies of hunters and gatherers, herders, fishers, agriculturists, for a great many generations (Berkes, Folke and Gadgil, 1994, p.281).

Thanks to indigenous people's efforts on local seeds and plants, one can still talk about biodiversity. Convention on Biological Diversity has also accepted that

The international community has recognized the close and traditional dependence of many indigenous and local communities on biological resources, notably in the preamble to the Convention on Biological Diversity. There is also a broad recognition of the contribution that traditional knowledge can make to both the conservation and the sustainable use of biological diversity, two fundamental objectives of the Convention ("Traditional Knowledge", 2010).

Patriarchal perception/ world-view centers male oriented ways of thinking for all values. In that sense, there is almost no room for diversity, instead lets hierarchy to take over (Shiva, 2018). In that sense, this system does not accept biodiversity. Thus, destruction of diversity and creation of monocultures are perceived required for capitalist patriarchy. The marginalization of women and destruction of natural bio-diversity goes hand in hand/parallel. According to Shiva, the reasons of diminishing in biodiversity and world's becoming more monoculture, uniformed, homogeneous; delegitimization of women's knowledge should be considered as results of patriarchal improvement (Shiva, 2018). Results of this process can be perceived in many fields of life. For example, constantly changing culinary habits/patterns threatens biodiversity and agricultural traditional knowledge of women. A research on food plant gathering in Italy, women can cook healthy soups with their traditional knowledge on agriculture that enables them to track 50 different wild plants (Pieroni, 1999). This research that has been conducted in 1999 might have lost its relevance. Traditional knowledge might have disappeared causing decrease in biodiversity. Another research that highlights women's labour on biodiversity and agricultural formation, has been conducted in Mexico focusing on Maya community/civilization (Greenberg and Howard, 2003). Mayan people, while migrating from their native land Yutacan, carried their seeds and plants with them under harsh conditions to protect their cultural and culinary diversity. They planted these seed in their new habitations in Mexico, protecting their own local seeds and culinary traditions.

Instead of homogeneous, uniformed industry and its products, when women meet in fields, forests, or arid areas in diversity they combine feminist and ecological politics (Shiva, 2018). According to Shiva, women having ecological knowledge might be perceived as the core/origin of feminist and ecological politics. She claims, women's exclusion from patriarchal system might be caused by their focus on diversity. Because eco-diversity means women hold wisdom in their hands (Shiva, 2018).

3.4.3. Women's Traditional Knowledge Based on Environment

Indigenous people who inhabit the most vulnerable ecosystems would be affected the most by the climate change and decrease of biodiversity (Magni, 2017). Especially, we can assume the negative effect on women who contribute to ecosystems with their knowledge and experiences. Despite their firsthand knowledge on traditional forms, women as populations tend to become more affected by ecological crisis, destruction of the environment in general (Acar, 2009). This might be related to women's gender roles and gendered division of labor in the society.

In indigenous societies' women are connected to natural resources by first hand, to sustain their lives. Thus destruction/corruption in natural resources immoderately affects women and appears as victims of this process. As research shows, the destruction of ecosystem in certain areas affected women's and local community's daily practices and rituals (Kronik and Verner, 2010). In fact, certain studies show that ecological destruction does not only affect daily lives but also affect even their life. Eric Neumar's research that was conducted in 141 countries illuminates that in all of those countries, women have higher mortality rates compare to men in natural disasters caused by climate change. The research highlights how existing inequalities determine mortality rates in natural disasters (Neumayer and Plumper, 2007). According to UN, draughts, floods and heats, shorten women's average lifetime more than men (DW, 2018). Both because of their positions as victims, and being containers of harmonious traditional knowledge, women tend to cover a central position in relation to ecological disasters. Women, who have the sustainable life experiences, especially in rural areas, also have environmental and local knowledge. Women tend to have more advantages in terms of fighting against the crisis and destruction, to be more precautions and to adapt themselves to changing circumstances. Their traditional knowledge is not only effective in decreasing effects of natural disasters or prevention from them, but also function as early warning system while healing destructive effects (Rautela and Karki, 2015). As a result, indigenous peoples'

close relationship with their own region and taking advantage of their own traditional knowledge seems to protect them from certain damages throughout centuries (Magni, 2017).

3.5. Conclusion

Traditional knowledge of indigenous individuals and women are becoming more and more important in years as we can perceive from policy makings. (IPCC)'s Evaluation Report (AR5), highlights traditional knowledge's importance on fighting against climate change and adaptation of it into existing systems (Pachauri, et al., 2014). However, despite their position both as victims of ecological crisis and as containers of harmonious co- existence with nature, women tend to be pushed aside in decision making processes (Acar, 2009). However, women's successful resource management skills' direct relation to the difficult life practices of natural resources and biological diversity should not be overlooked (Moser,1993). In other words, women's experiences show their close relations to traditional knowledge enable their expertise on natural resources. To conclude, this chapter summarized academic discussions on women's knowledge mainly based on their ecological, traditional and agriculture knowledge. By doing this, it is aimed to show the importance of it, especially in terms of biodiversity and sustainability within the context of ecological crises. Furthermore, the thesis is aimed to make connection between the effects on the decrease of women's traditional knowledge and biodiversity and sustainability which are supporting by the research findings. In the next chapter, the possible elements on the decrease of traditional knowledge will be analyzed.

CHAPTER 4

THE DISAPPEARANCE OF THE ECOLOGICAL TRADITIONAL KNOWLEDGE

4.1. Introduction

As mentioned in previous chapters, there are two major objectives of this study. The first is to underline the importance of traditional knowledge as elaborated in previous chapter, and the second one is to underline possible reasons behind the loss of traditional knowledge which will be analyzed in this chapter. Therefore, the information that I have obtained in the research field will be better evaluated within this context. As Companion Report to the United Nations Secretary-General's Study on Violence Against Women highlighted the risks as follows:

Indigenous Peoples have a body of knowledge that reflects our spirituality. It taught us how to live and how to have a relationship with our environment, which includes everything. Our relationship and our knowledge helped us to survive. Those teachings also help us to reciprocate that knowledge and energy that we take from the animals, from the oceans, from the plants. It is this kind of knowledge that we are trying to protect, but are at risk of commodifying (Indigenous Women Stand Against Violence, 2006).

The disappearing of the traditional knowledge has a very complex reasons in all over the world. According to Baggethun, Corbera and García those components are but not limited to: the loss of the local languages, the dominant religions, the changes in land use, the markets integration, and in a wider aspect the industrialization and globalization processes (Baggethun, Corbera and García, 2013).

As the major concern of the thesis is to highlight the relationship between women and nature in terms of biodiversity and sustainability; the research

objective of this study is requires into the loss of traditional ecological knowledge which is also including the agriculture knowledge. Tang and Gavin, claims that Traditional Ecological Knowledge (TEK) has a dynamic structure, adding that changes/decreases in TEK should not be considered separately from social and ecological changes. They generalize the factors that affect TEK as cultural, economic, political, social and institutional (Tang and Gavin, 2016). Therefore, this chapter is aimed to focus all of these effects.

Firstly, I would like to focus on the effect of mono-culture that was created by the domestication of traditional knowledge with Western ideas. Then, I aim to continue with the loss of traditional language and traditional land. Thirdly, I will focus on the effects of this loss in the modernization process and integration of capitalist market economy. Finally, I will discuss its effects on the soil and the climate.

4.2. The Change in Traditional Beliefs

4.2.1. Idea of Possessing the Nature

In literature, there are many studies that mention the positive association between the European industrialization's expansion into the rest of the world, spread of European values, that contain superior intelligence rationality and science and the level of violence and cruelty that 'white man' utilized on colonial lands (Mies, 2018). For example, Bodley says that the unique economies, cultures, languages and lifestyles of colonized areas need to be destroyed, and even the unique parts of those lifestyles should be despised. As a result , the white men's industrial culture can show the fascinating power of itself on the people who have been stripped off their own lifestyles and roots (Bodley, 1982).

Carolyn Merchant, in her book *The Death of Nature*, objected to the belief on scientific rationalism's emergences while claiming it is a mechanical paradigm that justified the exploitation of women and nature (Federici, 2011). One of the

most powerful Western philosopher Jean Jacques Rousseau, for example, was the one, who nature and naturalized women and 'savages' parallel (Steinbrugge, cited in Mies, 2018). According to Mies, to prevent women from modern setting that evolves around hierarchies and private property, women's attributed characteristics (humanity and sensuality) and men's attributed characteristics (the rational and modern) also contributed (Mies, 2018). However, none of the Western intellectuals mention the violence and deaths that women had to suffer at the expense of this protection. Furthermore, according to Merchant, there is a link between the invasion of nature with witch hunting in the Europe and the tortures that women suffer from this. She claims that all of this violence is based on the same modern science and technology (Merchant, 1983). It is not surprising that Francis Bacon, who was the father of modern scientific methods, perceives nature as a witch whose boundaries must be captured.

As woman's womb had symbolically yielded to the forceps, so nature's womb harbored secrets that through technology could be wrested from her grasp for use in the improvement of the human condition (Merchant, 1983, p169).

The society began to rule nature and humanity, with Bacon's science that crippled nature with the help of big laboratories that financed by science faculties. As a result, later on around 1960s green revolution and bio-revolution made people's reproduction control dreams come true under the name of productivity (Shiva, 2012).

4.2.2. Life's Becoming Mono-Cultured

Today, it is only possible to talk about the diversity of life, where cultural diversity is preserved; because the lifestyles here could not keep up with the Western ways of living that have been adopted all over the world (Shiva, 2012).

It is no coincidence that the world's last remaining forests and 80% of the biodiversity of the planet are found in territories that are managed, owned and under the control of indigenous peoples³

It is important to preserve the knowledge of local communities on traditional knowledge as the industrial lifestyle requires mono-culture. For example, industrial agriculture has been focused on monoculture. Thus, they don't contain the knowledge and experience of local seeds that accumulated over years. They are susceptible to disease and insects and can be affected immediately. It is mandatory to use a single product system in with industrial seeds, since they are easily affected by climate instabilities (Aysu, 2015). Moreover, grains can be an example of the destruction of biodiversity. While only some types of grains, rice and corns with a larger global market share are produced globally, some grain products except these face extinction (Shiva, 2012). Thus, mono-cultured grains enable for some diversity over certain kinds of seeds. Destruction of life diversity acts only in the light of the plannable and applicable principles of the discourse, leading to the standardization of vital relationships and ultimately the destruction of life diversity (Shiva, 2012). At the same time, in the last three decades, we have been witnessing the loss of natural resources and the gradual disappearance of traditional knowledge. We especially witness the rapid disappearance of the tropical forests (Ramirez, 2007). There is a strong connection between the destruction of tropical forests, other ecosystems and decrease of biodiversity and cultural loss (Ramirez, 2007). Shiva, in this sense, exemplifies the change in tropical forests as mono-cultivation. By controlling the cycle of trees in tropical forest areas, they create grassland areas for the inhabitants of the forest and provide the necessary transformation of the ecosystem, and ensuring eco-diversity. The example of eucalyptus, which intensifies in India and South Asia (but it was originated in Australia) shows how these species of wood, which the modern forest economy considers to be rapidly growing and yielding fast crops, might be the reason why the diversity of forests in India and South America pushed to reduction of a single species (Shiva, 2012). As a result, the wood

³ International Indigenous Forum on Biodiversity, "About" Accessed from <https://iifb-fiib.org>, on 04 January 2020.

species demanded by the industrial production model increases, while biodiversity decreases.

To sum up, monoculture mind that emerged with the idea of possessing the nature; In contrast to the process integrated with nature; it declares its “intellectual property” over animals, plants and nature and brings about a different process of ownership, slavery and control. I will discuss more these details in the following sections.

4.3. Losing Traditional Way of Living

As mentioned in the previous chapter, the cultural transmission is one the most common way to transmitted the traditional knowledge from generation to generation. However, there are many factors that can cause disruption of traditional knowledge’s cultural transmission over generations. For example, the disruption of the mother tongue, the loss of traditional land or the abandoning the traditional land enables the loss of traditional knowledge (McCarter and Gavin 2011, Reyes-García 2013).

Among the many markers of indigenous cultural identity, the attachment to land and the use of an indigenous language are two of the most significant (Kipuri,2019, p.53).

In this section, I will emphasize the close relationship between indigenous languages, decrease in indigenous regions and disappearance of traditional ecological knowledge.

4.3.1. Loss of Traditional Language

As the Traditional Ecological Knowledge has been transmitted through language, the loss of linguistic diversity directly affects this transferring process (Maffi, 2001). In that sense, languages are the greatest means that the traditional knowledge is coded, expressed and transmitted. There may be a direct link

between the decrease of traditional knowledge and extinction of traditional language (Am, 2019).

Nowadays, there are approximately 6000 spoken languages around the world (Grimes, 1996). It has been estimated that the vast majority of this number will decrease towards the end of the 21st century and dominant languages will prevail (Minasyan and Shafe, 2011). Traditional knowledge consists of knowledge accumulated in the mother tongues of indigenous people. The interdependence of indigenous communities with language constitutes the biocultural diversity (Nicolle, 2004). Thus, the survival of the native mother tongues would be very important for the viability and continuity of traditional knowledge as the transference of this knowledge to other groups and generations takes place orally (Am, 2019).

UNHRC Leaflet on Indigenous Peoples and the Environment underlines that one of the reasons that traditional knowledge is forgotten might be related to the decrease of language diversity and biodiversity. The report continues by highlighting the increasing threats that cultural diversity has to endure over the course of years, mentioning 2500 indigenous languages' still fight for their existence (Collings, 2009). It is also important to underline that this group of people also hold the vast majority of the world's biodiversity. In this sense, there may be a direct link between languages and the decrease of the world's biodiversity. As Convention on Biological Diversity, report of Plan for Action for the retention of Traditional Knowledge mentions:

Indigenous and local communities have expressed the need to preserve, use and revitalize their languages as a chief vehicle for cultural and knowledge transmission (CBD, para42).

For this reason, the survival of indigenous languages is the key for sustainability of traditional cultural knowledge.

The threat over mother tongue of many communities might be related to the loss of ecological traditional knowledge that is a relevant part of their culture. If a language disappears, most of the time the lifestyle supported by that language and the knowledge accumulated in the community for many years would disappear as well (Maffi, 2001). With the disappearance of culture, the death of language happens and those societies ultimately assimilate into the dominant language community (Maffi, 2001). This promotes the loss of traditional ecological knowledge, since many benefits can be obtained from this kind of knowledge on ecosystems, preservation methods, plants lives, or animal behaviors and many other aspects of nature that accumulated in native languages (*“Traditional Knowledge”*, 2010).

As a result, loss of the mother tongue is one of the important components that have impact on losing traditional knowledge (Gavin and Tang, 2016). The mother tongue plays an important part in traditional forms of transference as people who have difficulty speaking or understanding their mother tongue for any reason may struggle in terms of accessing healthy and sustainable traditional knowledge (Champagne, 2009). In this sense, prohibitions of traditional languages obstruct the learning of the mother tongue for generations, which may undermine the transmission of traditional ecological knowledge over the generations. Some of the surveys showed us the prohibitions on the use of indigenous languages in public schools adversely affect traditional languages and TEKs transmission through the languages (Gavin and Tang, 2016).

4.3.2. Loss of Traditional Land

What the land means for indigenous people is a place where they can integrate their traditional knowledge, their memories and their spiritual beliefs with natural resources and territories. Indigenous people feel responsible to protect their lands because they know that wellness of their land will pass on to the next generation through their hands (Young, 2000). In this sense, among indigenous people, they are defined as the 'owner' or 'the original people' of the region. The

reason for that might be the way they live with their culture in the region before being displaced, exploited or assimilated to the dominant general culture which is usually caused by a group of colonial powers (Kipuri, 2009).

The total or partial loss of an access to traditional lands and resources enables the loss of traditional ecological knowledge (Gavin and Tang, 2016). There are approximately 370 indigenous communities the world as it can be traced down (Carino,2009,p21). Even though these communities are perceived as the minority, they preserve the cultural biodiversity of the world with contribution of thousands of different local cultures they represent (Carino, 2009). However, these communities and people, whose biodiversity has contributed to the diversification of the world, are threatened more than ever in history. Gray underlines that the current biodiversity crisis is actually closely related to the world's cultural diversity crisis (Gray, 1991). Thus, this crisis does not only affect the indigenous people and their regions but the whole world. In short, as Collings summarizes:

Dispossession or forced removal from traditional lands and sacred sites has eroded the relationship between indigenous peoples and their environment. Without access to their land and natural resources, people can no longer carry out their cultural activities or use and develop their traditional knowledge. When forced to migrate and resettle in new environments, indigenous peoples find that their traditional knowledge and practices have to be adapted to new and often difficult circumstances. This has put the cultural diversity and traditional knowledge of indigenous peoples under tremendous pressure (Collings, 2009, p.94).

Restriction of access to traditional lands voluntarily or unwillingly helps to loss of Traditional Ecological Knowledge of indigenous people (Gang and Tavin, 2016).In the context of this thesis, next I will focus on the enforced displacements from the land.

4.3.2.1. Forced Displacement from Traditional Land

United Nations Report, states that indigenous communities' enforced displacement that caused by destruction of traditional lands and regions would be one of the biggest problems they face today(WGIP, 2006).

It is clear that one of the most significant threats faced by indigenous peoples arises from their displacement, eviction and separation from their lands, territories and resources. These issues are expanding and represent significant challenges to the security, health and survival of indigenous peoples and their cultures (Collings, 2009, p.87).

Forced displacement today has been perceived as the result of development and globalization politics from many aspects

4.3.2.2. Changes as Results of Globalization and Politics

In many parts of the world, lack of inadequate legal framework causes degradation of traditional lands and fragmentation of traditional lands. The privatization of common areas, for example, neglects territorial rights and cultures, and lead indigenous communities to forced displacement (Macchi, 2008). In that sense, the traditional knowledge practices are intended to be shaped and regulated by the dominant paradigm, in relation to the requirements of the dominant economic order.

There are studies that introduce indigenous communities as threats to traditional forms of production and development policies both directly and indirectly. For example, a study on pastoralist, hunter-gatherer indigenous people in Kenya shows that these traditional lifestyles have been threatened in recent years. Because policy makers implement policies that do not fit into the social and ecological lives of indigenous people in Kenya, as a result, people forced emigrations to the cities (Tauli-Corpuz, 1999).

Moreover, the same process applies to new food incentives such as genetically modified seeds, chemical fertilizers and pesticides. Increased use of chemicals have caused great damage to self-sustaining ecosystems and caused great damage to indigenous inhabitants' biologically diversified environments, forcing them to emigrate (Collings, 2009). This process is supported by the state authorities as well as private companies. The privatization of land and natural resources, and the disposition of them to non-indigenous people, leads to the deprivation of traditional people because of the commercial concerns. The most importantly, it forces indigenous people to migrate to the cities by leaving them landless (Stavenhagen, 2004). The people who move out to the cities would lose their bonds with the traditional ecology and causes disappearance of traditional knowledge.

4.3.2.3. The Effect of Colonization

The dominance of colonial systems over the traditional regions might lead to destruction of traditional ecological knowledge (Tang and Gavin, 2016). In colonial processes, the language, region and culture of the indigenous people are threatened. For example, according to Garcia, colonial policies often have a negative impact on the cultural transference process, since they also involve the compulsory education system (García, 2006).

Some studies have illustrated that the expansion of colonial lands and the removal of indigenous communities from traditional lands, resulted local people to have limited access local resources. This caused the loss of the traditional knowledge (Tang and Gavin, 2016). For example, due to some legislations and laws, some indigenous regions are transformed into 'national parks' and 'ecotourism' areas. That also should be perceived as the results of colonial processes on forced migration. As Colchester highlights in his research on the relationship between national parks and indigenous people in the United States, the goal was to create deserted national parks for visitors in the regions inhabited by indigenous people (Colchester, 2003). As a result, this system bans

indigenous people from their own regions and they become merely visitors with restricted access (*Gomez-Pomba and Kaus, 1992*). In the African region as well, one million square kilometers of forested areas, pastures and fields were expropriated for “protection” and approximately millions of people were forced to migrate(*Colchester, 2003*). As a result, they felt apart from their traditional land.

4.3.2.4. War/Conflict Zones

Conflicts and wars in the world often result in local people being deprived of their cultural, social and economic rights. (*Trash, 2009*) Conflicts and war zones are direct threats to the indigenous communities and their lifestyles. Indigenous people are often forced to leave their own territories. At the end of this process, transmission of traditional knowledge may have been disrupted. The reasons of disruption might be listed as: the destruction of the land of indigenous communities due to war and conflict, water pollution, land’s being exposed to nuclear weapon waste, or equipping the land with explosives or mines that may cause deaths. (*WGIP, 2006, para. 11, 12 and 13.*) Thus, zones of war and conflict may become a threat to local and indigenous people and lead to reduction of habitations. Decrease of living spaces might cause disappearance of traditional ecological knowledge. (*Tang and Gavin, 2016*)

Furthermore, women are more exposed to sexual and gender-based violence at home, on the street, while attempting to flee, in military zones or in refugee camps than men in times of conflict, or riots caused by war, and natural disasters (*Özdemir, 2015*). These zones of war and conflict should be considered not only as armed conflict but also as practices that target women such as rape and sexual violence (*Trash, 2009*). There are many studies documenting the violence experienced by indigenous women in war zones. For example, the International Indigenous Women’s Forum (2006) states that violence against women has been utilized as a weapon in colonial conquests of indigenous territories; 1,400 indigenous Samburu women in Kenya were exposed to rape by British soldiers

on their own territory; in the 1990s indigenous women in Chiapas, Mexico highlight the violence they suffered in paramilitary camps (IIWF, 2006, p48). As a result, women living in indigenous regions are often forced to leave their communities and leave their lands and migrate to other places (Trash, 2009).

