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**Original Scientific Paper** 

# GENDER PERSPECTIVE OF CLIMATE CHANGE IN THE REPUBLIC OF SERBIA

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**Abstract**. Climate change is one of the biggest current issues for the entire humankind. All world countries, including Serbia, are faced with the consequences of climate change, the most prominent of which include a rise in average annual temperature, periods of extreme drought, and periods of extreme precipitation, leading to floods. Previous research has shown that the impacts and effects of climate change are not gender-neutral. It was found that climate change affects women more than men, or that women are more vulnerable to the effects of climate change. In addition to poverty, other causes include gender-biased interactions with the surrounding, gender-biased roles in the household and the community, gender inequality regarding access to social and physical resources, and gender disparities related to education, health, income, and time.

This paper discusses the importance of examining the gender perspective of climate change in Serbia in order to identify the existing deficiencies and call attention to areas that, if explored further, could contribute to more just and gender-sensitive climate change policies and programs.

**Key words**: climate change, Republic of Serbia, gender sensitivity, adaptation to climate change, policy

#### 1. INTRODUCTION

Earth's climate has been changing for thousands of years due to a variety of factors outside the Earth's atmosphere as well as biotic factors (non-anthropogenic and/or anthropogenic). In the late 20th century, owing to the First Report of the Intergovernmental Panel on Climate Change (IPCC, 1990), the prevalent views of minimal human impact on the climate began to be abandoned. Nowadays, the human factor is cited as being the most influential, with reference to the human practices from the industrial revolution to date. The United Nations Framework Convention on Climate Change defines climate change

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as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods" [1, p. 3].

Climate change is directly associated with the greenhouse effect and the increased concentrations of harmful gases in the atmosphere (carbon dioxide, methane, chlorofluorocarbons, and nitrous oxide). Consequently, 90% of the Earth's temperature increase is due to greenhouse gases forming as a result of human actions over the last 50 years. Carbon dioxide is the most important anthropogenic greenhouse gas. Regardless of all the global efforts expended to reduce greenhouse gas emissions, the levels of key greenhouse gases have been on a constant rise from 2015 to 2019, with carbon dioxide increase rates almost 20% higher than in the preceding five-year period [2]. In addition to industry and its energy branch, climate change is also attributed to the destruction of nature, urbanization, and agricultural production.

New developments regarding anthropogenic climate change, in addition to the causes, also include the rate and scope of the changes [3]. In the last 100 years, the average temperature of the Earth increased by 0.85°C, while 2019 was one of the warmest years, with extreme weather reaching populations in almost every part of the world. The most recent data published on the World Meteorological Organization's website shortly before the UN Climate Change Conference (COP26) in Glasgow this year indicate "that after dropping 5.4% in 2020, global fossil carbon dioxide (CO2) emissions are set to increase about 4.9% in 2021, finishing just 0.8% below 2019 emission levels. [The Global Carbon Project] updates the remaining carbon budgets based on the Intergovernmental Panel on Climate Change's Sixth Assessment Report and projects that if CO2 emissions were to remain at 2021 levels, we have 11 years to 1.5°C, and 32 years to 2°C [4, see also 5]. From 1990 onward, the sea levels annually rose 19 cm on average throughout the world. Some coastal cities and settlements will reach an average sea level rise of 2 up to 10 m, which will significantly