4.4. Disappearing the Traditional Livelihood Practices

The long-term historical processes leading to climate, food and energy crises would be the industrialization of agriculture and the removal of the peasants and women from the land (Shiva, 2012). The second process that emerged recently is the effect of globalization of agriculture and free trade on food security and ownership. These processes cause serious problems both for women and for food safety.

4.4.1. Globalization and Industrialization Process in Agriculture

In the face of the growing world population, the phenomenon of industrialization and globalization has the expectancy of meeting the food need and enriching the countries in a short period of time. It has been broadly claimed that globalization and industrialization do not provide these benefits, on the contrary, cause harm to humanity and the environment.

There is mounting evidence that the phenomenon of globalization has been devastating to indigenous peoples and their communities, lands and resources. Globalization has become a primary cause of conflict between indigenous peoples and others, including transnational corporations (TNCs), the World Bank (WB), International Monetary Fund (IMF) and the Overseas Development Agencies (ODAs) (Trash, 2009, p229).

It has been assumed that the development under the effect of globalization would bring prosperity and wealth to everyone in the world, including Third World countries. However, for some regions this foreshadowing could not be fulfilled. On the contrary, the share of these regions turned out to be environmental poverty (Shiva, 2018). The monopolization of the production and consumption

of basic inputs such as food products and seeds does not bring prosperity to millions of people. In the industrialized agriculture and globalizing world; life, environment, food safety and biodiversity have been affected negatively by this process. Furthermore, industrialized production gained more visibility compare to traditional knowledge.

4.4.2. Globalization as a Way of Exploitation

The current understanding of globalization stands on a system of commercial and financial committees that support large-scale export trade by expanding agriculture and producing monocultures worldwide, in order to achieve economic prosperity in areas of commercial, mining and industrial monocultures (Trash, 2009). When one assesses the last 500 years of history, Shiva claims, that if there is a colonial understanding of nature's rights, the North, would be more advantaged (Shiva, 2018).

Bourdieu explains the hierarchies in the fields created by globalization and power's effect on the relationships and strategies:

A field is a structured social space, a field of forces, a force field. It contains people who dominate and people who are dominated. Constant, permanent relationships of inequality operate inside this space, which at the same time becomes a space in which the various actors struggle for the transformation or preservation of the field. All the individuals in this universe bring to the competition all the (relative) power at their disposal. It is this power that defines their position in the field and, as a result, their strategies (Bourdieu, 1998b, p.40-41).

As we have been acquainted today, most of the international companies benefit from certain parts of the world due to the cheapness of labor force or lack of environmental regulations due to their political situations or because of former commercial agreements. Commercial agreements and negotiations that eliminate or reduce trade barriers lead multinational companies to operate in many parts of the world, while maximizing profits, and operate decision makers both politically and economically (Piniero, 2016). Under these circumstances, many

of the farmers are forced to compete with the subsidized prices of internationally protected companies. This is because the prices set by international corporations and the states that support them in laws increase global supply and on average, would cause world prices to fall (Elliott, 2004).

According to Shiva, the process of industrialization brought the term of ‘biopiracy’ which is defined as:

Problematic relationship between global commercial interests and the biological resources and indigenous knowledge of local communities (Shiva, 2007, p.307).

She states that World Trade Organizations (WTO)’s Intellectual Property Rights (TRIPs) agreement which was prepared and shaped by the transnational organizations, have great role to ‘steal’ the knowledge from those people. Therefore, biological and cultural heritage of indigenous people are in danger of disappear (Shiva, 2007). I will discuss this in the next section.

4.4.3. More Globalization More Industrialization

Farmers and women are forced to struggle against the industrialized agriculture with the traditional knowledge of agriculture that contains their relationship with nature and how they utilize their lands (Piniero, 2016). Because the expansion of industrial agriculture in the world enables easy distribution of agricultural systems of multinational companies to the world, consisting of a combination of chemical fertilizers, pesticides and machines based on industry (Thu, 2009). Globalization has led to increasing industrialization of agriculture, which forbids women from productive activities through their lands (Shiva, 2014). Likewise, agriculture expert Abdullah Aysu mentions companies which aim to control agriculture and food, can manage it only with the support of politicians, eliminating small farmers, ignoring animal rights, ignoring women's knowledge, destroying nature and by lowering the value of food supplies (Aysu, 2015).

Certain policies have led to increased visibility of companies producing chemical seeds and agrochemicals, such as the World Trade Organization's (WTO) Trade-Related Intellectual Property Rights (TRIPS) agreement, which allowed the possession of food and agricultural land (Shiva, 2017). These practices, which are international company-friendly, have brought the obligation to adapt the principles and rules determined by national legislations by overlooking the traditional seed cultures accumulated over centuries (Yüksel, 2001).

According to Corpuz, the TRIP agreement which was prepared on the Western foundations is a hale and hearty example of the Western imposition, perceived as one of the greatest threats to traditional communities. The current form of this imposition is the Intellectual Property Rights (IPR) regime, especially the Trade Aspects of Intellectual Property Rights (TRIP) of the World Trade Organization (WTO) Conventions, was the latest example of such an imposition (Tauli-Corpuz, 1999). TRIPS can be explained in summary as:

The TRIPS Agreement is an embodiment of western legal philosophy, norms, values, and mindset that are contrary to many Indigenous Peoples' cosmologies and values (Tauli- Corpuz, 1999).

This agreement increased liberalization of export and import, creating a threat to indigenous communities with international global capital especially in terms of local traditional agricultural practices, food security and biodiversity (Carino, 2009).

The greatest threat of the TRIP on traditional knowledge is its ignorance of these values, and positions itself as against them. For example, traditional knowledge advocates for biodiversity and promotes seed diversity. On the other hand, TRIPS advocates monoculture and mono-constructs the seeds in the laboratory and aims to restrict food sector with several seeds. The preservation of the indigenous people's knowledge and skills on nature becomes an essential issue, because, as stated in Topuz: "Sharing of knowledge becomes dangerous because it might be appropriated by those who have the capacity to claim exclusive

ownership over such knowledge and commercialize it.” (Tauli-Corpuz, 1999). Traditional people and knowledge that have been undermined by TRIPS, are served for the privatization and trade of this knowledge. In other words, the worst part of TRIPS is its attempt patenting life, or the commercialization of life (Tauli-Corpuz, 1999).

After the TRIPs agreement, there are big changes in the social life of farmers from all over the world. For example, multinational companies, which cover huge part of this transformation, have started to buy parcels of land in large amounts. For example, Oxfam Briefing Report mentions how Cargill, one of the largest companies in fields of corn and soybean production, large-scale purchases of public land in Colombia (Guereña and Burgos, 2014). Acuña records to what extent these purchases might have transformed the cultural and social lives of the local communities living in the region and also states that the driving force of the change is the one on the agricultural systems (Piniero, 2016). The echoes of these land purchases in the Asian region according to Shiva, was the increase of dependency on chemicals, genetic engineering, and mechanization, while small farmers continued to disappear. At the end, it has been predicted that 200,000 farmers committed suicide in India (Shiva, 2009).

4.4.4. Capitalist Market Integration

Increasing dependence on national and global markets might ultimately affect the products of traditional ecological knowledge and the livelihoods gained in these ways (Gavin and Tang, 2016). In today's neoliberal system, products are full of incentives for processed foods and abundant chemicals appear every area of our lives. These are not part of traditional methods. For these reasons, market integration might be playing a crucial part in loss of traditional ecological knowledge (Locay, 1989).

Market integration not only increases the demand for market goods, but also leads to reduction in traditional methods and traditional diversity. For example,

Soemarwoto's research on rice diversity in Kasepuhan, Indonesia demonstrates striking results of market integration. The reason for the disappearance of traditional knowledge and methods might be related to use of industrialized seeds in the research area, Kasepuhan, which is perceived to be a growing trend around the world. According to the research; 146 types of rice are reduced to just one company seed as a result in the process of industrial production (Soemarwoto, 2007).

Modern industrial society is becoming more and more widespread and its effects are becoming more common in traditional societies. Modern industrial society, which focuses on Western mentality of progress, is equated with Western values. These economic values have become the equilibrium of productivity and consumption in a Western way (Shiva, 2018). This system, which was created with Western values, sustained itself with the exploitation of the rights of women and third world countries. For example, women's domestic work has been defined as "non-productive domestic labor" and been left unrequited since it's not being considered as labor. This process has led to more exploitation of women in this system (Mies, 2018). Rosa Luxemburg in *The Accumulation of Capital*, states the importance of this exploitation for capital growth. She stated that the colonialist understandings of Western industrial development, and consequently the creation of poverty and dispossession, are essential for capital growth (Luxemburg, 1964).

Industrial processes also change the concept of poverty and make market goods more valuable than products of traditional knowledge. As Shiva points out, the new idea of poorness is related to consumption of the seeds that women have stored and protected instead of consuming industrial seeds that can be purchased by global agricultural companies. They are perceived as "poor" if they use other local materials instead of concretes in construction, or if they wear clothes made from natural fibers instead of synthetic fabrics that can be purchased (Shiva, 2018). In short, self-sufficient and self-substituting economies are perceived as poor in this system.

However, as people experienced over centuries with the support of traditional knowledge, more ecology friendly and nutritious nourishments are both cheaper and more accessible. Instead of traditional knowledge, which blends in with modest living practices, development leads to more complicated and more expensive results, often destroying the traditional knowledge women have. As Mies briefly points out, unlimited growth-oriented economies and a profit-oriented dominant market system; cannot survive unless it exploits nature, women and others. However, it also requires manufacturers who constantly want more (Mies, 2018).

4.4.5. Women in Industrial and Globalization Processes

While the industry expands, rural women start to become impoverished for not being able to use knowledge they have anymore. According to Mies, the problem of industrial expansion occurs after women are turned as consumers. Mies state that, the discovery of private households being consumers coincides around 1920's and after the World War II, daily needs such as, detergents, foods, soap, clothing are begin produced in households (Mies, 2018). As it was highlighted by Mies, products that became more extensive, enabled women to integrate in the market that positioned them as merely consumers. This process most probably coincides with the end of the production of daily home-made products.

Among the most detrimental aspects of neoliberal trade would be disregarding the traditional knowledge of women, therefore ignorance of women's value in natural resource management (IIWF, 2006). Shiva claims that women's traditional non-Western wisdom has been attempted to be destroyed and forced to become more obedient by this neoliberal system. She claims, in the 1500s, women in Europe were kept away from medicine and healing due to their wisdom (Shiva, 2012). Industrial processes transform women's knowledge of vital processes into commodities, while overlooking women with traditional knowledge. For example, many research demonstrated that, older women and indigenous people or people who have strong kinship relationship in the society

have more knowledge of plant uses (Boster, 1986). However, increasing market integration processes might cause women's knowledge in this field to become useless and forgotten. Research also shows how market economies have significant effect on plant utilizations (Reyes-García et al., 2005). Contemporary version of these issues might be increasing spread of the male-dominated scientific paradigm that causes the exclusion of the tribal wisdom (Shiva, 2012).

Furthermore, Silvia Federici reveals how old women who have traditional knowledge have been labeled and killed as the 'witch' and how this hunt is related to the beginning of the industrial revolution in Europe. Federici underlines that women generally cultivated medical herbs, had basic birth knowledge, had knowledge of alternative medicine that existed before, became the healer and conveyed all this information throughout generations in the Middle Ages. Moreover, these people might not fit to the capitalist system and this may cause mass and systematic deaths. As we can perceive the violence that has been faced by "witches," traditional knowledge of women must be destroyed while societies become more capitalist (Federici, 2011). Even today, there are many indications that there is still menacing perceptions towards the wisdom of old women. For example; old widow women in countryside of Ghana have been labeled as witches in 2011 and condemned to live in witch camps (Hoşgör, 2019). As a result, indigenous women protected the biodiversity, had formation on utilization of plants and other vital gadgets, and they have historically conserved and transferred these traditional knowledges (IIWF, 2006). However neoliberal policies and industrialization threatens this traditional knowledge.

4.5. Green Revolution

In 1964, at the International Rice Research Institute (IRRA), they invented a new rice seed that would double up the rice production, with the addition of sufficient water, fertilizer, insecticides and pesticides (Lobb). A variety of small agricultural land cultivated by traditional methods changed and social, ecological changes occurred around the world as this rice grain was transformed into single

crops in laboratories and cultivated on large agricultural land. The green revolution is the food revolution, encompassed the entire agricultural production process, which aims to provide / produce hybrid plants by changing the world's agricultural system, while increasing seed yield and changing the genetics of the seeds especially since the 1960s (Kılıç, 2015). Initially it begun in the United States, and then spreaded to the whole world, including India (Shiva, 2012).

The green revolution represents an increase in the use of irrigation, herbicides and pesticides in agriculture, but also has led to serious controversy in the discourse of agricultural production. The green revolution, in South America and Asia, led to higher production in the first years. In fact, wheat production in Punjab was 1,765,000 tons in 1961-1962, after the Green revolution, wheat increased to 5600,000 tons in 1971-1972 (Randhawa, 1977). However, Shiva also points out a study comparing traditional production with industrial production, underlining that 100 units of food are obtained by using 5 units in traditional productions while 300 units of inputs are needed for 100 units of food production in industrial agriculture (Shiva and Saysel, 2006). Similarly, the research by the Food and Agriculture Organization of the United Nations (FAO) shows that biodiversity-based and traditional methods of small farmers produce might provide more products compared to industrial production in the form of mass production (FAO, 2019).

Moreover, the consequences of these products/outputs were left to the misery of the barren lands, imbalanced ecosystems. The industrial system found itself in a systematic debt heap and still claimed to bring prosperity to the indigenous lands (Shiva, 2012). As a result, ecological problems have started to emerge with utilization of herbicides and pesticides, the use of GMO seeds and artificial fertilizers. This creates serious problems both for the producers and for the nature. In terms of both its support for ecological destruction and its products, the question of which the green revolution serves comes to mind.

4.5.1. The Process of Seeds' Commodification

The green revolution traded and privatized the seeds by taking them away from indigenous women and gave them to Western male managers of multinational seed companies (Shiva, 2014). The system has started to work in the production of pesticides and other chemicals resistant since the 50s and 60s. Their focus was coping with the problems of the growing population but they have become monopoly of many seeds as several companies in the world.

While 1 billion people are struggling with hunger (DW, 2019), on the other hand, more than 2 billion people create the paradoxical dimension of dealing with nutritional diseases such as obesity and diabetes. The transformation of food and green revolution in that sense, might be serving only for global food giants. The conversion of seed into commodities was necessary for capitalist system, because the self-producing seed is free, functions as a public resource and is under the control of the farmer or the seed-keepers. The seeds from the companies have higher costs, and are under the control of the private sector or companies (Shiva, 2018) Instead of making traditional knowledge free and available at all times, there was a need to produce it in laboratories and convert it into raw material for industrial production. As a result, life can become an issue of property.

4.5.2. Local Seeds Vs. GMOs

Seed is the beginning and source of the life. For millions of years, seed has been able to exist in the nature and been able to renew itself with ecosystems. As this research shows that seeds are also gives the cultural identity of the society.

The healthy food chain created by local seeds with years of experience is threatened by GMOs as a result of industrialization. GMOs can be described briefly as follows:

*A GMO, or genetically modified organism, is a plant, animal, microorganism or other organism whose genetic makeup has been modified in a laboratory using genetic engineering or transgenic technology. This creates combinations of plant, animal, bacterial and virus genes that do not occur in nature or through traditional crossbreeding methods.*⁴

Some of the oppositions on genetically modified organisms (GMOs) are based on a moral point of view in terms of the sanctity of life (Herring, 2001), while other criticisms are about GM technology's use in agriculture is being artificial (Walgate, 1990). However, according to Shiva who opposes GMO from ecofeminist perspective and demonstrates the damages that GMOs have created in all areas, they mean 'stolen' traditional knowledge that have been accumulated over the years by the women and local farmers (Shiva, 2018).

4.5.3. Bio-Piracy and Women's Knowledge

With the World Trade Organization's legal assurance on the Trade Aspects of Intellectual Property Rights (TRIP), pharmaceutical and seed companies, have the knowledge of the indigenous people through patent rights, enabling them to be used with legal control in the marketing (Raya, 2006) Moreover, indigenous communities are threatened when trying to access to this information and traditional products. Shiva, who bases her arguments from India, describes how international companies use this situation:

This phenomenon of the stolen harvest is not unique to India. It is being experienced in every society, as small farms and small farmers are pushed to extinction, as monocultures replace biodiverse crops, as farming is transformed from the production of nourishing and diverse foods into the creation of markets for genetically engineered seeds, herbicides, and pesticides. As farmers are transformed from producers into consumers of corporate- patented agricultural products, as markets are destroyed locally and nationally but expanded globally, the myth of 'free-trade' and the global economy becomes a means for the rich to rob the poor of their right to food and even their right to life (Shiva, 2001, p.7).

⁴ Non GMO Project "What is GMO?"

Accessed from <https://www.nongmoproject.org/gmo-facts/what-is-gmo/>, on 04 January 2020.

The unauthorized use of traditional agriculture of indigenous communities and women raises the issue and debate of Bio-Piracy. Bio-piracy means utilization of the wisdom of indigenous communities and women, without asking the original owners. This was perceived as a patent theft of information/knowledge (Shiva, 2019).

Throughout history, colonial forces have perceived the vacant land as a conquest. Nowadays, powerful corporations tend to perceive things similarly, often thinking that they can possess indigenous people's knowledge and resources (Raya, 2016).

In many instances, the knowledge and biological resources that are collected and 'developed' in the laboratories of developed countries are derived from indigenous peoples and their territories (Simpson, 1997, p.50).

They were able to do so because most traditional regions are defined as wild and they ignore traditional ways of life. Defining these regions as 'wild' in the neoliberal paradigm would have been possible and sustainable through women's traditional knowledge on these lands and resources (Posey, 2004).

To conclude, one of the biggest damages caused by the neoliberal trade system on women and indigenous knowledge is its ignorance of the traditional knowledge accumulated and transmitted by rural and indigenous women (Raya, 2016). The traditional knowledge undervalued and transferred to the multinational companies, with the assurance of international trade rules such as the Trade Aspects of the Intellectual Property Rights (TRIP) of the World Trade Organization.

4.6. Environmental Change and Natural Resources

4.6.1. Climate Crisis

There is evidence that the climate crisis was probably the result of greenhouse gas emissions caused by human-made gases that eventually causes over heating of the planet. Climate change is generally defined as the average change in the course of climates at intervals of ten years or more, and the continuation of this process (Collings, 2009). According to the latest reports of the United Nations Intergovernmental Panel on Climate Change (IPCC), climate change and overheating are the cause of human activities that used atmosphere as the discharge area of greenhouse gases. The report demonstrates how human activities disrupted the ecological integrity of the world (IPCC, 2007a). At the end of this process, not only climates change, but also the frequency and impact of extreme weather events such as droughts, floods, and severe hurricanes might take place. Also increase in ocean and sea levels, increase in acidity of oceans, melting of glaciers might put plants, animals, ecosystems as well as human communities under severe threat (WFF).

Human-induced greenhouse gas emissions started to increase after the industrial revolution that began in the 1750s, with 40% increase in carbon dioxide from 280 ppm to 394 ppm (WFF). According to the Intergovernmental Panel on Climate Change (IPCC), the increase in carbon dioxide is primarily due to fossil fuel use. The second notable factor would be the change in land use, particularly deforestation (IPCC, 2007a). These changes would probably mostly affect the poor and indigenous people's areas. Modern industrial states, have only recently started to realize the effects of the permeation of the ozone layer, the damage to underground and aboveground resources, overuse of pesticides and artificial fertilizers, air pollution, industrial food and stress that risks people's health in major cities (Mies, 2018). These are the results of economic systems that aim for constant growth.

Studies demonstrate that, although indigenous people have the least impact on greenhouse gas emissions, they are primarily and directly affected by the ecological damages such as; deforestation, soil salinization, pollution from mining, drill for oil or gas and climate change (ILO, 2017).

Climate change poses severe threats to their livelihoods, cultures, identities and ways of life because the majority of indigenous peoples have a close cultural relationship with the environment, and are often dependent on land and natural resources to meet their livelihood needs (ILO,2017, p.1).

Although there are expectations that the impacts of climate change will vary between regions (Collings, 2009), many indigenous people are forced to relocate, many of which are vulnerable (IPCC, 2007b).

4.6.2. The Increase of Pesticides and Desertification

The effect of the green revolution and the global agricultural system on food involves serious ecological costs. After abandoning the traditional methods, the ecological balance has been destroyed while the industrial agriculture method used plenty of antibiotics and chemicals (Aysu, 2015). Instead of crop production and animal breeding applied by the indigenous knowledge, experience, that involved sharing, industrial agriculture that huge amounts of chemicals have been used was adopted. This way of production pollutes the water, and infertility the soil. It destroys the cycle of life and contributes to the climate crisis (Aysu, 2015). The energy spent on chemical fertilizer production in 2000 is equal to 191 billion liters of diesel energy. (Shiva, 2012) In the last 50 years, the amount of fossil fuels used in obtaining nitrogenous fertilizers has increased global warming (Aysu, 2015).

Industrial system in agriculture is the production system that uses intensive energy, especially fossil fuels, chemical fertilizers and insecticides, herbicides, hormones and antibiotics and genetic engineering (Aysu, 2015). The use of chemicals does not end with the cultivation and mowing of the products. The

products are packaged in factories, again exposed to preservatives, colorants, additives, and sent to the consumers with the power of advertising (Aysu, 2015). However, all of those as we know contain large amounts of poison. The most important of these poisons is the so-called Pesticide, which is essentially an insecticide.

Since 1950, pesticides, are frequently used as effective installment as insecticide and herbicide (Şık, 2019). Pesticides are the most important agenda of studies on food and environmental safety due to their harmful effects on humankind and natural life. It is known that pesticides cause serious problems both for the people who use the pesticide and for the consumer. According to a study, after its application it might evaporate into the air with high rates (80% -90%) and might cause intense air pollution. 220,000 people die annually due to pesticides (cited in Aysu, 2015)

The destruction of biodiversity, the intensification of grain production, the destruction of traditional agricultural methods with GMOs and the formation of seed monopolies by global food companies destabilize the rainfall regime, heat the world and turn the soil infertile. (Aysu, 2015).

4.6.3. The Urbanization of Countryside

Urbanization, changes in natural and rural areas, has relevant impact on the destruction of traditional knowledge that leads to a decrease in agricultural lands. Industry and services in the world economy have enabled cities to grow rapidly with the increase of the active working population since most of the countries' populations work in the service industry (Satterthwaite, McGranahan and Tacoli, 2010). The question of how the change in the global system since the mid-20th century would affect Traditional Ecological Knowledge in the face of urbanization and technological developments (Baggethun, Corbera and García, 2013).

Globally, the migration from rural areas to cities has been triggered by led neoliberal policies and the capitalist systems by tempting individuals to consume more rather than produce. However, it is clear that one of the greatest requirements of traditional systems would be the existence of a self-sufficient human model. In order to preserve the integrity of these indigenous traditional knowledge and food systems and to ensure biodiversity, environmental issues that affect their productivity and sustainability need to be addressed radically. The protection of these cultures are fundamental issue for well-being of humanity (Turner, Plotkin and Kuhnlein, 2013).

4.7. Conclusion

With the emergence of modernity and the processes of globalization, the transmission of traditional knowledge has been damaged in many parts of the world (Federici, 2014). However, existing problems could have been solved with indigenous women's knowledge of traditional production. As Gomez-Pomba and Kaus indicated *“We assume that our perceptions of environmental problems and their solutions are the correct ones, based as they are on Western rational thought and scientific analysis.”* (Gomez-Pomba and Kaus, 1992, p.293). In the recent years, some policies and international agreements have been implemented to accelerate the commodification process of the seeds. The knowledge and experience that accumulated over the years have been put into laboratories for profit, not for feeding the communities. Thus, this knowledge was transferred from women to companies. The extra chemical use of seed laboratories and companies has made the land more infertile and deepened the climate crisis.

This chapter briefly explained the reason behind the disappearance of the traditional knowledge. In the next chapter, I will give the information about the research field and research methodology.

CHAPTER 5

RESEARCH METHODOLOGY & A LOCAL SEED IN DOSKI VALLEY

5.1. Introduction

The aim of this chapter is to provide information about the research process of this thesis and its methodology. The purpose of this thesis is to illustrate the women's experiences regarding the traditional agriculture knowledge upon a local seed called, "Doski Cucumber". Based on women's experiences, the thesis aims demonstrating the main reasons behind the decreasing use of the local seed and its impact on local women. The research was conducted within a sociological framework by using a feminist methodology as the major objective is to understand the women's experience on local seed, Doski Cucumber.

The interviews were conducted with 22 local women, who were born and lived for their whole life in Doski region in Yüksekova, Hakkâri . The names of the interviewees and their family member are changed due to anonymity. Doski region is located at the border of Turkey and Iraq. This region is known as the conflict zone due to the long period of conflict in the region⁵. The region consists of many villages which were evacuated in 1990s. Many people have moved from the conflict part of Doski region to the areas, where conflicts have been less experienced. I conducted my research in five different villages into this region;

⁵ With the establishment of armed movement of PKK (Partiya Karkerên Kurdistan) in 1984 and the following struggle of security forces against PKK starting from the declaration of State of Emergency (OHAL) in 1987, the region has entered into a long period of conflict then several rural settlement areas have been evicted in the period when OHAL was in force (Kurban et al., 2006).

Çatma (Süsyân), Grdere(Cıwyan), Karlı(Befırcan), Çimenli (Feqışêh) and Bulaklı (Memkan)⁶.

Chapter consists of five parts. In the second part (5.2), I will present the significance of this thesis. In the third part (5.3), the research question, methodology and constraint of research will be underlined. Later (5.4), research field, the profile of Doski region, where the research is conducted will be presented. Lastly (5.5), I will discuss the profile of participants of the interviews.

5.2. Significance of the Thesis

This research focuses on a particular geographical area (Doski) and the local seeds from that area. In order to identify the major reasons behind the women's loss of the local seeds and the traditional knowledge, Doski's women play an important role in the transmission of the traditional knowledge and they contribute to the protection of the biodiversity and sustainability. The knowledge that they gain throughout the centuries is mostly based on the products of common life experiences. In that sense, this study contributes to the existing literature on traditional lives of the local people especially their relationship with the environment and agriculture.

The thesis contends that there is a combination of factors behind the disappearing of the Doski Cucumber's seed even though women try to protect the seed. By focusing on the argument, the thesis highlights possible reason behind the disappearing. As mentioned in the previous chapter, there are many components explaining the reasons behind the disappearance of the traditional knowledge and the destruction of environment. Those components can be explained as; the capitalist market economy, climate changes, immigration of young people from the villages to the cities, policy deficiencies to protect the local seed and the evacuation of Kurdish villages. On the other hand, there were

⁶ "İlimiz Hakkında Genel Bilgi" March 3, 2010, retrieved from <http://www.Hakkâri-ozelidare.gov.tr/ilimiz-hakkinda-genel-bilgi>, on 05 January 2020.

some specific components, such as evacuation of Kurdish villages, which can contribute to new discussion in academic studies. This new discussion can highlight the implications of the evacuation of Kurdish villages by bringing into account the impact of the disappearing seeds, mainly the Doski Cucumber seed. Therefore, the thesis can contribute to the literature by showing the linkage between the evacuations of Kurdish villages and disappearing of local seeds in Turkey's context. Moreover, the thesis highlights the important of traditional knowledge which is collection and preserving my women by showing many other research from all over the world. In that sense, this study may contribute to literature as new research on traditional knowledge.

5.3. Research Procedure

5.3.1. Methodological Basis of the Research

In the preparation of this thesis, the Grounded Theory method is used. In that sense, there were no pre-acceptance of any theory for the thesis before the research. Grounded theory is a research method which was born in response to the dominance of quantitative methods in social sciences and aims to examine the existing theories. Data analysis, theory building and sampling are the basic steps of this theory. Furthermore, feminist methodology which is defined as:

The approach to research that has been developed in response to concerns by feminist scholars about the limits of traditional methodology to capture the experiences of women and others who have been marginalized in academic research (Naples, 2013).

is also used in this thesis.

Theoreticians with feminist standpoint, such as Sandra Harding (1987, 1992), Donna Haraway (1991), Alison Jaggar (1989) and Dorothy Smith (1987; 1990) propose to depart from women's concrete and daily experiences for social-scientific researches (Öztan, 2016). The common feature of feminist researches

is the guidance of the life process by the feminist perspective in the areas motivated by feminist thought. Finally, feminist methodology is concerned with how the knowledge on social life is produced and how this knowledge is linked with women's social realities (Öztan, 2016).

It is crucial to underline that feminist research is in close relation with other academic disciplines (Lykke, 2010). As an instance, in the present study, the feminist research in a specific area (women's experiences) speaks to other fields such as ecology. On the other hand, feminist researches have four characteristics which distinguishes it from other social researches. First is adopting a feminist perspective and focusing on gender relations, second is the significance given to daily life and personal experiences contrary to what is emphasized by conventional scientific methods, third is the refusal of the hierarchy between the researcher and the research, and the final component is including the aim of women's liberation and abolition of gender inequalities among the aims of the research (Hammersley, 1992). This research is designed around these characteristics.

5.3.2. Interview Technique

The data was collected from the field by using semi-structured interview technique. With this interview technique, questions are already prepared ahead of time but at the same time during the interviews it allows the participants express their views and feelings in their own terms. This was important as this thesis defends the importance of women's experiences. In that sense, the interviews help to understand the impact of traditional knowledge from women's experiences, and they shape around these experiences.

The focus of the interviews was to see the knowledge and experience women gained as seed keepers and seed carriers. So, the following questions were asked to the interviewees: *'Who is generally keeping the seeds in the society'*, *'Why women have main role of keeping it?'* *'How women are transmitting their*

knowledge on Doski Cucumber to next generation?’ ‘How important is to the transfer of this knowledge to the next generation? Why do you think the plantation of the Doski cucumber has decreased compared to the past?’

The interviews were completed between October and November 2019. During the interviews, the voice recorder was used with the verbal consent of the interviewees. The transcription of those voice recordings were done after the interviews.

5.3.3. Data Collection

After the transcription of interviews, the texts have been coded and categorized in order to derive the prominent and relevant themes. Those themes, and therefore the emerging typology provided the conceptual framework of this study. Those concepts are identified according to most given answers such as; gender division of labor, distinction between private-public spheres, women-nature connection, evacuation of the villages. Furthermore, while analyzing the findings, further literature review was carried out on specific subjects, such as gender, ecofeminism, ecology, traditional knowledge, traditional ecological knowledge, indigenous/local people, industrial agriculture, green revolution, land disposition, in order to shape the research findings within the theoretical background. In parallel to this, previous research on similar topics, newspapers, international/national books, international agreements, international decision makers reports, leaflets, statistics were reviewed and analyzed. I have benefited greatly from the similar research on the same topic from cases other countries, in particularly; Mexico, Italy and the African countries.

5.4. The Constraints of the Field Research

Even though I was born in Yüksekova and know place very well, I had many constraints which I never thought it would happen, before the research. First of all, since I never get the chance to improve my mother tongue, I experienced a

language barrier between me and with some of my interviewers. For that reason, sometimes I had to benefit from the services of someone else, a friend who speaks more fluently Kurdish than me, to understand some stories better. Secondly, even though Yüksekova is only 15km away from Doski area, sometimes I felt that being born in the city center and not being a ‘villager’, may have created distance between me and some of my interviewers. I felt as if they were telling stories to someone who had never been in a village environment before.

Lastly, because of the long-term conflict in the region, interviewers sometimes felt uncomfortable about some questions. I felt that they might be a little uncomfortable, especially when I asked questions about any kind of women’s related subjects. I attributed this to the politicization of the ‘women’s discourse’ due to the fact that the dominant political party in the region emphasized women in their political agenda. I thought that they sometimes identified me with a political institution and couldn’t trust me in the beginning, so they withdraw themselves. This worry disappeared when we talked more to each other.

5.5. Research Field

The research was conducted in Doski district in Yüksekova/Hakkâri . Doski region includes a large territory including the Doski valley. I conducted interviews in five different villages located within the Doski region but not in Doski Valley; Çatma (Süsyân), Gûrdere(Cıwyan), Karlı(Befircan), Çimenli (Feqîşêh) and Bulaklı (Memkan). These villages are not located in the Doski Valley. This is important to mention that because most of my interviewers were originally from the villages, that is located in the Doski Valley. However, they currently live in villages a little further away from the Doski valley and closer to the city center of Yüksekova, due to evacuation of their original villages.

A local seed, Doski Cucumber, was the main reason for selecting Doski district/Yüksekova, since the source of the seed is Doski Valley. On the other

hand, I have my own curiosity about the Kurdish cultural heritage. According to the sociologist Beşikçi, Kurds living in Hakkâri , compared to other regions, are very intimate with their own culture (Beşikçi, 1970). It means that Kurds in this region are eager to protect their culture against the dominant culture. Based on my own life experience, I can say the same thing; I grew up in a city where people relate to the Kurdish culture very intimately and insisting not to lose it. The region may protect its own culture since the region was hardly accessible for long time, due to geographical reasons. In that sense, this research aims to understand how and why, a local seed, which has been protected and transmitted through generations as a part of the Kurdish cultural identity, is disappearing.

5.6. Profile of Doski Region

Doski region is located in Hakkâri/Yüksekova. The province of Hakkâri is 9.521 km² and its population 267.813 was in 2016⁷.Hakkâri is located to the south of Van, Iran to the east, Iraq to the north, Şırnak to the West. It is one of Turkey's most mountainous province; 87% of the province is covered with mountains, 10.3% with plateaus and 2.1% with plains (Yurt Ansiklopedisi, 1982).

⁷ “İlimiz Hakkında Genel Bilgi” March 3, 2010, retrieved from <http://www.Hakkariozelidare.gov.tr/ilimiz- hakkinda-genel-bilgi>, on 05 January 2020.



Figure 1. Map of Hakkâri with its neighbouring provinces and countries. Source: Çevre ve Şehircilik Bakanlığı. (2014). Hakkâri İl Çevre Durum Raporu 2013.

Even though the altitude of many rivers is low in the south and north of the province, there are many valleys in Hakkâri . Most of the valleys in Hakkâri are lower than 1000 meters. Throughout the history, settlements have often been established in the valleys or on mountain slopes, rarely in the plains(Yalçın-Heachmen, 2002). Doski Valley is one of those areas.

Doski region, is 15 km away from the city center of Yüksekova. The region's highest mountain and even one of the highest of Turkey is Cilo Hill (Resko 4168m) (YurtAnsiklopedisi, 1982) and İkiyaka (Sat) Mountains (Sat 3540m) is located in this zone.

During his visit to Hakkâri , Nikitan records about Doski region:

Inaccessible peaks, crags, spurs, precipices, a chaos of enormous rocks, high valleys with snow, deep cañons, the greenish-blue river of the Rubar i Shin, dangerous passes, practically no roads, a spot completely isolated (Nikitine and Soane, 1923)

The Doski district, is located on the eastern slope of Yüksekova, is mostly called by local people ‘Geliyê Doskanê/Doskiyan’ in the region, which means that the area is belonging to the people, who are the member of Doski tribe. It is important to highlight that in Hakkâri region, land is an important element of local tribal classification. The reason mostly related with the place that tribes ruled throughout the history. For example, Ertuşi, Oramari, Doski are well known tribes in the region. Since those tribes have been living in those places for long time, regions are often referred to as tribal names (Yalçın-Heachmen, 2002). It is worth mentioning that the inhabitants in Doski Valley are usually members of the Doski tribe. On the other hand, it should be added that the groups that are not only members of the Doski tribe and whose number exceeds several villages are in this region. For example, the two most important groups of these are the Oremari and Satî. The Satîs in this district take their name from the village Sat / Satê (İkiyaka) to which they belong. Sati who had to leave their villages due to political reasons in the 1990s were settled in the district center or surrounding villages. The Oremarians take their name from the village of Oremar (Dağlıca) to which they belong. In addition to the village of Oremar (Dağlıca), members of the Oremari people reside in the villages of Şitazın and Serpêl(Yalçın-Heachmen, 2002). All these villages are in the Doski region. However, in the 1990s, due to village evacuation, most of them had to migrate to district centers or villages close to the center. Today, dozens of villages in the Doski region were subjected to forced migration in the 1990s and settled in villages close to the district center or district center.

5.7. Interview Process

During the summer- autumn 2019, I have made 22 interviews in the research area. All my respondents were women. Most of those semi-structured interviews

lasted in 1-2 hours. It is important to point out that Kurdish culture is mostly based on oral culture. That was the reason behind the duration of each interview. Whenever I asked something related with seed tradition or any other topic, it took me to wait a bit long to take my answer regarding the questions. Every question created its own stories, and at the end I came up with many stories with one question. I did not restrict myself about the number of interviews before the research. After I reached to 22 interviewers, I realized that I reached to a saturation. Hence, the answers began to repeat itself after a while and I discovered the *patterns*.

As mentioned, the thesis aims to highlight to understand how Kurdish women are transferring their agriculture knowledge to the next generation, in the first place. However, during the interviews, I realized that Doski Cucumber is getting decreased because of the reasons that I will discuss in the next chapter. So, I began to ask more questions related with this decrease and the possible impacts on it. Since question of the thesis designed according to semi-structured interview technique, it helped to me to be more flexible. Therefore, I came up with many different topics that I didn't design on my mind beforehand. For example, evacuation of Kurdish villages and women's political affiliation with the seed are two of them. These two topics extended the research.

5.8. Interview's Participants

The total of women that I interviewed was 22. Most of them were born in Doski Valley. They have been living in the area since they were born. Among those women, only two of them are literate. The fact that the research involves only women is that the research question is about understanding the traditional knowledge of women.

The list of participants and their profiles are presented on Table 1.1.

Table 1. List of participants and their profiles

No	Name	Number of Children	Age	Village in Doski Valley	Current Village
1	Mahnaz	4	45	Köşkönü (Pişt Qesrê)	Dağdibi (Memkan)
2	Nedimhan	11	53	Bostancık (Gulord)	Karlı (Befircan)
3	Naime	7	55	Çatma (Süsyen)	Karlı (Befircan)
4	Saadet	5	45	Dağlica (Oremar)	Karlı (Befircan)
5	Şirin	6	40	Dağlica (Oremar)	Dağdibi (Memkan)
6	Hazal	6	52	Sat (Sati)	Çatma (Süsyen)
7	Eyşan	7	70	Sürekli (Bêsitkê)	Gürdere (Cıwyan)
8	Hizeyca	5	39	Köşkönü (Pişt Qesrê)	Dağdibi (Memkan)
9	Mislihan	8	60	Bostancık (Gulord)	Çimenli (Feqışêx)
10	Dılnoz	6	67	Bostancık (Gulord)	Çimenli (Feqışêx)
11	Cemile	7	72	Dağlica (Oremar)	Çimenli (Feqışêx)
12	Hanım	9	40	Bostancık (Gulord)	Çimenli (Feqışêx)
13	Kamile	8	80	Bostancık (Gulord)	Çimenli (Feqışêx)
14	Hayat	8	70	Sat (Sati)	Çatma (Süsyen)
15	Halet	7	78	Bostancık (Gulord)	Çatma (Süsyen)
16	Fedile	9	60	Sürekli (Bêsitkê)	Gürdere (Cıwyan)
17	Cane	8	84	Bostancık (Gulord)	Çatma (Süsyen)
18	Gule	7	87	Bostancık (Gulord)	Çatma (Süsyen)
19	Gelin	6	53	Bostancık (Gulord)	Çatma (Süsyen)
20	Begihan	8	54	Bostancık (Gulord)	Çatma (Süsyen)
21	Memihan	6	50	Tuflu (Mêrgen)	Gürdere (Cıwyan)
22	Pakize	8	64	Dağlica (Oremar)	Gürdere (Cıwyan)

Even though I did not set the interviews profile before the research, the profiles of the interviewees were shaped on two main points. Firstly, the age of the interviewees was 40 and above 40 years. The age factor came up during the interviews. When I first went to the villages, I was trying to talk with young people as well, but I couldn't get any answer from them since they were not interested in the subject. Apart from that, every person I met in the village, were referring me to the old women of the villages. Thus, the age range of my interviewees was determined in this way.

Secondly, most of the people I interviewed were deported from the Doski valley in the 1990s. That was also one most common and significant information about them. The villages that I went for interviews Dağdibi (Memkan), Karlı (Befircan), Çatma (Süsyen), Çimenli (Feqışêx) and Gûrdere (Cıwyan) are migratory villages and those are close to the city center of Yüksekova. The other villages that were evacuated, Köşkönü (Pişt Qesrê), Bostancık (Gulord), Dağlıca (Oremar), Sat (Sati), Tuğlu (Mêrgen), Sürekli (Bêsitkê), Çatma (Süsyen) were the villages in the center of the Doski Valley. The village of Bostancık (Gulord) was the most crowded one before the evacuation. I came across many women from this village during my research into different villages. Since Doski Valley is the main source of Doski Cucumber, it is important to highlight the evacuation of Kurdish villages and its effect on the disappearing the both the original seed and women's experience regarding it. I will discuss these research findings in detail in the next chapter.

CHAPTER 6

FINDINGS OF THE RESEARCH

6.1. Introduction

When I first started to explore my research, I was wondering how Kurdish women were transferring their agriculture knowledge from one generation to the next. In other words, my purpose was to understand how the local women were protecting Doski cucumber seed and transmitted agriculture knowledge, in view of the fact the seeds were about to get disappeared.

Once I arrived in my research area located in Doski Region, I realized, from the very first interview, that there would be too many answers to my initial questions, even beyond my imagination. During the interviews process, I was enriched by the respondents' interests that were added to my own intellectual curiosity and at the end I came up with three main objectives to explore; which are:

- i. Understanding the women's main role as protector of the traditional agriculture knowledge.
- ii. Analyzing how this knowledge has been transferred between generations.
- iii. Finding out the possible reasons behind the loss of both the seed and its traditional knowledge

In this chapter, the above-mentioned questions will be analyzed through a cucumber as case study.

As a first step of analysis, I categorized data that I collected from the field into three main parts in line with objectives mentioned above:

(i). Understanding Kurdish women acting as seed protector: My interview questions related to this section aimed at understanding the specific contribution of women in protecting the seed, e.g. *‘Who is generally keeping the seeds in the society’*, *‘Why women have main role of keeping it?’*. The first common answer spontaneously given by my interviewees underlined their traditional gender roles in the society. Later on, the other common answers encouraged me to think about distinction between public and private spheres; culture and nature, as well as on women-nature connection.

(ii). Analyzing the transmission of cultural knowledge between generations: This section aimed at collecting answers to following questions; *‘How women are transmitting their knowledge on Doski Cucumber to next generation?’* *‘How important is to the transfer of this knowledge to the next generation?’*. I realized how participants were associating almost automatically the issue of keeping and sustaining the knowledge with being an old women. It was obvious according to my interviewees that the knowledge and the seed should be transmitted between women, that the old women were considered as key actors in this transmission process.

(iii). Finding out the possible reasons behind the loss of the seed and its traditional knowledge: The main question addressed to interviewees, related to this section was *‘Why do you think the plantation of the Doski cucumber has decreased compared to the past?’*. The interviews indicated the evacuation of Kurdish villages during 1990s as the main possible reason that might cause Doski cucumber’s plantation being diminished.

In following sub-chapters, I will try to explore each of the above-mentioned three parts in a more detailed manner, by linking with theoretical aspects which helped me to reflect on these contents, whenever possible.

6.2. The Role of Kurdish Women as Seed Protector

Women have always been more seed collectors and custodians in my village. I don't know why, but I think men just don't care. Without women, these seeds would not have come to this day. Women care more about seeds. I don't know why, but it seems, their relation with the seeds is better (Nedimhan, 53, Dağdibi).

I talked with many people in Doski region; most of them highlighted the Kurdish women's role in the protection of their cultural heritage. According to (Shiva, 2001), the seed “*is not just merely a source of future plants/food; it is the storage place of culture, of history*”. As I mentioned in the previous chapters, the traditional knowledge is a system that includes the physical, environmental, biological knowledge of traditional land, and its offer the best farming way with environmentally perspective. Local seed in that sense, is wise:

The selection, collection and preservation of seed and their use according to geophysical or agro climatic conditions, is an accumulated knowledge source passed on through generations (Sillitoe, 1998, p.229).

There are many researches showing that women have the main role in the collection and preservation of the seed (Howard, 2003). For example, according the research, which was conducted in Morrocco by Montanari and Bergh on the local Moroccan agriculture cooperative system shows that women are employed mostly for the basic steps of the seeds protection and preservation. Almost in all the steps women's traditional knowledge is required (Montanari and Bergh, 2019). I observed the similar results in Doski region; women are the major actor of the seeds protection process. In that sense, in the following sections, the role of Kurdish women as seed protector will be analyzed through different theoretical subtopics such as; gender division of labor, private and public sphere, nature-culture distinction, and women-nature connection.

6.2.1. Gender Division of Labor

Gender-based division of labor refers to the imposition of different roles and responsibilities on women and men, mainly based on ideas and values created in society about what women and men can and cannot do. According to Chafetz,

Undergirding all systems of gender stratification is a gender-based division of labor, by which women are chiefly responsible for different tasks than are men (1991, p.77).

In that sense, gender division of labor has traditionally allocated certain activities as the women's activities. In those activities, most of the time women are responsible to do domestic production, for example caring of their households and children (Tinker, 2001).

Similarly, in my field research, most of the participants mentioned that women are responsible to protect the seed because of their gender roles in the society. In terms of local seed knowledge, women have been expected to have the knowledge about how to protect, collect and select the seeds since it has been seen as part of the 'housework'.

Women always keep the seeds, but men do the gardening, they water the garden and they do the other sowing work (Hizeyca,39,Dağdibi).

When I interviewed with the people about why women are keeping the seeds, I received many different answers expressed in various manner, but on most of them came to the same conclusion by indicating the gender division of labor. Men and women have different tasks in Doski region and its part of the cultural habitus. The masculine discourse, which evaluates women's intimacy with nature in this context, pushes women into the private sphere. As a result, hierarchical structuring among gender roles deepens (Üzel, 2006). This hierarchical structure eventually justifies women's and nature's domination. In dualist thought, ration designs nature as its wife or the subjected other, which involves the maintenance of life, material space and femininity, and that is in a

way distinguished and disparaged from the master (Plumwood, 2004). In this way, the masculine discourse defining women as species closer to nature pushes them into the private space, contrary to the public space that is reserved for men; and therefore, amplifies the hierarchical stratification of the gender roles. Through the identity of womanhood that is configured with the productive, nourishing, compassionate and procreative symbols of nature, this paradigm dominates and exploits women by identifying them with nature and territory (Değerli, 2003).

In the Doski region, women mostly deal with domestic works such as taking care of children and elders; while men, deal with cultivation and breeding of crops and animals and trading.

Women were keeping [the seeds], because men had previously taken care of the garden and sheep herd. Women were meeting the needs of the house. A long time ago, men were doing sheep farming, agriculture and outside work, but women were also interested in the gardens of their small houses or housework. Women used to keep the seeds as much as the house needed but then men started trading, commuting to and from cities, and this work was again on women's back. Men still did it, but women did more (Mahnaz, 45, Dağdibi).

According to them, the work of protecting and preserving the seed is assigned to women as the seed has been stored in the houses. Unavoidably, during the interviews, it happened sometimes that the participants were surrounded by other people at home. It was truly interesting to observe the participation of males into the interview while discussing about this topic.

One of my participant's husbands expressed:

Men's work is not at home. Men's work is outside of the house, but women's work is always at home. That's why women need to keep the seeds with them. If they don't keep, then I must keep it (Hasan, Husband of Kamile, 85, Çimenli).

In order to support his idea, he has differentiated the roles by giving examples:

Women's work is different; men's work is different. Why don't women go to mowing now? Well, because it's not their job, it's men's job. We also have an idiom on it which basically means: the woman should work in the house (Hasan, Husband of Kamile, 85, Çimenli).

Furthermore, one of my participant's sons said:

Since my childhood, I know that these are woman's work. Because the man is going out, he is working so he cannot do it. Just think about it, why there is no female sheepherding? This is because of it. Because all the sheepherding works are done by men; then women milk the animals at home. The woman cannot just sit at home and sweep around, aren't the husband and wife friends, of course she will do, too. But, of course, men do the heavy work, women do the light work. Look, for example, mowing is a more difficult task than milking animals or housework. You go, you use your power, you struggle, but women's work is easier (Enver, Son of Cane, 55, Çatma).

Women also seemed to agree quite unanimously on the gender segregation of the work:

Men cannot do women's work. It is the job of women to deal with herbs and seeds. Now, whatever country you go, always women work [for it]. Always women take care of the houses, animals and fields. It's my job to collect herbs and to make them eatable. If I do not, [the herbs] will not be collected and turned into food. And then the children will stay hungry (Cemile, 72, Çimenli).

However, it is also common for women to do the most of the male work in those villages while men do not feel responsible to do women's work. For example, the preparation of farm land for planting is thought to be 'heavy' for women, so it requires 'men's power' to do it. On the other hand, they mentioned many times, women and men were planting together in the farm land or gardens. Yet, in all circumstances, the collection and storage of the seed still is under the responsibility of the women, only:

Men and women cultivated the plants together, they organize the farmland and prepare the soil together, yet women still collect and hide the seed for next years by themselves (Hanım, 40, Çimenli).

To summarize, most of women are responsible for domestic works in Doski region. It seems that, the main possible reason for that is gender division of

labor. Since the seed protection and collection are a part of the domestic work, women have responsibilities to store and collect all the seeds including the Doski cucumber seeds.

During the interviews, I also witnessed that many people highlighted the separation between public and private spheres. Most of them have argued that the reason of the women's great role in the process of preserving and protecting the seed was related for keeping it at 'house'. As mentioned in the previous chapters, the capitalist system (Akkılıç, 1997), which restricts women to the domestic work due to their 'abilities' and portrays men as breadwinners due to their 'intelligence and power' contributes to the gendered division of labor. The masculine discourse, which evaluates women's intimacy with nature in this context, pushes women into the private sphere from the public sphere that was predominantly allocated to men, ends up deepening the hierarchical structure of gender roles (Üzel, 2006).

6.2.2. The Distinction of Public and Private Spheres

The public and private distinction is a state of affairs that involves different distinctions such as private and public, paid and unpaid, and is in fact based on a deep-rooted patriarchal mentality (Ersöz, 2015). By withholding woman from the virtue of 'reason', the masculine thought historically and theoretically devoids woman from the position of being an individual, and therefore from the public space, which is only accessed as a 'full individual'. Because both the public space and the principles ruling that public space are seen as separate or independent from the relations taking place in the domestic space. (Pateman, 1987) In the public space beloved by masculine ideas, common good is defined by men; and with a brotherhood framework, the 'public' is constructed historically as men's exclusive area. (Donovan, 1997) At this point, feminist literature underlines how the public-private separation corresponds to a gender based segregation and relations of subordination and domination.

Aside from the meanings, brought to its historical development, Sancar states that in the modern establishment of the private/public dichotomy, a sharper separation has been experienced with the industrial revolution, meaning the masculine public and feminine family-household-private spheres formed the spirit of modern industrial capitalist sociality (Sancar, 2009). As mentioned, with the industrial revolution, production has shifted from households to factories. In that sense, the formation of the private sphere based on economic, institutional and ideological aspects have resulted in the establishment of the ‘home’ and ‘workplace/market’ through different gender orders. The formation of this kind of gendered space, including hierarchical priorities and superiorities among themselves, has become a feature of modern socialization (Sancar, 2009).

In this research, one of the issues raised by almost all participants was that women and men had their own fields. The gender category shapes areas as public and private spaces, In that sense, the *house* was defined as a *private space* in all of the interviews, and thus women's connections to this particular space were expressed at every opportunity.

The main justification expressed by women and other family members who were involved in the interviews was that the seeds are stored at home and women’s affiliation with the seed is obvious since home belongs to domestic sphere and is ruled by women. Following this rationale, men cannot store the seeds, because they have work to do outside of the house:

Women do [keep the seeds]. Men have other works such as mowing in the fields. Women can't do it. I keep the seeds (Dilnaz,67,Çimenli).

Moreover, according to one of participants, Naime; women are the ‘head of house’. Due to the roles women adopt according to social division of labour, women are ‘head of house’ at home. Most of those are such as taking care of children and old people and providing general needs of home. Those duties are related to ‘private space’, the space that is domestic. As Doski women are the

‘head of houses’, this is the reason why they should follow the tradition of preserving the seeds:

It's always women who produce food. Women are the chief of the house. Women are the owners of the house, so they do all the work. If I wasn't alive, my husband would never dry the seeds, and if I don't live anymore, the seeds would disappear (Naime,55, Karlı).

According to most of women I met in the field, the works that they are entitled to do are prescribed by the male dominant society. Some of them were interpreting that as a kind of punishment: ‘Hukmê Zelamane Li Ser Jinkan’ (The Kurdish expression, which mean “Women’s judgment is not the same as men’s judgment” referred to patriarchal society)

Men do not [keep the seeds], they though that women should be in the torment. That's why they always wanted to us to do. Men herd the sheep, plow the fields. They prepare hay for winter, that's it. Women do all the other work (Dılınaz,67, Çimenli).

Cane was mentioning the same patriarchal system in the society:

They gave this job to women so that they could be oppressed. They were saying: we brought you to this house as a bride; you're a woman, so you'll do this job. Women's judgment is not the same as men's judgment (Cane, 84, Çatma).

The reason for women being pushed out of the public sphere is directly due to the separation of nature and culture of patriarchal ideology (Ersöz, 2015). Patriarchy assigns women to the private sphere. Having said that if women are outside of the house, it is again for serving the men. On that, one of the participants, Cane was giving the example on plant species that they were responsible to collect from the mountains:

We were going to collect all of these herbs, wash them, separate them, and put them in front of men as ready meals for them. It was the judgment over women. We would do all the work (Cemile,72, Çimenli).

Collecting plants and roots were a collective action that was usually taken by women. As a result, after fulfilling daily needs with collected plants, and years of experience, humankind has found regular grain cultivation in Neolithic age (Mies, 2018). There are many studies that claim that first attempts of agriculture and agricultural gadgets have been done by women (Childe, 2017).

Another example taken from the conversation between Cane and her son, while having the interview, was particularly relevant for illustrating this phenomenon.

Cane's son (50): In the culture of the Kurds, all of this work is on the shoulder of women. Milking sheep, baking bread, collecting herbs, taking care of the house, all are on the shoulder of the women. More weight on women's shoulders. Arranging the house, taking care of the house is always on the shoulder of women. I think this is really important and good. In this sense, I think our culture is also very beautiful and superior when compared to other people.

Cane (85): No, it's cruelty.

Cane's son (50) : If the woman does the heavy work of men, that will be cruelty. If the woman does mowing, does the heavy work of men which require muscle strength that will be cruelty to her! Go to West, you see women work in the fields but men sit in cafes. I have seen, I did live with them. Woman go home; no value of her is left at home. But it's not like that at our culture. Woman is the organizer of the house in our culture, so her value in the house is very high. (Çatma)

The value of women in society is linked to how active they are at home. As they have spending enough time with domestic work, their value in the society is getting increase. However, domestic work is free and unlimited, contrary to work done by men. Those who move or trade in the field can earn money in return of their labor. Hence, as Marx stated men exchange their use value with money and this makes men's labour visible and valuable. The fact that men do this work in public spaces makes the work they do worthwhile, while women's seed storage does not have any 'material' value, which makes their labor worthless. Moreover, Shiva mentions how women's responsibility for the livelihoods derived from biodiversity, and highlights how their labor both domestic and public are not considered as value in the market, which is one of the basic arguments of ecofeminism. In this sense, she mentions the free labor of women

which deemed worthless has been ‘stolen’ (biopiracy) by the industrial system (Shiva, 2018).

Well, as women we were doing all the work. My husband was trading, so he was not at home. I didn't know what money was until my husband died. After he died, they brought his money. I asked about the banknotes, they said they are 5,10,15 lira. When men are not at home, we would do their job too. For example, we would do mowing. We did all the work. Housework was much; we would herd the sheep, do the housework, milk the cows, plant the gardens. On top of them, when my husband was not there, we would go to do the mowing instead. We still wouldn't see any money (Halet, 78).

To summarize from the ecofeminist point of view, the concept of patriarchy plays a key role in the separation of private sphere / public sphere. The fact that the field separation according to gender has also played a decisive role in women's participation in social life in Doski region. Women's position in the private sphere has caused with the serious patriarchal practices in the region. Therefore, while men are located in the economic and political sphere which is in the public sphere, women are held responsible for the reproduction process and domestic activities, which is in the private sphere. In the domestic space, women conduct those duties unpaid. Therefore, the lower status of domestic labour turns those duties more invisible in physical, economic and ideological ways. Because domestic labour does not reveal palpable, concrete results or they are consumed rapidly; they are conducted in the private space and they don't yield profit. Since domestic labour is undervalued and overlooked, even those who are conducting domestic labour participate into the process of disvaluation (Bora, 2015).

6.2.3. Nature - Culture Distinction

As discussed in the previous chapters, women and femininity have always been conceived as the other of men and their independent subjectivity has been denied, throughout history, and they have been denoted as irrational oppose to rational (Berkday, 2003). In that sense, the ecofeminists see the origin of destruction of the natural world in this fictionalized dualism. Because the basic principle of Ecofeminist theory argues that the domination of nature and

women's domination to construct a whole (Donovan, 1997). Sherry Ortner and Ariel Kay Salleh trace the marks of natural world's extinction in western society's hierarchical dualism. This cleavage gave birth to modern patriarchal society and thus created today's atomized individuals, impassive bureaucracy and immoral market (Ortner, 1997). This dualism associates wrongly women with nature and body, while it associates men with culture and science (Üzel, 2006). Men are considered to represent civilization and culture. Thus, men's job is to create culture and civilization, to use and manage authority in the public sphere, that is to say politics; and women were found to be children in the home and family (Ersöz, 2015).

Doski Women are taking care of the seeds because they are recognized as being more compassionate and more sensitive.

Because women have children, they have to think about them. They encountered poverty; they don't want their children to be poor also. Even if men see poverty, they don't know because the women are more aware of poverty, so they become more compassionate (Hanim,40,Çimenli).

Following this rational, the men don't care about protecting the seeds, because there are not responsible for feeding the family. In that sense, women's attitude based on their rational and emotional experiences. Since men don't take care of what is defined to be "women's work", women invest particularly in the protection of the seed.

Also, considering that this activity is categorized under "housework", men are ashamed to do it, and they leave the floor to women:

Always women do [the domestic works]. The men here are ashamed to do these things. Women's work is separate, men's work is separate. They are ashamed about it and they say: we don't to women's work (Memihan,50, Cıwyan).

Moreover, women, from their sides, are ashamed to do the 'men's work' as well; and afraid to be considered masculine if they got involved in activities that are traditionally assigned to males.

I cannot do heavy work, I cannot take it so women do not do this work, men do. I do if it's light work. But here there is a village, where women work in the field too. It seems strange to us because women should not do heavy work. The women of our village are ladies, but the women of the other village are like men, they go and do every job. They mow grass and plow fields (Hızeyca,39, Dağdibi)

Moreover, neither women nor men don't see the housework as 'heavy work'. The reason of this mostly affiliated with the 'lack of men's muscle' required to do housework. Most of the interviewees emphasize that women are the ones who bring order to the house rather than men. They mentioned many times that women are more regular, understanding and emotional than men. According to many of them, the women are protector of the seeds because; children needed to be fed as the responsibility of women.

6.2.4. Women-Nature Connection

The women in the Doski region have also another important task. They are responsible of collecting some kind of plants specific to Doski region. Those plants are ingredients of most of traditional and modern meals of the region. That is why, almost all the interviewees have known many species obtained through these herbals. They pointed out that women's connection with nature is much more intense and stronger than it is for men.

Men don't go because women know nature better. Even if the men go, they don't recognize the herbs, they bring poisonous herbs and collect everything. But women know nature better. Women's relationship with nature is stronger than men (Pakize,64, Grdere).

Women in Doski region, have strong relationship with nature because they are responsible for feeding their families, as one of the participants has explained it:

Woman has to look after her children. She has improved herself for doing this. She knows the soils, she knows herbs, she knows better than man knows. For that reason, woman is closer to nature more than man (Dlnaz,67, imenli).

Even though the place where they collect the herbs, is generally known as public sphere; women have been active in this sphere. As the herbs that they collected

seen as part of the meal, as is it cooking in the kitchen; it is coded as women's work. In this point, women have been actively participating the public sphere which is dominated by men. It is possible to argue that similar to seed-keeping, the way how collecting plants and making food out of them are seen as 'housework' might also pave the way for the distinction of public space and private space. However, as Plumwood points, due to the masculinized understanding of humanity, women as well maintain the implicit domination on nature and other excluded groups (Plumwood, 2004). This means that we can argue for the existence of an implicit domination regardless of the visibility of women in public space.

Interview contents clearly indicated the idea of a connection between women and nature among our participants. However, it seems like this connection is mainly caused by the traditional gender roles and patriarchal society they are belonging to. In that sense, Salleh argues that that it is pointless to defend that women are closer to nature than men. The problem with that argument is, invisibility of labor on reproduction and nature being perceived as provider of sources. While socially established roles that cover private spaces (such as cooking, cleaning, taking care of old people and childcare) are associated with nature, which undermines the position of women in society by the patriarchal system. On the other hand strong roles that seems to be more separate from nature, such as mining and engineering, are attributed to men in the public sphere (Salleh, 1992). In other words, according to Salleh, it is the division of labor and women's labor itself that brings women closer to nature.

Socialist Ecofeminism, focuses on issues such as restriction of women in the private spheres of houses, the exploitation of women's labor, delegitimization/(making invisible) of labour on childcare, domestic work and reproduction. They also fought against production of commodities and income generations are being perceived as "men's role/part." They equated the free and open characteristics of nature with the labor of women that became invisible. A study by FAO in 1985 revealed how women's labor was made invisible.

According to the study, while 80% of the world's agricultural production is carried out by women and the majority of the activities that enable families to find nourishment are carried out by women, women can own only 1% of the land (as cited in Demir, Dankleman and Davidson,1988).

As explained by other materialist and socialist ecofeminists, similarly, Doski Women - nature connection seems to be socially constructed in Doski region. This close connection with nature is promoted by a discourse on material production and serves as a part of mechanisms of oppression and exploitation.

6.3. Transmission of Traditional Knowledge by Kurdish Women

Women have been transferring their agricultural knowledge to the next generation through cultural transmission. In order to explain this transmission; first, I would introduce the methods and technicalities of storage, and then will focus on the transmission process itself.

6.3.1. Seed Storages Methods

Even though the villages that I have visited during my field research were close to each other, I discovered that there are several different traditional ways of protecting the seed:

The seeds are left to dry under the sun:

Firstly, I sun-dry it and then wrap a fabric then I keep it until following year. After, we steep it in the spring. It will never decay after drying up (Hazal, 52, Çatma).

The seeds are left in the farmland for a long time:

We keep the matured vegetables in the field for longer time, we put a sieve under vegetables and wash it, the seeds fall into the sieve. Then we take these seeds and dry them, we keep them for the following year (Eyşan,70, Gürdere).

The seeds are put under the water, for one day:

We steep the seed during a day, then we dry them. In this case, it gets better (Naime,55,Karlı).

The seed are in the ashes:

I make a fire in the tandoori, I put the seeds in to the tandoori's ashes. My mother does in the same way. They cover the seeds with ashes, thus seed are protected. None of insects does not harm the seeds (Mahnaz, 45, Dağdibi).

All these alternative ways help to protect and select best seeds for the next season. The seeds contain all the changes obtained in this way through the breeding work. For millions of years, the seed have therefore managed to evolve, and they have even become more productive plants which can resist (Shiva, 2018). As long as it is in harmony with nature, the seed remains a social entity and the seeds remain alive on the ground. (Aysu, 2015).

6.3.2. Nationalities of the Seeds

One of the most interesting points of the research is that the seeds are referred to the political affiliation by participants. During the interviews, local seeds are considered as 'Kurdish seed', while the corporate seed which is purchased from Yüksekova center, is named as 'Turkish seed' or 'State seed'.

All vegetables in Doski is very delicious. We go to the down town sometimes, as I heard that they have bought the seeds which produced by the state and they have told that these seeds grow ripe very fast. Never mind, it is not healthy. Since everybody eats the state's seeds in the downtown, women could not get pregnant, people are getting cancer (Eyşan,70,Gürdere)

When describing the flavor of the seeds, they often refer to them as 'Kurdish seed' or 'Turkish seed':

Turkish cucumber grow ripe very fast, grow old fast. However, Kurdish seeds do not grow old despite they stay longer in the field. Certainly, Kurdish cucumber are more delicious then the Turkish ones (Memihan, 50, Cıwyan)

The seed then becomes a part of the culture and even the nation:

I have never bought the seeds from outside. Kurdish seeds are better. Why did I not plant the Kurdish ones? I always keep and save ours. I have used our seeds; other seeds are diseased. These are our seeds, why should I buy the others. For example, my son has bought cucumber seeds from the bazaar, I have not planted them. My neighbours have planted Doski Cucumber seeds, I have received 2 Doski cucumbers from my neighbours and planed them (Memihan,50,Cıwyan).

On the other hand, according to Cemile, ‘Kurdish seed’ is deliberately reduced:

The number of the Kurdish seeds which we have are decreasing and they sell the state’s seed to us. The state has been selling these seeds since it wants to generate an income. The state’s seeds are short and it is not sufficient but our seeds are long it is sufficient for every year (Cemile,72, Çimenli).

As Shiva says, a seed cannot live alone in an isolated environment. Just like bees and butterflies, the seed always has connection with the place of birth and other lifestyles on the place (Shiva, 2019). Moreover, since the region has been a conflict zone for a long time, it seems to have been reflected in the daily lives of people. They protect everything that belongs to their culture against the dominant culture. In fact, this reaction which I observe in most women, is seemed to me a kind of rebellion. Because a major part of the interviews reveal that the women of Doski keep the seeds with an intention of revolt in order to prevent the extinction of a figure belonging to their own identities. Here, one could argue that the increasing political efforts to protects Kurdish identity and culture in the region may have created reflex in Doski women to preserve the Doski cucumber which seen as part of their culture. As the cultural ecofeminists, at that point, argue that what is perceived as ‘personal’ and ‘private’ would become actually political. As a consequence, the efforts to prevent the loss of the seed turned into a political reaction.

6.3.3. Cultural Transmission Through Generations

Women are known as both cultural carriers and also cultural knowledge transmitters in many parts of the world (Howard, 2003). Many rural women have primary role in providing daily livelihoods. Therefore, they are interested in the management and protection of the environment (Montanari and Bergh, 2019). In that sense, this cumulative environment knowledge and seeds have been passing from mothers to their daughters (Kipuri, 2009).

The ways traditional knowledge has been transitioned throughout generations, contain both the traditional (old) formations and experiences while adding up the contemporary (new) ones. On this track, traditional knowledge may show which trees and plants grow together, what kind of indicator should be used to show soil salinity, and how to plant local seeds. Apart from these, it also includes how to store the seeds, and how to transfer them for following generations. It brings many tools for planting and harvesting. Thus, with the sustainability and reliability on agriculture for centuries, traditional knowledge reaches today while adapting itself and not harming the ecosystem.

According to my observation in the field, women have a special relationship with their own environment and they are more concerned about access to natural resources, due to their gender roles. As mentioned above, this relationship is socially constructed as Socialist Ecofeminism has been defending the nature-women relationship in this manner. Moreover, they have special knowledge about species. They are the main decision makers regarding which plant and its variety should be used. Women are able to select the best seed for next season, and preserve them by using a series of traditional methods. Moreover, they also exchange the seeds with other women. They transfer all these knowledge and methods to their daughters/brides/ neighbors or any other women in the village. Cultural transmission is processed from the older generation towards young generation. Although the actors involved in the process may change, the direction of knowledge transfer is mostly from the older women to the younger

women, especially from mother (or mother in law) to daughter (daughter in law):

I have learned all the knowledge about the agriculture from my mother. When I was a child, my mother explained me how to plant the Doski Cucumber. She said to me that you should not give too much water to it, you should give little water so that not decay or you should not sow it too deep. With all this information, I plant the Doski Cucumber better than anyone (Hazal, 52, Çatma).

Howard argues, in indigenous communities, protection of seeds and transmission that are defined strictly by certain rules have been passed from mothers to daughters (Howard, 2003). According Dick-Bissonnette study as well, which was done among California Indians; corn which was one of the main food sources for California Indians communities was collected by women with certain rules. Those rules were so strict. For example, about the area where they were planting; the specific area could be inherited by the daughter later. However, it couldn't be inherited between mother in laws or daughter in laws with certain restrictive rules and boundaries. Otherwise, it would cause feuds between families (Dick-Bissonnette, 2003).

Transmission process is mainly carried out vertically, through generation; yet it can be operated vertically as well, among women from the same generation:

The seed has already existed since I was born. It was always at home. My mother has saved this seed. Her mother gave to her and her grandmother gave to her mother. Woman has helped each other in the village. If we could not get seed during the year, we got from the other woman in the village. This year, I received the seeds from my neighbours (Mahnaz, 45, Dağdibi)

Family is also one of the factors in the transmission; still the role of the women in the family in this process is decisive.

There are some seeds which are transferred from one family to another. They are transferred like some furniture. Women usually do this transfer. However, it is a difficult work; you should make an effort to do. The seed transfer from women to their children and usually to married women (Şirin, 40, Dağdibi)

Cultural transmission is carried out through generations. However, at the same time, since women have strong connection with each other in the village, they are sharing the knowledge and the seeds with each other. Therefore, the seeds and its knowledge are passing vertically among women. Moreover, families are also transferring seeds to their members. However, here I want to mention that having the seeds are not given any kind of power to those families. Families have been very openly sharing the seeds with the other members of the villages.

Above, I tried to recapitalize the main elements of cultural transmission process, as they are emphasized by participants during the interviews. Below, I will highlight their 'reasons' to keep protecting and transmission the seeds and its traditional knowledge.

6.3.3.1. 'Doski Seed is Getting Disappearing'

Many of the participants mentioned that the seed needed to be protected as they are at risk of getting disappeared, which makes sharing knowledge with someone from the next generations particularly important:

My mother gave me the seeds when I got married and she said to keep and plant them. I gather these seeds save and reproduce them, I keep them to transfer to the new generation or I gave to my neighbours since these seed should be maintained. Otherwise these seeds are going to be lost. Women workers already live in the cities and they go to work so they could not do this work. However, housewife who is like me live in the village should do this work. It is very important for not being lost (Mahnaz, 45, Dağdibi).

Women has a great role in bringing the seeds to our day. The fact that the seeds started to get lost seems to increase the motivations of women of Doski to protect them and transmit them to next generations.

As Naime contributed to this argument:

Other women in the village are constantly looking for Doski seeds. They always ask others to find. If they cannot find they go to Nav Doskiyan to find. Because

they know they will get lost, that is why they go as far as the old [evicted] villages (Naime, 55, Karlı)

Besides all, not only the protection of this cucumber, which they see as belonging to their culture and through the link they built on their identity, but also how it is used as a method are striking.

According to Cemile:

These seeds are getting less and less but nobody cares. Nobody ever keeps them. Everybody goes to Yüksekova to buy. Why? Aren't these seeds ours? These are seeds of Kurds, they need to be protected, otherwise they will also get lost like others (Cemile, 72, Çimenli)

Women of Doski consider the seeds as part of their Kurdish culture. They are building an ethnic belonging over those seeds. And this link leads women to show more effort to protect the seeds which have started to get lost. Therefore, women of Doski show a strong reaction to the disappearance of their identities by keeping these cucumber seeds which they see as belonging to their ethnic identities. Moreover, the women of Doski insist on transmitting these seeds to the next generations in order to protect the biodiversity in the region they live.

6.3.3.2. 'Doski Seed is Healthy'

As finding the healthy and safe food is becoming a global concern, people in Doski region are also concerned about that. They suspect that the corporation seed is leading to provoke sickness. Thus, healthy local seeds are definitively needed to be protected:

These seeds include (nutrition which necessary for) people's health. They contain everything that beneficial to human health therefore transferring the seeds to the new generation is very significant. However other hormonal seeds are diseased. You can understand from the cucumber, it is looking so old. It is not look like our cucumber as green and healthy. All of them are with pesticide and hormonal (Mahnaz, 45, Dağdibi).

The locals argue that the local seeds are safe, healthy and makes people stronger, while the other type of seeds are for ‘rotten bodies’:

Kurdish cucumber is much more important. It's more delicious. Kurdish cucumber is much more solid for our body. The other is always for rotten bodies (Eyşan,70,Gürdere).

Neoliberal policies may be directly affecting women's health by possessing the knowledge they have. For example, many countries in Africa, are rapidly increasing the number of concessions of international companies, often allowing technologies to pollute the regions that were inhabited by indigenous communities. As a result, the poor indigenous people have many problems, especially in terms of their health (Carino, 2019). Moreover, Indigenous women and children are more affected by the toxicity of wastes. *“The widespread practice of dumping toxic waste in indigenous territories has been the cause of many abortions and cases of cancer and other diseases among indigenous women”*(Stavenhagen, 2007, para 52). Almost all of participants have made a connection between the health problems and current food on the same scale. It seems there have connection between the increase of using the ‘corporate seed’ and women’s health problems in the region.

6.3.3.3. ‘Doski Seed is Fertile’

Many participants explained the reason why the corporate seeds have been purchased by saying that the corporate ones grow faster and give more products compared to the local ones.

Many participants argued that if seed planting is done in an accurate way, Doski cucumber’s seed is fertile enough and will provide enough amount of cucumber for everyone. No need to purchase every year, while it is free and sufficiently fertile.

This cucumber is a very fruitful. Sometime the seeds of one or two cucumbers are enough for many years. People think that the seeds which bought from bazaar are fruitful however it is not. It does not give the seeds for following years and you have to buy again. It became more expensive. Wheat from Bazaar gives 10 to 1, our seed gives 6 or 7 to 1 but you can also get the seed for following year, you do not need to buy seeds again. It is same account. It recirculates itself (Şirin, 40, Dağdibi).

Almost all participants have mentioned that the corporate seed are both expensive and it is not fruitful.

The seeds from the bazar is expensive, my husband has bought the seeds for 20tl, there is not 20 seeds (in the package) and also it was not fruitful. It is not like our local seeds. I am still using the seed 3 years ago, since they are Doski seeds, they are very fruitful (Hanım, 40, Çimenli).

However, to be able to obtain as much as products possible, traditional methods should be well arranged:

Our neighbours said that the seeds which bought from bazaar are more fruitful. They go to bazaar and buy from there in order to get more harvest. However, I have told them that if you give more place to the plant and give enough water, you can get more harvest. With right methods you can get enough ones. We measured one cucumber it was 5 kilogram in 1994 (Hazal, 52, Çatma).

Another issue that was brought up with the green revolution was the possibility of feeding the world, which is another controversy. Shiva claims that industrial agriculture would not be enough to feed the world even though there are women and small producers who contribute through food diversity (Shiva, 2012). While industrial agriculture has been presented as the only solution to hunger with the help of scientific researches, Shiva highlights the lack of food and decrease in biodiversity and products as negative effects (Shiva, 2012). The traditional agriculture methods have been underlined almost by all participants.

6.3.3.4. ‘Doski Seed is Heathy for Women’

Many participants pointed that women should preserve and transfer the seeds to next generation, also in order to avoid women’s body being negatively affected

from the corporation seed. Most of them have attributed the fact that women can no longer have children because they are not having foods obtained through local seeds.

There is no such thing as disease in our village. We do not plant unhealthy seeds, we never spray pesticides. We hear that in Yuksekova women cannot get pregnant anymore, I think those seeds are the reason for that (Hizeyca,39,Dağdibi).

The relationship between current sickness and GMOs is strongly underlined:

Hormonal seeds harm women. I didn't go to school, I'm illiterate, maybe what I say is wrong, but all of the current diseases come from these modified seeds. The first is cancer, then infertility, heart problems and other diseases, eyes are weakening, all because of these seeds. My grandmother did not eat anything purchased. She lived until 102 years old, she could see and hear very well. I am 58 years old, but my eyes and ears are in very bad condition. Young people get cancer all the time (Mahnaz,45,Dağdibi).

There is a strong connection between the disappearing the seeds and women's problems in getting pregnant. GMO's so-called 'hormonal' seeds are believed to increase cancer and other diseases in the community. But in particular, they attribute to infertility.

6.3.4. The Role Older Women in the Transmission

Older women used to be “*living encyclopedias*” (Singh, Rallen and Padung, 2013) in the cultural and social ecosystem of Doski Region. Considering this attribution, people generally were referring me to the old people in their villages when I was introducing the topic of the research. During the interviews, almost all the participants have referred to ‘old women’s knowledge’ and their role in protecting and passing the ecological, social related knowledge to the next generations. At the same time, the participants also mentioned that the wisdom attributed to old women in the society has been diminishing.

The old members of the communities play a crucial role in transmission of the traditional knowledge. Traditional knowledge, that contains material, spiritual and cultural characteristics and accumulates, adapts itself in the process and transmitted throughout generations by cultural transmission (Berkes, Colding and Folke, 2000). In these transmission forms, knowledge will be protected and transmitted by the efforts of prominent older figures in the communities or by the efforts of the family members. Bruchas claims that traditional knowledge produces its own indigenous epistemology and he provides examples about rituals. He argues that rituals are being transferred between the families and other members of the community through formal and informal uses of language in indigenous communities (Bruchac, 2014). In that sense, one can claim that traditions, daily experiences and activities that are being shared by families, communities or ethnic groups can be transmitted through generations so that traditional knowledge would be reproduced and protected.

There were older people in our village, they knew much more. They knew everything. As long as I've known myself, I have this knowledge thanks to them. Because this is the job of the elders. I'm old now and this is my job (Mislihan,60, Çimenli).

Almost all the participants underlined that this specific type of knowledge is closely related to age factor. Having seeds to share with others, is an important qualification of old women in the region, and attributes to them a special place in the societal organization.

There was one old woman in the village, who kept all the seeds in their jars. All the people would come to her to get the seeds. Imagine a queue in front of a supermarket to buy goods and that was the same in front of her house in the village, people. Her house was all had fruit and veggies. The house was like a market (Pakize,64, GÜrdere).

The reason of diminishing the use of the local seed was explained by ‘youth indifferences’ most of the time, which makes the vertical transmission process essential. Or most of the time, the diminishing use of the local seed was affiliated with the diminishing respect to old people in the community.

When there was an old person in our house, we would never do anything without consulting him/her. Old sed to be big, used to know everything. We would ask them everything, they would enlighten us. Nobody asks people who know now. Now everything is already sold in the market. But they don't realize that everything in that market is very harmful to them. Lions are these seeds; these seeds will strengthen them (Mislihan,60,Çimenli).

Even though many old women have been caring about protecting and transferring the knowledge to the next generations, the seeds and its agriculture knowledge have been unavoidably decreasing. The corporate seed has been taking over the place of Doski Cucumber. In the last section, I will focus more specifically on the possible reasons explaining this decrease.

6.4. The Local Seed and its Knowledge at Risk of Disappearing

I would like to categorize below the possible reasons explaining the decrease of the Doski Cucumber, based on interviews outcomes.

6.4.1. Industrialization / Globalization Process of Agriculture

As mentioned in the previous Chapters, the industrialization of agriculture can be one of these factors. The current financial and trade rules of universal system have an understanding of a single worldwide system (Trash, 2009) which, includes single type of food/seed to all over the food regardless any cultural and social backgrounds. Social and cultural background is important for human being, since our metabolism has been functioning based on places where we grew up or lived.(Aysu, 2015)

Most of the time, the diminishing use of traditional knowledge were referred to the industrial process by participants. The local seed's knowledge was one of them.

Is the soil in Mersin and the soil here same? We cannot plant the same seed everywhere, it wouldn't grow. Seed of every region is separate. So, they mixed

and messed up the world, they're sowing the same seed everywhere (Fadile, 60, Grdere).

The globalization of the agriculture has been developing since the last half centuries. (Mies, 2018) Its effect is seen in Doski region as well:

For about 20 years we have been taking this seed from outside. 20 years ago, everybody used to keep their own seeds or share with the ones who didn't have. But now it is not like that, we go and buy (Kamile, 80,imenli).

While the production of farmers and women are constantly decreasing, the number of multinational Northern companies with fewer but expanding domains is becoming more competent in the food production process. This process, was defined as agricultural industrialization, and increased its effectivity with the globalization which emerged in the 1980s. Globalization highlights the rapidly increasing trade and capital flows of world economies and the unlimited international production, often organized among multinational companies (Bruinsma, 2017). In this sense, globalization refers to the economic integration between countries which occurs rapidly with the reduction of the restrictions on rules which benefits to multinational companies.

In fact, it is possible to observe the effect of the industrialization process in agriculture by comparing across regions which were affected by industrialization at later stage:

For example, there is Iran close to us, I'm actually going there. I always looked for seeds in Yksekova, but I looked there. Seeds sold in markets in Iran are local seeds they don't put hormones into seeds there, but there are hormones in the seeds sold at the markets in Turkey. Because America is sending those seeds to Turkey, but not to Iran (irin,40,Dağdibi).

Even though the local seed is still mostly used in the region, most of the interviewees explained that the corporation seed has been genetically changed by the actors. The participants are referring here to the point of GMOs seeds.

Because of the seasonal changes, the corporations have been produced the seeds which are fit into the environmental changes.

They changed the seeds and blocked the seeds we used before. They released a 6-month- wheat seed, for example, and another 40-day-wheat. There are no more seeds as before, they changed seeds (Cemile,72,Çimenli).

In that sense, the discourses collected from the field were exactly indicating the Green Revolution in the region. Industrial agriculture system has great impact to change the methods and the seeds in this region. The changes have been causing to refer traditional knowledge which is mostly women have. Regarding to this, I would like to mention women's knowledge based on their daily lives. The reason of the decrease in using the local seeds is attributed to the fact that women are no longer mobilizing their traditional knowledge. Other type of traditional knowledge (such as knowledge of the birth) is also highlighted many times. In fact, the knowledge of the birth has been acquired throughout the years, by being transferred from women to modern medicine. Since the birth has become a 'positive science' issue, the female body has been considered *manageable* by professional experts (Shiva, 2018). The introduction of modern medicine into our lives coincides with a recent history while in the past women were responsible of their own bodies and taking care of each other's bodies regarding births:

I used to give the birth of all women in the village. I would go to them to have their birth, but now they prefer to go to the doctor immediately when the women say they are pregnant. The doctor doesn't know more than I do. There was pain in the past, but we didn't know what a caesarean section was, and no one needed it, so they always brought us new things (Hayat,70,Çatma)

Moreover, Mies states that women's wisdom and biodiversity have been left out on the "background" of the industry. She claims that this paves the way for the exploitation of both women and nature. She highlights that the formation on giving birth, which was one of the traditional knowledge of women, was detract from women, leaving them passive, and causing them to transfer their knowledge to other experts. One can perceive the same biopiracy pattern here which was mentioned by Shiva. Moreover, Mies claims the development of contraceptive

methods did not liberate the women in terms of sexual intercourse, on the contrary, their body became more controllable. The relationship between contraceptive methods and 2nd World War period eugenics have been assessed (Mies, 2018). The birth control methods that have been developed would be applied to third world countries which are seen as responsible for the destruction of nature due to population surpluses. However, it is not the Southern people who harm the world by fossil fuels and make up 80% of the world's population; rather 6% in America use the 30% of fossil reserves. (Mies, 2018) Therefore, Mies also focuses on the bodily dimensions of the established hierarchical relationships.

To sum, traditional knowledge based on women's experiences has been disappearing. Moreover, globalization and industrialization have been taken over to women's knowledge. It is also one of the effects of not able to use the local seed as well.

6.4.2. Reduced Women's Labor

The use of corporation seeds has increased in recent years in the region, since it is easier to use it. Some participants attributed this to women's decision to not use the local seed

Of course, Doski cucumber is very tasty very good, but(sowing it is) exhausting. When we buy the other one from the market, we bring it home immediately and sow it. It is much easier, not exhausting. It's not as good Doski but it's easy (Dilnaz,67,Çimenli).

The women's labor is recognized by all the participants that the whole process of preparing, collecting, selecting, washing, drying and hiding the seed for next year requires a very intense human's labor and energy.

In fact, this is a quite long process. It starts in spring and continues until the end of summer. There are stages of drying [the seeds] and all of these stages are very important and labor intensive. Women these days are lazy, so they do not deal with the seeds. Everything is readily bought now, people think that we can

supply the seeds anyway, so they don't feel obliged to dry the seeds and store them (Eyşan,70,Cıwyan).

It seems to be an important activity of the women in Doski region, that those who are missing this responsibility are not well-seen among the community by other women and categorized as being “lazy”:

If a woman did not keep the seeds in the village, men are lazy to do this job anyway, then the seeds are brought from outside the village that year. If women are lazy that year, men don't give attention to it anyways, that year seeds are bought from the market (Nedimhan,53,Karlı).

Almost all participants mentioned that women should be actively mobilized in order to prevent the risk the seed of being disappeared:

Well, it's all because of laziness. Those seeds are not even present anymore, they are no longer around. Since the seeds of the market have come out, people got used to them; they have been going to the market to buy. In the past we would leave a big box of seeds to next year and would distribute to everyone. Now we can't find seeds, if we want. Women got a bit lazy (Begihan,54,Çatma).

The diminishing of the seeds attribute to women's decision. However, there are some reasons behind the women's decision. For example, because of the gender division of labor, women are doing most of the work of the daily life. They mentioned that this is sometimes enough to use the ‘easier’ corporate ones. I can summarize to say that patriarchy forces women to use the corporates seeds.

For example, according to Hanım:

My husband brings home the seeds sold in packs in Yüksekova. You don't have to make effort but directly plant them. But they are really easier. I accept it is easier sometimes (Hanım, 40, Çimenli).

On the other hand, instead of those from the town's market, women always have alternatives.

Sometimes you do not need the market seed. You can have crops from fruits or vegetables themselves. For example, an old women told me in the past to not throw away the peel of potatoes. She told me that I can get potatoes again from

the peels of it. After that I opened a dig in the earth, I plant potatoes and put the peels inside, and then really I had very nice large potatoes instead of those peels (Fadile,60,Gürdere).

The corporation seed has been purchased for almost 20 years from the city center of Yüksekova. The participants mentioned that as the road from villages to Yüksekova is paved, transportation is easier. That has contributed to the purchase of the seeds from the city center.

In the past, they had to keep the seeds, or they would starve. Because there was no way to go to Yüksekova and buy those seeds.. Maybe the seeds were not even there at that time But now most people have car, they can get whatever they want at any time. Then everyone started to have car so traveling to the city center increased (Gule, 87, Çatma)

6.4.3. The Evacuation of the Kurdish Villages

One of the most interesting result of this study is to witness the strong relationship between the evacuation of the Kurdish villages and the diminishing the use of the Doski Cucumber.

Village evacuations have taken place as a major problem having important social and political consequences in Turkey. According to the report prepared by “Internal Displacement Monitoring Centre” in 2006, between the years 1984-1999s, 954.000 - 1.200.000 Kurdish citizens were displaced from their villages (Solak, 2010). Particularly in the 1990s, the evacuation of many villages in the context of forced migration had happened in Doski region, which created further conflict and security problems. While some of the displaced people got settled in the city center, a significant part of them migrated towards other villages which are close to both city center of Yüksekova and to Doski region. The effect of the displaced population in Doski region, on the decreased preference and use of Doski seed is the main concern of this thesis. At this stage, it would be important provide some information on the source of the Doski cucumber in Doski Valley where the evacuation has happened mostly.

6.4.3.1. Nav Doskiyan; the Source of Doski Cucumber

Doski Valley which is the warmest part of the region, constitutes the main source of the Doski Cucumber. Since the whole region consists of high mountains, the slope between the two mountains offers a suitable environment for cultivating Doski cucumber, as an endemic cucumber.

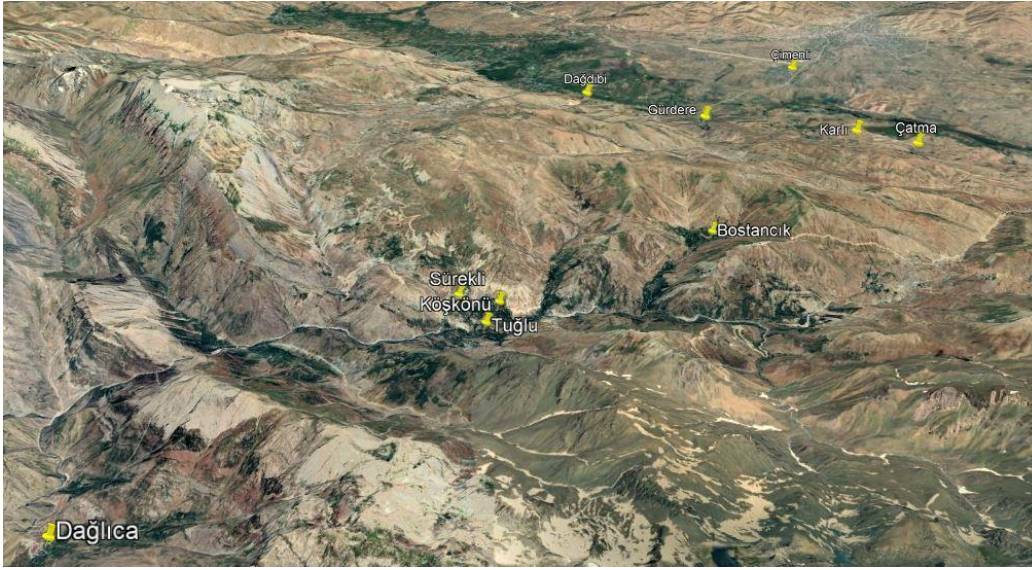


Figure 2. Map of Doski Region. (Source: Google Earth).

As it shows in the map, Dağlıca where is Doski Valley about starts, and Bostancık where is the about end of the Valley. It can be said that the temperature in this region is higher than in other regions, since it is located between mountains. As it provides appropriate growing conditions, the Valley is known the place of ‘Doski Cucumber’. The Valley is also known as one of the most severe conflicts.

The source of Doski Cucumber is Valley as many participants have also agree.

The source of these seeds is the Doski Valley. When I was a little girl, in the spring, big tables were laid in the village of Doski, seeds would be prepared. Seeds were prepared to be planted in the fields. My mother and other women in the village always made this preparation. My grandmother knew these things

very well, everyone in the village would come to her and she would have all the seeds (Saadet, 45, Karlı).

Further to the evacuation of the villages, people have lost not only their traditional land but also their seeds.

I bought these seeds from Nav Doskiyan (Doski Valley). In the past I used to live in Nav Doskiyan (Doski Valley). This seed was there since I know myself. Then I moved to this village and realized that these seeds didn't exist here. Then we started planting as much as we found, but now it got harder to find (Pakize, 64, Grdere).

6.4.3.2. Forced Migration from Nav Doskiyan

The process of villages' evacuation caused thousands of citizens to be displaced and caused many social, economic, political and cultural problems (Tuncel and Gndođmuş, 2013). One of main argument of the current research is that, the evacuation of the Kurdish villages has contributed strongly to the existing local traditional agriculture knowledge and consequently Doski Cucumber being disappeared. The data collected from the field is supporting this argument:

We were in another village before, and there also old men and women used to prepare seeds. There is no one here, no old person to prepare the seed and sow them. That's why we go and buy cucumber seeds from the market (Dlnaz, 67, Çimenli).

The Doski region used to count almost 10,000 residents. Although there were approximately 100 villages many years ago, most of them were evacuated and now have there are only a thousand of inhabitants in the region (Çapraz, 2017). Dađlıca (Oremar), which is a district in the south of Hakkâri province and at the border with Iraq, is one of the oldest villages in the area, it is surrounded by high mountains. According to the participants, thanks to their traditional knowledge on environment and food, people in Dađlıca (Oremar) could live.

The house of my family is in Oremar, (Dađlıca Village), now they make their own butter. They don't take anything from Yuksekova unless they have to. They make sheep butter, it's white as snow. When you eat at breakfast, you won't get

hungry until evening. But because of the surrounding food, people have blood pressure now. High blood pressure always happens because of these foods (Hanım,40,Çimenli)

After the region has been evacuated, they lost their traditional knowledge:

Our village was evacuated, we came here, we left our gardens and everything there. We haven't been doing any planting work since we got here. We left them all unattended. Sometimes we go to the gardens and see that vegetable grew by themselves, we pick them up and come back (Begihan,54,Çatma).

People had to leave the agricultural traditional land and the seeds:

These seeds have been bought from the market for almost 20 years. My husband goes to the market and buys seeds when we need. After the evacuation of the villages, people could no longer cultivate, they left all their crops in their gardens and moved to other villages. If everyone were in their own village, there would be more seeds around (Hayat,70,Çatma).

Participants also sometimes made the connection between losing the seeds and their traditional language. In that sense, they argue that losing the seed is considered as a kind of assimilation. Cane was coming from one of the most crowded village of the region, Gulork, and she pointed out:

Well, since we came from Gulord (A village in Doski Valley), we have stopped keeping seeds in this village. Our village was evacuated, and we had to come here. If we stayed in our village, we would have continued in our old tradition. This is a kind of assimilation, like language assimilation, they try to make people forget, this is also such assimilation (Cane,84,Çatma).

The evacuation of village seems to pave the way in the loss of traditionally acquired knowledge and methods. During the research, one of the most interesting stories was told by the participant, Begihan. The story illustrated very well the result of the market integration and village evacuation:

When we came out of our villages and came here, seeds diminished. When we came out of the village, this [yeast] was the beginning of everything taken from outside. When we first came to this village, we had not seen any artificial yeast before, we came here and our yeast we brought from our own village was over. We had to shift many places in the village too because we were looking for a

place to stay. We changed 20 places until we built a house. One day our own yeast (hevitirşk) was over. My mother in law had forgotten somehow to leave a piece of dough aside and the dough was finished that way. That dough was the dough we brought from our village. We went to a few villages, but we could not find there too. When we asked for hevitirşk (sourdough), they gave us market yeast. At first, we refused to use, but then we had no other choice and began to use it. I saw the artificial yeast bought from the market for the first time in my life at that time. I asked how it's used, and they told me. Since that day we have been using yeast from the market. We lost our yeast after that day. We're out of yeast here. I wish they'd let us to bring the seed of Doski cucumber, we could have planted, but now it's hard to find (Begihan, 54, Çatma)

These people, who were detached from their living spaces against their will, were not allowed to access to their property for long years. The fact that more than millions of Kurdish people were forced to migrate massively and without any preparation in a very short period of time, was a violation of citizen' rights and brought together many other violations (Kurban and Yeğen, 2012). In that sense, the loss of traditional knowledge and the disappearance of Doski cucumbers can be seen as a direct consequence of village evacuations in this region and as part of citizen' rights violations.

6.4.4. The Disruptions to Ecosystems

As I mentioned in the previous chapter, indigenous people have social and economic relationship with their traditional land. Natural resources are one part of the traditional land and indigenous people are the best actors who are able to protect the land and transfer the cultural knowledge to next generations. During the interviews, many participants shared their concerns about climate changes and the possible effects of it. Desertification and salinization of soil is the most common concerns of participants related to the environment. .Even though the reason still is not clear, they were attributed it to use of chemicals and the 'corporation' seeds.

For the last few years we have been buying seeds from Yuksekova. Last year something like this happened to us: Maggots came to our garden. All the harvest was infested with maggots. People in the village said that it's because of these seeds. That's what I also thought, but I still don't know if those seeds

damaged the soil. No one could understand if it was from the soil or the seeds (Begihan,54, Süsyan).

They stated that because of chemicals used the soil became wasteland.

Modified seeds damage [the soil]. These seeds brought disaster to our land. Number of harmful weed and insects increased with these seeds. Old people used to say, for example, cucumbers used to stay on the field until autumn, but now a natural disaster hits and they cannot stay until then. This is probably related to the chemicals sprayed to the gardens or it comes with the seeds, I don't know. I think about it a lot. There used to be no disaster as much as now. I'm stuck here, and I think about the reason a lot (Mahnaz,45, Dağdibi).

Many times, they mentioned about the chemical fertilizer and its effect to the soil. And the corporate seeds are considered just as like cancer cell to the soil.

Market seeds are damaging the soil. For instance, there are people using market seeds for 2-3 years and they have to use pesticides because they use those seeds, and it is damaging the soil. Just like the cancerous cell, it says, I'm the only one who's going to live here, and no one else (Şirin,40, Dağdibi)

Those environment problems especially based on the soil, caused gaps and challenges that people in Doski region face in the struggle for their traditional agriculture rights.

Nowadays, as the importance of global warming is increasing, the protection of traditional knowledge is also becoming a major concern. The impact of global warming and climate change is also felt in this region. As expressed during the interviews, people have been witnessing some changes in the climate and its negative effect on the traditional agriculture methods. Both climate and seeds have changed.

It used to snow and rain a lot around here. Soil was more fertile here, but it hasn't rained in recent years as before. By June we used to prepare our crops, ready for sowing and harvest, now in June everywhere is dry (Mislihan,60, Çimenli)

The region suffers from water shortages due to the decreased amount of snow and rain, even though the region was the wealthiest area in terms of water.

This year my vegetables were not good at all. I always used our seed, I never bought any seeds from outside, but this year I was able to get very little product because the water was less. That's why I couldn't keep seeds this year. I will have to buy from outside next year, our gardens were not good this year because there was no water. There used to be a lot of water now there is less of water. The fertility of the world is diminished, nothing is good anymore neither vegetables nor others (Cemile,72,Çimenli)

Moreover, unlike the local seeds, the corporate ones require much more water during the plantation phase. This is why, the water consumption is likely to become a major problem in Doski region, in the following years:

The seed of the Doski cucumber does not want much water. But these seeds from the market want a lot of water. Giving water once a week was enough in the village, but here we have to water 2-3 times (Fadile,60,Gürdere).

To summarize the climate change is affecting both the harvest and planting time in the region. But the most importantly, due to the scarcity of water, people may give up the planting the seeds soon.

6.5. Conclusion

I started my research with the research question on how traditional agricultural knowledge has been transmitted between Kurdish women in this specific zone of Doski Valley. However, during the research, I realized that I also needed to understand the main reasons behind the traditional knowledge being diminished. I observed that women in those villages insist on keeping the seeds of Doski cucumbers despite all the obstacles that they have been going through.

I conclude my research by highlighting some points that obtained in interviews. First, one the first assumptions of this thesis, which is pointed out in the first chapter, is to demonstrate that women have been playing the key role in

preserving the traditional knowledge. I observed the same in the research field; women had great contribution in preserving the local seed and transfer the knowledge associated to it, to the next generation (brides, daughters and neighbours). In particular, old Kurdish women have great role to preserve seeds and to transmitted them to the next generation. Moreover, most of the time, they encourage other women to do it. In that sense, women are always willing to share their agricultural knowledge with the other women and promote the cultural transmission. One may argue that they created a kind of seed sharing network among themselves. In that sense, they consider themselves as actors playing a crucial role in protection of the Doski cucumber. However, as Socialist Ecofeminists points that women relation with nature is socially constructed. Similarly, Doski women's role as protector is assigned by patriarchal social order. Furthermore, it is possible to content that Kurdish women have political affiliation with the local seed. In fact, this relationship can be seen as 'political resistance' since they keep the seeds with and intention of revolt in order to prevent the extinction of a figure belonging to their own Kurdish identities. The second point is the diminishing use of Doski cucumber in the region. There are many reasons behind the decrease but the most important one is evacuation of the villages. Being away from the source area, Doski Valley, seemed to provoke the reduction of seed.

To summarize , many Kurdish women have been struggling to preserve Doski cucumber in the region. However, both Doski cucumber and women's struggles have been decreasing due to economic and political reasons in the region.

CHAPTER 7

CONCLUSION

This study departs from an ecofeminist position by proposing the following questions: ‘How Kurdish women are transferring their agricultural knowledge to the next generations?’ , ‘How is the traditional knowledge protected?’ and ‘What are the factors behind the disappearance of the Doski Cucumber seed?’. By embarking on these questions, it is aimed to reveal how the disappearing Doski Cucumber was protected till today, through which methods the knowledge and the seed was brought to our day, and finally the factors among this seed and the traditional knowledge it bears through a framework of ecofeminist perspective. Finally, this study presents the major role the women of Doski play in protecting the Doski Cucumber seed and transferring it to the upcoming generation. This thesis also put forward the argument that there is a significant link between the disappearance of the Doski Cucumber and the evacuation of Kurdish villages around the years of 1990. There are comprehensive studies analyzing the forced migration issue in Turkey within the global phenomena of ‘internal displacement’; and as well considering the legal, political, socio-economic, demographic and psychological consequences of forced migration in order to develop policy recommendations (Kurban et al., 2006). However, there is a lack of research studies that demonstrate the impact of forced evacuations of Kurdish villages on the disappearance of traditional agricultural knowledge and local seeds. This study therefore aims to contribute to understanding from a feminist perspective the implications of the Evacuation of Kurdish villages by bringing into account the impact of the disappearing seeds.

The ongoing ecological destruction impact on different sex and gender groups in varying manners everywhere around the world – due to the existing inequalities. Besides struggling in the areas of gender discrimination, male dominance, class

and militarism, feminists developed a feminist approach towards the ecological danger the earth is facing. In this sense, there is a school of thought which brings women to the fore in considering climate change and ecological problems through a gender perspective: ecofeminism. Ecofeminism constitutes a crucial institutional line in the feminist thought of the recent years by grounding on the argument that the domination of nature has a fundamental link with the domination of women. This system of thought and movement evolving around the axis on nature and ecofeminism has a resonance as well in Turkey in the recent years.

In this study, firstly, I highlighted the main role of women in preserving traditional knowledge which is key in terms of promoting biodiversity and sustainability. To explain this connection between traditional knowledge and biodiversity and relationship between nature and women, I referred to the ecofeminist perspective. Ecofeminism, with its recent response to environmental problems, started to cover a relevant ground on opponent movement's side, bringing a feminist perspective within society. In fact, ecofeminist studies opened new perspectives for women, by putting emphasis on how androcentric ideologies have been exploiting women's experiences and knowledge in our societies, which were shaped based on patriarchal thoughts. By doing that, the ecofeminist movement has relied on promoting the value of women's experiences and their practices. Also, they created a field for the integration of those theories and practices. As Garry and Pearsall say: "Feminist philosophy springs from two sources: the feminist movement and traditional philosophy." (2015). This perspective created one of the main theoretical backgrounds of the thesis, together with social constructivism. Likewise, the feminist methodology used in this thesis had a great function in putting forward the main arguments discussed here. As one of the main defenders of feminist methodology, Harding asserts, feminist standpoint defines women's concrete/daily experiences as starting points of scientific investigations (Harding, 1987). Finally, this feminist study on Doski Cucumber illustrated women's experience in agriculture and the traditional knowledge by using feminist method.

By using the Ecofeminist theoretical background, the thesis focused on understanding why and how Kurdish women in Doski region have been seen as the protectors of the Doski cucumber's seed, as a part of their socially constructed roles. First of all, findings of the research show that gender division of labor is well-structured in Doski region. The tasks are divided by genders in the society. Doski women have been assigned to take care of their families and be the main food provider. As protection and preservation of the seeds are seen as part of the domestic works, women are assigned to keep and preserve the seeds. Women are also main herbal providers of the region. They are collecting the herbs from the mountains in order to cook them and use them for medical purposes. Since collecting herbs is related with kitchen as part of 'house work' and task related to feeding the family, it is also assigned to women. Even though mountains are dangerous and they are coded as 'public sphere', public and private sphere are disappearing in that point.

Ecofeminist studies attempts to analyze the link between women and nature. This effort reminds the question what kind of a link Doski women had with nature in protecting Doski cucumber and transferring it to next generations. The research findings of this study therefore finds out that Doski Women's role in keeping and protecting the seeds emerged out of the patriarchal social order. The masculine discourse that describes women as species closer to nature has been pushing women to private space against the public space owned by man; and thus aggravating the hierarchical stratification among the gender roles. As a result, as Cultural or Socialist Ecofeminists underline, the hierarchical structure in society seems to have established the connection between women and nature. Being both the carrier and the protector of the seed, puts emphasis on nature and women connections which are socially constructed in Doski region. Moreover, in a system where the relationship between women and nature is based on these myths, women's gender roles are constantly re-appropriated. Women are being perceived as in charge of old care, childcare and as providers of nourishment, increases women's exploitation in the community. These stereotypes

overshadow the potential of women and supports the perception of nurturing women rather than domestic workers in the society (Bielh, 1991).

As part of Ecofeminism relies on the experiences, I tried to discuss traditional knowledge, but particularly regarding women's experiences. By doing that, the thesis focus on traditional knowledge based on women's experiences. Moreover, as women have been known as 'gatekeepers' of traditional knowledge and local species (Howard, 2003), it is commonly admitted that their contribution to biodiversity and sustainability of species are particularly valuable (Montanari and Bergh, 2019). Likewise, the present study demonstrated that Kurdish women in Doski region are the protectors of the local seeds and any other species. In this sense, this research shows that Doski women provide an important source for the dialogue between biodiversity and sustainability.

Moreover, women in Doski region are both being protector of the seed and also being carries of the knowledge to the next generation. In this process, one of the important components is age. Kurdish old people, in particular women, carry the traditional knowledge through generations by cultural transmission. Culturally and socially speaking, the seed task is assigned to them. Maybe not as much as it was in the past, but still Kurdish old women are seen as an important source in the community. They have been considering as 'seed bank' in the region. Besides the cultural transmission, traditional agriculture knowledge is shared among the women in the region where they have been living. Women in those regions are actively sharing their traditional knowledge with each other. Those two processes of transmission operating both vertically and horizontally enable protecting and preserving the traditional knowledge.

Furthermore, this study demonstrates that women living in Doski region particularly old women has a greater knowledge on seeds and traditional agriculture than younger women. Although the interviewees' ages were not aimed to be determined prior the research, it has then emerged as a significant component during the fieldwork. The consequent age average of the interviewees

demonstrates that the traditional knowledge and the role of seed carrier is appropriated mainly by old Doski women. The knowledge old women transferred to their daughters and daughter-in-law's has a major part in the survival of Doski Cucumber to our day. On the other hand, old women mentioned their daughter and daughter-in-law's lack of knowledge during the interviews. Almost all of the participants defined 'being young' in the same category as being 'ignorant'. I would like to emphasize my observation that the experience of years has a positive role on the knowledge and interest on the seeds, the knowledge on seeds having relation with age. Moreover, through the interviews, I could observe the different ways in which patriarchy is treating old women in a different ways than to younger women. While old women is considered to be deserving the 'wise' attribute and therefore staying outside the culture of domination; younger ones are still subjected to male domination.

It is important to underline that traditional knowledge represents knowledge based on experiences and practices in communities in rural areas. As many research studies, which were referred to in the third chapter discuss, women mostly are responsible for products of common life experiences in daily life in rural areas. As a result of those experiences, women gain further knowledge about natural resources. In the third chapter, I mainly focused on the importance of those women's knowledge in preserving biodiversity and sustainability in the rural areas. Similarly, women in Doski region, have been using the traditional methods in order to protect and transmit the knowledge of local seeds but also other ancestral heritage. In this sense, this study contributes to the existing literature on traditional knowledge of indigenous people.

Furthermore, this thesis focuses on the reasons behind disappearing of the traditional knowledge. As the traditional knowledge and its relation with the environment have a core effect on the biodiversity and sustainability in the world, disappearing of the knowledge is alarming. It seemed particularly important to discuss the effects of the disappearance of the traditional knowledge from women's perspective, as women are the ones who insist on not

losing Doski cucumber's seed. The evacuation of Kurdish villages, market integration and overall impact of globalization can be considered as main reasons behind the disappearing. Having said that, the evacuation of the Kurdish villages as being linked to disappearing of the traditional knowledge, would represent one of most interesting outcomes of this study. As mentioned, in the literature, the evacuation of Kurdish villages has been analysed in many different aspects; be it socially, politically or psychologically, but the ecological perspective is brand new. This study may contribute the literature by analyzing evacuation of villages in terms of losing local seeds and its traditional knowledge.

As I discussed in the fourth chapter, there are many elements behind the disappearing of the traditional knowledge systems and methods. According to research findings, the evacuation of Kurdish villages represents the main reason of the disappearing. Since protecting the traditional knowledge and seeds are mostly considered under women's responsibility, this situation can also be read as women's traditional knowledge are disappearing. Among other reasons, appeared the Industrialization / Globalization process of Agriculture, which resulted in traditional patterns changes and buying the corporation seeds in the market. It seems, due to market integration, and traditional methods being more time consuming, women prefer using the 'packaged ones', although they blame each other about being 'lazy' and provoking this change. Finally, the results indicate that there is a close relationship between being displaced of the land where people were carrying out all the agriculture activities, and losing the Doski cucumber seeds. Therefore, with the evacuation of their traditional land, people started losing their traditional agriculture knowledge and methods as well.

Nowadays, economic concentration, patents and property rights, and genetic engineering are the three processes which construct a monopolistic hegemony on the seed, which is the primary element in the food chain (Shiva and Saysel, 2006). As Shiva states, and as discussed in the fourth chapter of this thesis, these factors coming along with the marketization of agriculture cause for women of Doski as well to start using company seeds instead of local seeds and loose

several traditional methods and practices. The ownership of seeds and limitations on the use of local seeds give rise to the loss of conventional methods of agricultural activities (such as seed keeping), transformation of the traditional knowledge on those methods that were built along the long years in Doski region. In addition, the current situation of how the conflictual region of Hakkâri, Yüksekova was drawn into marketization and a capital transformation in the period of decrease in conflict points at the question of how neoliberal policies are dealing with phenomena of ‘conflict’.

Women in Doski region insist on not to lose the Doski cucumber’s seed, in a way to challenge the current political and social environment by protecting the Doski seed. The cultural ecofeminists, at that point, argue that what is perceived as ‘personal’ and ‘private’ would become actually political. In that sense, the way that Kurdish women are defending protecting their local seed can be seen as a ‘political reaction’. Similar cases have been experienced from all over the world. For example, a group of women in India known as the pioneers of the Chipko movement opposed the developmental plan that aimed to destroy the forest area, between 1972 and 1978. Because they have perceived the place they lived as part of their lives, and to be able to continue their daily activities, they were involved in the movement and embraced it (Shiva, 2018). The Chipko movement presented a good example of women's affinity to nature by cultural ecofeminists (Üzel, 2006). Another example, would be the reactions of women who are most affected by the toxic technological wastes after the development of technology around the world. Pesticides that were sprinkled on vegetables and trees affect pregnant women and children through air and water. This leads to poisoning, death and miscarriages. It is stated that to protest against these functions like a matter of life and death for women (Tamkoc, 1996). Similarly, the women of Doski are carrying out a struggle against the disappearance of Doski cucumber in a way similar to the reactions given by women for political, social and economic reasons in different parts of the world. In this sense we can consider the protection of Doski cucumber for years and transmission of it to our day as a ‘political reaction’.

Here, we may argue that Kurdish language and Kurdish culture has been melting in the predominant paradigm in the last year and therefore getting close to be forgotten and lost. The increasing efforts to protect Kurdish identity and culture in the region may have created a reflex in Kurdish people to preserve their belongings. Doski women saw local seed as part of their culture and built a link through their feeling of belonging. As a consequent, the efforts to prevent the loss of the seed turned into a politic reaction.

Finally, one may wonder what might be the position of Kurdish feminist movement, which has been gaining a significant ground in the Kurdish region. Kurdish feminist movement has an increasing presence in the region in the last years; that is why it is likely to find a correlation between the political positioning of interviewee women and the Kurdish feminist movement. However, when the age average of the interviewees is taken into account, this correlation seems more like a reflex to protect a part of ethnic identities, rather than an active political commitment. Then firstly, Women of Doski are showing a strong act of revolt against the loss of their identities by protecting the cucumber seed, which they consider as belonging to their ethnic identity. Secondly, they are insisting on transmitting this seed to the upcoming generations to preserve the biodiversity in the region they live.

When I first started my research, I could explain the initial findings of the research with concepts of gender theory such as gender division of labor, private-public distinction and other related concepts. However, as research results spread to other areas, I began to struggle to do it and needed a different framework for analysis. For example, it was particularly appealing to see people creating political affiliation with the local seed: in fact, Kurdish women were making a clear distinction between seeds based on ‘origins’, by calling their local seeds as ‘Kurdish seed’ and corporate seed as ‘State Seed’ or ‘Turkish Seed’. Even though most of the participants were above 50 years old, they were actively involved in the political debate, and information they provided included many statements about politics and sociology of the region. Considering that one of the

main reasons of the disappearance of the Doski cucumber's seed is the evacuation of the Kurdish villages; a crucial outcome of this research about the 'nationality of seeds' seems to require further analysis to be linked with theoretical readings and empirical studies. The present thesis may have limitations in adequately deepening these points, however it creates a basis for guiding me to focus more on these aspects while continuing eventually with future studies.

To conclude, even though Kurdish women in the region are eager to protect the seeds, they have been facing with complex factors behind the disappearing of the Doski seed. From a broader perspective, the seeds can be considered as independence of food and as freedom of the society. When communities' freedoms are restricted, it would not be possible to form healthy communities. Thus, the disappearing of seeds and disappearing of women's traditional knowledge could create mono-cultured, unsustainable and insecure societies.

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APPENDICES

A. METU HUMAN SUBJECTS ETHICS COMMITTEE APPROVAL PAGE

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER



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22 EKİM 2019

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Ayşe Gündüz HOŞGÖR

Danışmanlığını yaptığınız Rubar Güngör TEKBAŞ'ın "Understanding How Kurdish Women are Transferring Agricultural Knowledge about Local Seeds to the Next Generations from Ecofeminist Perspective: A case study of Doski Hıyarı (Doski Cucumber)" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve 376 ODTU 2019 protokol numarası ile onaylanmıştır.

Saygılarımızla bilgilerinize sunarız.


Prof. Dr. Tülin GENÇÖZ

Başkan


Prof. Dr. Tolga CAN

Üye

Doç.Dr. Pınar KAYGAN

Üye


Dr. Öğr. Üyesi Ali Emre TURGUT

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Üye

Dr. Öğr. Üyesi Süreyya Özcan KABASAKAL

Üye



B. TURKISH SUMMARY/TÜRKÇE ÖZET

Tohum yaşamın başlangıcı ve kaynağıdır. Tohum yaşamın her alanında bolluğu, bereketi temsil eder. Milyonlarca yıldır tohumlar kendilerini var edebilmeyi ve doğada evrimleşip, daha direngen ve daha üretken bitkiler olmayı başarmışlardır. Bu nedenle bir tohum, kendi içinde milyonlarca yıllık evrim bilgisini ve değişimi barındırır. Kısacası bir tohumda geçmiş ve gelecek vardır. Bu yüzden tohumlar yaşadıkları bölgelerden ayrı olarak düşünülmemelidir. Çünkü tohumlar doğdukları yer ve yaşam biçimleri ile ilişki halindedirler. Bu tezin yazılma sebebi olan Doski hıyarı tohumun da böyle bir hikayesi vardır; yaşadığı Doski Vadisi toprağı ve halkıyla geçmişe dayanan uzun ve meşakkatli bir yolculuğı vardır.

Tarım, başta kadınlar olmak üzere dünya halklarının çoğunluğu için en önemli geçim kaynağı olmuştur. Kadınlar, dünyanın ilk gıda üreticileri olarak, besin zincirinde gerçekleştirdikleri işlerle ile, gıda üretim sistemlerinde merkezi rol oynamış ve oynamaya devam etmektedirler (Shiva,2014). Birçok araştırma gösteriyor ki, kadınların tohumların saklanması ve gelecek kuşaklara aktarılmasında önemli roller vardır (Howard,2003). Tohumları saklayan ve bir sonraki kuşaklara aktarımını sağlayan kadınlar, genetik çeşitliliğin ve besin maddelerinin korunmasını sağlamıştır (Shiva, 2012). Öte yandan, yerel tohumların dünya üzerindeki varlıklarının gittikçe kaybolmaya başladığı da bilinen bir gerçektir. Tohumların kaybolmaya başlamasının arkasında birçok faktör bulunmaktadır. Bu faktörleri şöyle sıralayabiliriz; küreselleşen ve endüstrileşen tarım sistemi ve bu minvalde tohumların metalaştırılarak ‘özel mülkiyet’ hakları adı altında kayıt altına alınmaları, değişen ve dönüştürülen geleneksel yaşam biçimlerini, tarım alanlarından zorunlu/gönüllü göçlerin yaşanması ve iklim krizi gibi faktörler hem geleneksel ekolojik yaşam biçiminin hem de yerel tohumların kaybolmaya başlamasında önemli etkenler olarak karşımıza çıkıyor (Tang ve Gavin, 2016). Bu minvalde bu çalışma, Doski hıyarı tohumuna odaklanarak; kadınların tohumların korunmasında ve bir sonraki

kuşaklara aktarılmasında rol aldığı öncü role odaklanmaktadır. Bu anlamda bu tez, Doski kadınlarının Doski hıyarı tohumunu koruma konusunda her ne kadar gayret ediyor olsa bile, tohumun kaybolmasına sebep olan faktörlerden oluşan bir yapının bu kadınların karşısında durduğunu savunuyor.

Hakkâri'nin Yüksekova ilçesinde bulunan Doski bölgesinde yaşayan Kürt kadınları, yıllarca yerli halk tarafından '*Doski hıyarı*' olarak adlandırılan ve endemik bir hıyar çeşidi olduğu düşünülen hıyar tohumunun koruyuculuğunu yapmışlardır. Doski hıyarı koruyucuları olan Kürt kadınları, gelecek kuşaklara bu tohumu ve geleneksel yetiştirme yöntemini kültürel aktarım yoluyla kuşaktan kuşağa aktarmışlardır. Böylece, Doski bölgesindeki doğal kaynakların biyolojik çeşitliliği ve sürdürülebilirliğini sağlamada katkı sunmuşlardır. Böylece bu tez, kadınların bu aktarım sürecine odaklanarak; geleneksel tarım bilgilerini bir sonraki kuşağa nasıl aktardıklarını anlayabilmek için yerel bir tohum olan Doski hıyarı tohumunu vaka çalışması olarak belirlemiştir. Ayrıca, bu tohum üzerinden kadınların geleneksel tarım bilgi sistemlerinin neden azalmaya başladığını da araştırmaktadır. Bu anlamda, bu tezin ilk araştırma sorusu olan; "*Kürt kadınları Doski hıyarı tohumunu sonraki kuşaklara nasıl aktarmaktadır?*" sorularak öncelikle kadınların tohum aktarımındaki rolü belirlenmeye çalışılmıştır. Bununla birlikte, saha çalışması sırasında yapılan mülakat görüşmelerinde ortaya çıkan veriler ışığında bu tohumun kaybolmaya başladığı bilgisinin katılımcılar tarafından teyidi araştırma sorularını daha da genişletmiştir. Kaybolmaya sebep olan faktörleri özetlemek gerekirse; tarımın ve tohumun piyasalaşması ve globalleşmesi ve bu anlamda şirket tohumlarının bu bölgede artan şekilde kullanılmaya başlanması, tarım alanlarından zorunlu/gönüllü göç ve iklim değişiklikleri sonucunda kuraklaşan ve verimsizleşen topraklar sonucunda tarım arazilerine ayrılan kısmın azalması gibi etkenler sayılabilir. Bunlar içinde en önemli olan faktör ise, zorunlu göç kapsamında Kürt köylerinin 1990'lı yıllarda boşaltılmasıdır. Dolayısıyla, araştırmanın başında belirlenen ilk soruya ek olarak, başka araştırma soruları da saha araştırma süreci boyunca eklenmiştir.

Sonuç olarak, bu tezin ana araştırma soruları üç temel noktada belirlenmiştir:

- i. Kürt kadınları tarım bilgilerini bir sonraki kuşaklara nasıl aktarıyor?
- ii. Kürt kadınlarının tohumların koruyucusu olarak rolleri nedir?
- iii. Tohumların ve geleneksel bilginin kaybolması arkasındaki faktörler nelerdir?

Ayrıca, yukarıdaki araştırma sorularına ek olarak, 'Kadınlar Doski hıyarı tohumunu nasıl ve nereden temin ettiler?', 'Kadınlar tohumlarını başkalarıyla paylaştılar mı?', 'Kadınlar şirket tohumlarını kullanıyorlar mı? Evet ise, ilk olarak ne zaman kullanmaya başladılar?' gibi daha spesifik sorular sorularak araştırmayı daha da derinleştirmek istenmiştir.

Görüldüğü üzere araştırma soruları daha çok kadınların tohum üzerine olan deneyimlerini anlamak üzerinedir. Bu anlamda, bu araştırma feminist metodoloji temelleri üzerine oturtulmuştur. Çünkü bu araştırma kadınların deneyimlerini ana kaynak olarak kullanmıştır. Harding'e göre feminist yöntemlerin ilk özelliği, bilimsel araştırma yöntemlerine kadınların deneyimlerini de eklemek olmalıdır (Harding, 1987). Bu anlamda, feminist metodolojinin de bu tezin temel savlarını ortaya koymakta önemli bir işlevi olmuştur. Feminist metodolojinin savunucularından Harding'in de belirttiği üzere, feminist bakış açısı kadınların somut/gündelik deneyimlerini sosyal bilimsel araştırmaların başlangıç noktası olarak belirlemektedir (Harding, 1987). Sonuç olarak, Doski hıyarı üzerine yapılan bu feminist araştırma, feminist metod kullanılarak; kadınların bu hıyar tohumu ve geleneksel bilgi deneyimleri üzerine analizler yapmaya çalışmıştır.

Bu tez bu anlamda, Harding perspektifiyle, yukarıdaki araştırma sorularını sorarak aşağıdaki üç ana amacı ortaya koymaktadır:

- I. Geleneksel tarım bilgisinin koruyucusu olarak kadınların ana rolünü anlamak.
- II. Geleneksel bilginin ve tohum bilgisinin kadınlar tarafından kuşaklar boyunca nasıl aktarıldığını analiz etmek.
- III. Hem tohumun hem de geleneksel bilgi kaybının arkasındaki olası nedenleri araştırmak.

Bu tez bu soruları sorarak, kaybolmaya yüz tutmuş olan Doski hiyarının kadınlar tarafından nasıl bugüne kadar korunduğunu, bilginin ve tohumun kendisinin günümüze kadar hangi metotlarla ulaştırıldığını ve son olarak bu tohumun ve sahip olduğu geleneksel bilginin kaybolması arkasındaki faktörleri, Ekofeminist perspektifle ortaya koymaya çalışmıştır.

Dünya'nın birçok yerinde, ekolojik tahribat, dünyada varolan cinsiyetleri - halihazırda var olan eşitsizlikleri dolayısıyla - farklı şekillerde etkilediği bilinmektedir. Donovan'nın da belirttiği gibi, feminist düşünme biçiminin bir başlangıcı olduğu ve fakat bir sonunun olmadığıdır (Donovan, 1997). Bu anlamda, feministler uzun zamandır savaşını verdikleri cinsiyet ayrımcılığı, ataerkil düşünce yapıları ve kurumları, sınıf ve militarizm konularının yanında bir de ekolojik tahribata ilişkin yeni bir feminist bakış açısı getirdiler. Bu ekolojik bakış açısı, iklim değişikliği ve çevresel sorunlara cinsiyet perspektifinden bakan ve kadınları bu analizlere dahil eden bir düşünce ekolü: Ekofeminizm. Feminist çalışmalar içinde son yıllarda önemli bir damarı oluşturan Ekofeminizm, kadınlar üzerindeki tahakküm ile doğa üzerindeki tahakküm arasında kuvvetli bir bağ olduğunun altını çiziyor. Kadın ve doğa ekseninde gelişen bu hareket ve düşünce sistemi son yıllarda Türkiye'de de sıkça konuşulmaya başlanmıştır.

Genel olarak kabul gören görüşe göre Ekofeminizm kavramı ilk olarak Fransız Komünist partisinin bir üyesi olan Françoise Eaubonne tarafından 1974'te ortaya atılmıştır (Ferry, 2000). Fakat Ekofeminizm Karen Warren tarafından tanımlanmıştır. Warren'e göre Ekofeminizm, kadınların ezilmesi ile doğanın ezilmesi arasında önemli bağlantı kuran; bu bağların durumunu anlayarak, kadınların ezilmesi gibi doğanın ezilmesi de her türlü girişim için zorunlu kuran; feminist teori ve uygulamalara ekolojik bir perspektif içeren; ekolojik sorunlara yönelik çözümlerin feminist bir perspektife sahip olması gerektiğini ifade eden bir düşünce sistemi olarak tanımlanmıştır (Warren, 1987). Ekofeminist dalga 1960'larda ve 1970'lerde doğa bilimlerini eleştirerek, 'erkek merkezli' olan bu bilimlerin 'insan merkezli' yapılara dönüştürülmesi gerektiğini savunmuştur.

1960'ların başında feminist dalgaının içinden sıyrılmaya çalışan Ekofeminizm, zamanla gelişerek 1990'ların başında birçok grup ve birey tarafından kabul görmeye başladı. Bu gecikmenin olası sebebinin, Ekofeministlerin biyolojik determinizm ile olan ilişkisi olduğunu düşünülmektedir (Demir, 2013).

Kadın ve doğa ilişkisi üzerine farklı temellerde ortaya çıkan tartışmalar etrafında farklı konumlanan Ekofeministler, temel olarak üç kategori arasında ayrışır. İlk kategori kadın ve doğa arasındaki farkın metafizikleştirilmesi düşüncesine dayanan Özcü ya da Kültürel Ekofeministlerdir. Bu farkın temel aldığı sav, kadınlar ve doğa arasındaki yakınlığın nedenini, kadının bedeninin tenselliğiyle doğaya daha yakın olduğunu dile getiren özcü düşünce biçimidir. Bu düşünce sistemine göre, kadınların ve doğanın baskı altında tutulmasına sebebiyet veren modern kültüre karşı, özü itibarıyla doğaya daha yakın olan kadınların mücadele etmesi gerektiğini savunurlar. İkinci kategori, doğa ile kadınlar arasındaki yakınlığın, ataerkilliği oluşturan tarihsel ve sosyal süreçlerden kaynaklandığını iddia eden ve dolayısıyla kadın ve doğa arasındaki yakınlığı sosyolojik olarak analiz eden Materyalist ya da Sosyalist Ekofeminizm'e ait. Onlar bu farkın, maddi üretim ilişkilerinin dağılımında ve sömürü mekanizmaları üzerine kurulmuş olan düşünce biçiminden kaynaklandığını savunurlar. Özet olarak, kadın ve doğanın her parçası patriarka ve kapitalizm tarafından sömürülmüştür (Mies, 2018). Üçüncü kategoriye göre, ilk iki kategori arasında bir bağlantı olabilir: kadınlar ve doğa arasındaki yakınlık biyolojik deterministik argümanlarla açıklanabilir, ancak bu bağ tarihsel ve sosyal süreçlerle oluşturulan ataerkillik tarafından yaratılır (Çetin, 2005, s64). Bu tezin konusu, hem kadınların doğa ile kurdukları bağ üzerine hem de kadınlar ile doğanın yakınlık derecesi üzerine analizler içermektedir. Analizler sonucunda, kadınların doğa ile kurdukları bağın, ikinci kategoride yer alan Materyalist ya da Sosyalist Ekofeministlerin vurguladığı gibi, Doski kadınlarının doğa ve yerel tohumla kurdukları bağın maddi üretim ilişkilerinin dağılımında ve sömürü mekanizmaları üzerine kurulmuş olan sosyal düzel sonucu olduğudur.

Tarih boyunca, ekosistem dinamikleriyle uyum içinde yaşayan yerel topluluklar tarafından geliştirilen geleneksel bilgi, uygulama ve deneyimler biyolojik çeşitliliği korumuş ve gelir kaynaklarını sağlamlaştırmıştır (Gómez-Baggethun, Corbera ve Reyes-García, 2013). Hükümetler arası İklim Değişikliği Paneli'nin Değerlendirme Raporu (AR5), geleneksel bilginin iklim değişikliğiyle mücadele ve mevcut sistemlere uyarlanmasındaki önemini vurgulamaktadır (Pachauri ve diğerleri, 2014, s. 19). Geleneksel bilgi, biyolojik çeşitlilik ve sürdürülebilirliğin konuşulması için önemli bir kaynaktır. Biyo-çeşitlilik çok önemlidir, çünkü bunların çoğu yerli toplulukların doğal kaynaklar konusundaki uzmanlıklarından gelmektedir (Berkes, Colding ve Folke, 2000). Kaldı ki; birçok araştırma, kadınların geleneksel bilginin aktarılmasında büyük rol oynadığını göstermektedir (Am, 2019). Ekolojik geleneksel bilgilerin korunması ve aktarılması kadınlara atfedilmiştir (Howard, 2003). Bunun nedeni, kadınların ailenin gıda ihtiyacını karşılama gibi geleneksel günlük rutinleri olabilir (Montanari ve Bergh, 2019). Geleneksel toplumsal cinsiyet rolleri nedeniyle, kadınlar doğa ile belirgin bir ilişki kurma eğilimindedir ve doğal kaynakların korunması, depolanması ve diğer kuşaklara aktarılmasıyla daha çok meşgul olurlar (Howard, 2003). Örneğin, Arjantin'de Pilcaniyeu topluluğu üzerinde yapılan bir araştırma, kadınların yerel bitkilerin ana koleksiyoncuları ve geleneksel bilginin kuşaklararası vericileri olduğunu göstermektedir (Eyssartier, Ladio ve Lozada, 2008). Meksika'da cinsiyet rollerinin mantar toplayıcıları üzerine yapılan bir başka araştırma, dünyanın birçok bölgesinde kadınların genellikle mantarların ana toplayıcıları olduğunu gösteriyor. Bu aynı zamanda bitki toplama ve organize etme için de geçerlidir; kadınlar tüm dünyada tarımsal biyo-çeşitliliğin koruyucusu olarak kabul edilmektedir (Orijel, Terrazo ve Velázquez, 2012). Öte yandan, bakıcı olarak toplumsal cinsiyet rolleri nedeniyle kadınların ekoloji konusundaki bilgilerini genişletmiş olabileceği iddia edilebilir. Örneğin, kadınların hasta veya yaşlı insanlarla ilgilenmesi gerekiyorsa, yerel iyileştirici bitkiler hakkında kendi bilgilerine güvenmeleri ve bunları kullanmaları gerekir. Benzer geleneksel bilgiye sahip kadınlar ve erkekler farklı alanlarda uzman gibi görünmektedir (Pilgrim, Smith ve Pretty, 2007). Fakat, geleneksel bilgi gittikçe kaybolma tehlikesiyle karşı karşıyadır. Yaşam

çeşitliliğinin yok edilmesi, yalnızca söylemin planlanabilir ve uygulanabilir ilkeleri ışığında hareket ederek hayati ilişkilerin standartlaşmasına ve sonuç olarak yaşam çeşitliliğinin yok olmasına yol açar (Shiva, 2012). Onlarca yıldır, doğal kaynakların kaybına ve geleneksel bilginin giderek yok olmasına tanık oluyoruz. Geleneksel bilginin kaybolması tüm dünyada çok karmaşık nedenlere sahiptir. Baggethun, Corbera ve García'ya göre bu bileşenler şöyle açıklanmıştır: yerel dillerin kaybı, baskın dinler, arazi kullanımındaki değişiklikler, pazarların entegrasyonu ve daha geniş bir açıdan sanayileşme ve küreselleşme süreçleri (Baggethun, Corbera ve García, 2013).

Bu tez yedi bölümden oluşmaktadır. 1. Bölümde, tez hakkında kısa bir giriş yapılmaktadır. Bölümlerde tartışılacak konuların kısa bir özeti, araştırma soruları, araştırma metodolojisi, araştırmanın önemi ve araştırma alanının demografisi hakkında kısa bilgiler içermektedir. 2. Bölümde, tezin teorik çerçevesini sunmaktadır. Bu bölümde Feminist hareketler ile Ekoloji arasındaki ilişkiye odaklanılmıştır. Bu anlamda ekofeminist düşüncenin ortaya çıkışı ve cinsiyet ile doğa arasındaki ilişki analiz edilmiştir. Kadınlarla doğa arasındaki ilişkinin kurulduğu bağlam ekofeminist çalışmalarda halen tartışma konusudur. Bu nedenle, Ekofeminizmin tarihsel süreci, birbirinden ayrı varyasyonları ve yöntemleri incelenmiştir. Ekofeminist teorinin dayandığı temel çerçeve, baskın söylemde reddedilen kadın-doğa bağlantısının doğrulanmasıdır (Üzel, 2006). Bununla birlikte, bu olumlu değer üzerinde birçok açıdan farklılıklar vardır (Plumwood, 2004). Ancak, Ekofeminizmin tüm tartışması, kadınlar ve doğa arasındaki ilişkinin toplumsal olarak inşa edildiğini ve bu anlamda toplumsal olarak çözülebileceğini düşünenlerle, kadın ve doğa arasındaki ilişkiyi biyolojik ve manevi sebeplerden kaynaklandığını düşünenlerin arasındaki tartışma eksenine odaklanacaktır.

3. Bölümde, geleneksel bilginin teorik tartışması yapılmıştır. İklim değişikliğinin ve ekolojik krizlerin etkisinin her geçen gün arttığı şu günlerde, geleneksel bilginin gezegenimizi koruyabilecek yeterlilikte ve güvende olduğunun teorik tartışması gerçekleştirilmiştir. Ayrıca ikincil pozisyonları sebebiyle iklim

değişikliğinden ve ekolojik tahribattan en fazla etkilenen ve daha savunmasız durumda olan kadınların, geleneksel bilginin benzersiz bilgi ve becerilerine sahip grup olmalarının da altı çizilmiştir. Bu bağlamda, bu bölümde biyolojik çeşitlilik ve sürdürülebilirlik açısından kadınların deneyimlerine dayanan geleneksel bilgi tartışması yapılmıştır. Bu açıdan geleneksel bilgi kavramı öncelikle tanımlanmış ve biyo-çeşitliliği korumada ve doğal kaynakların sürdürülebilirliğini sağlamada ki önemliliği üzerine bir tartışma yürütülmüştür. Bu bağlamda, bu bölümde kadınların biyolojik çeşitlilik ve sürdürülebilirlik açısından geleneksel tarım ve ekolojik bilginin aktarılmasına katkısının altı çizilmiştir.

4. Bölümde, geleneksel bilginin ortadan kalkmasına ve kadınlar üzerindeki olası etkilerine odaklanmaktadır. Modernliğin ortaya çıkışı ve küreselleşme süreçleri ile, dünyanın birçok yerinde geleneksel bilginin aktarımı zarar görmeye başlaması ile başlayan süreçte, geleneksel bilginin kaybına neden olan birçok faktör incelenmiştir. Geleneksel bilginin kaybı, üç kategori altında incelemeye çalışılmıştır. Öncelikle, geleneksel bilginin Batı bilgi ve düşünce sistemiyle harmanlanan mono kültür etkisi altına kalmasına odaklanılmıştır. Doğaya sahip olma fikri ile ortaya çıkan mono kültür zihni; doğa ile bütünleşen sürecin aksine; hayvanlar, bitkiler ve doğa üzerindeki “fıkri mülkiyetini” ilan eder ve farklı bir mülkiyet, kölelik ve kontrol süreci getirir. İkinci olarak, geleneksel yaşam tarzının kaybolmaya başlaması ile geleneksel bilginin kaybolmaya başlaması arasındaki bağlantı gösterilmeye çalışılmıştır. Burada ele alınan iki nokta, geleneksel dil (anadil)’in kaybı ile geleneksel toprakların kaybı (zorunlu/gönüllü göç)’nin sonucunda geleneksel bilginin kaybolmaya başlaması. Ardından, geleneksel geçim tarzlarının kaybolmaya başlaması ile geleneksel bilginin kaybolmaya başlaması arasındaki bağlantıya odaklanıldı. Bu süreçlerde, iklim, gıda ve enerji krizlerine yol açan uzun vadeli tarihsel süreçler, tarımın sanayileşmesi ve köylülerin ve kadınların topraktan uzaklaştırılması üzerine teorik tartışmaları yansıtıldı. Son zamanlarda gıda güvenliği ve tohumların metalaşma sürecine dönen tartışmalar üzerine, yeşil devrim ve uluslararası anlaşmalar gibi tohum meselesinin endüstrileşmesinin ve globelleşmesinin tarihsel ve politik süreçleri bu bölümde yansıtılmaya çalışıldı.

5. Bölüm, tezin araştırma süreci ve metodolojisi hakkında bilgi vermektir. Öncelikle, bu tezin önemi belirtilmiştir. Sonrasında araştırma sürecinde yaşanan deneyimler aktarılmıştır. Araştırma, sosyolojik bir çerçevede, kadınların Doski hıyarı üzerine olan deneyimlerini anlamak üzere feminist bir metodoloji kullanılarak yapılmıştır. Araştırma, 22 kadın ile yarı yapılandırılmış görüşme tekniği kullanılarak yapılmıştır. Bu bölümde, görüşme teknikleri ile bilginin sahadan nasıl toplandığı, saha çalışması sırasında karşılaşılan zorluklar ve son olarak hem sahanın hem de katılımcıların profilleri incelenmiştir.

6. Bölüm’de saha araştırması sırasında elde edilen bulgular, tezin teorik arka planı dahilinde analiz edilmeye çalışılmıştır. Kürt kadınlarının yerel ve geleneksel tohumlar hakkındaki bilgilerini nasıl aktardıklarını anlamak için, bu bölüm sırasıyla üç ana bölümü kapsayacaktır. İlk olarak, Kürt kadınların tohum koruyucusu olmalarının nedenleri üzerinde durulmuştur. İkinci olarak, kültürel bilginin kuşaklar arasında aktarımının nasıl yapıldığı analiz edilmeye çalışılmıştır ve son olarak, tohumların ve geleneksel bilginin azalmasının arkasındaki olası nedenleri analiz edilmeye çalışılmıştır. Tüm bu araştırma sonuçları ekofeminist perspektiften yorumlanmaya çalışılmıştır.

Sonuç bölümünde, Bölüm 7, araştırmanın bulgularına yer verildi. Araştırmanın bulguları kısaca şu şekilde:

Doski bölgesinde yaşayan kadınların, Doski hıyarı tohumunun korunmasında büyük bir rolleri vardır. Bunun altında yatan en büyük sebep, cinsiyetçi iş bölümüdür. Kadınların gıda tedarikçileri olarak ailelerine bakmakla yükümlü olmaları, tohum saklama işinin daha çok kendileri tarafından yapılmasına sebebiyet vermiştir. Bunun dışında, tohumların korunması ve saklanması işi, ev içi ücretsiz emeğin bir parçası olarak görüldüğünden hem kadınların özel alanlara hapsedilmesine hem de bu görevin kadınlar tarafından ‘doğal olarak’ üstlenilmesine yol açmıştır. Araştırma bulguları, Doski kadınları ile doğa arasında bir bağlantı olduğu fikrini açıkça ortaya koymuştur. Bununla birlikte, bu bağlantının esas olarak ait oldukları geleneksel cinsiyet rolleri ve ataerkil

toplumdan kaynaklandığı anlaşılmaktadır. Bu anlamda Salleh, kadınların doğaya erkeklerden daha yakın olduklarını savunmanın anlamsız olduğunu söyler. Bu argümandaki sorun, emeğin üreme ve doğa üzerindeki görünmezliğidir. Özel alanları (yemek pişirme, temizlik, yaşlı bakımı ve çocuk bakımı gibi) kapsayan toplumsal olarak kurulmuş roller, ataerkil sistem tarafından kadınların toplumdaki konumunu zayıflatan doğa ile ilişkilidir. Diğer bir deyişle, Salleh'e göre, kadınları doğaya yaklaştıran iş bölümü ve kadın işçiliğinin kendisidir (Salleh, 1992) Sonuç olarak, Doski hıyarının koruyuculuğunu ve aktarımcılığını yapan Doski kadınları, ataerkil sistem tarafından doğa ile ilişkilendirilmiştir.

Doski kadınlarının, Doski hıyarı tohumu başta olmak üzere bölgede yetişen diğer yerel tohumların kuşaktan kuşağa aktarılmasında önemli rolleri vardır. Bu noktada, yaş faktörü saha çalışması esnasında önemli bir etken olarak kendini göstermiştir. Dolayısıyla, Yaşlı Doski kadınları hem tohum hem de tohumun geleneksel bilgisine en fazla sahip olan kişiler olarak belirlenebilirler. Dolayısıyla, bölgedeki yaşlı kadınların geleneksel bilgi ve tohum aktarımı süreçlerinde büyük bir katkıları vardır. Bu kültürel aktarımının daha çok aynı aile içerisinde; gelinlere ve kızlara yapılmış olduğunu söyleyebiliriz. Öte yandan kadınlar arasında tohum alış-verişi ve tohum paylaşımı da oldukça yaygın. Hatta bu anlamda güçlü bir kadın dayanışma ağının varlığından bahsedebiliriz. Bu noktada ataerkinin kadınlar arasında yaş kategorisi gözeterek, tahakküm biçimini farklılaştırdığını gözlemlediğimi aktarmak isterim. Yaşlı kadınlar toplum içinde 'bilge' sıfatını hak ederken ve tahakkümün kültürünün biraz daha dışında konumlanabilirken, daha genç yaşta olan kadınlar ise eril tahakküme maruz kalmaya devam ediyorlar.

Son olarak, Doski hıyarı tohumunun gittikçe azaldığı konusunda görüşmeciler hem fikirdi. 1990'larda, zorunlu göç bağlamında Doski hıyarının ana kaynağı olan Doski vadisinde bulunan birçok köyün boşaltılması sonucu bu tohum azalmaya başlamıştır. Sonuç olarak, Doski hıyarı tohumunun kaybolmaya başlaması, bu bölgedeki köy boşaltmalarının doğrudan bir sonucu olarak görülebilir. Türkiye'deki zorunlu göç meselesi göç mağdurlarının hukuki, siyasal,

sosyo-ekonomik, demografik ve ruhsal açıdan değerlendirilmeye çalışan çalışmalar mevcuttur. (E.g.Kurban et al., 2006) Bu alanlara ek olarak, boşaltılan köylerin, kaybolan geleneksel tarım bilgisi ve kaybolan tohumlar üzerine etkisini gösteren bu çalışma, literatüre bu anlamda katkı sunmayı ummaktadır.

Doski kadınlarının tohumu koruma motivasyonlarının mevcut siyasi ve sosyal çevreye meydan okuyacak şekilde politik olduğunu gözlemledim. Kadınların yerel tohumla kurdukları politik ilişkiye şahit olmak bu araştırmanın ilginç noktalarından biriydi. Doski kadınları, yerel tohumlarını ‘Kürt tohumu’ olarak adlandırırken, şirket tohumlarını ‘Devlet tohumu’ veyahut ‘Türk tohumu’ olarak adlandırıyorlardı. Katılımcıların çoğunun verdikleri cevaplar güncel siyasi tartışmaları içermesinin yanında bölgenin siyaseti, sosyolojisi hakkında birçok bilgi barındırıyordu. Bu noktada, Doski kadınların kendi yerel tohumları üzerine kurmuş oldukları politik bağlılık, bu tohumun sadece ‘tohum’ olduğu için korunmadığı fikriyatını veriyor. Son yıllarda hem Kürt kültürünün hakim paradigma içinde eridiğini, kaybolmaya ve unutulmaya başlandığı söylenebilir. Aynı zamanda, son yıllarda bölgede artan, Kürt kimliğinin ve kültürünün korunmasına yönelik çabalar ise bölge insanı üzerinde kendi aidiyetlerini koruma üzerine bir refleks oluşturmuş olabilir. Ve böylece, tohumların kaybolmasını önlemedeki çabaları politik birer eyleme dönüşmüştür. Bu noktada Kültürel Ekofeministler, 'kişisel' ve 'özel' olarak algılanan şeyin aslında politik hale gelebileceğini savunuyorlar. Bu anlamda, kadınlar ‘özel alan politiktir’ şiarıyla Dünya’nın birçok yerinde politik, sosyal ve ekonomik nedenlerle ortaya çıkan; tohumların kaybolmasına, şehirlerinin kirletilmesine, ormanlarının yok edilmesine karşı tepki veriyorlar. Doski kadınlarının yerel tohumlarını saklamaları ve kaybolmamaları konusunda bu tepkileri de bu tepkiler içinde yerini alıyor.

Öte yandan, bölgede güçlü bir yere sahip olan Kürt feminist hareketin bu noktadaki duruşu nasıldır sorusu akıllara gelebilir. Bölgede son yıllarda artan güçlü bir feminist kadın hareketi mevcuttur; görüşmeciler kadınların politik eylemselliği ile Kürt feminist hareket arasında bir paralellik olması olasıdır.

Fakat, görüşmecilerin yaş dilimleri göz önünde bulundurulduğunda, bu paralellik aktif siyasi bağlılıktan ziyade; etnik kimliklerinin birer parçasını koruma üzerine gösterdikleri bir refleks gibi görünüyor. Öyleyse, Doski Kadınları etnik kimliklerinin bir parçası olarak gördükleri bu hıyar tohumunu saklayarak, kültürlerinin kaybolmaması konusunda politik bir eylem gerçekleştirmiş oluyorlar.

Sonuç olarak, Doski kadınları yerel tohumlarını koruma konusunda ısrarcı olmalarına rağmen, karşılarındaki politik, siyasi ve ekonomik yapı sebebiyle yerel tohumlar kaybolma eğilimindedir.

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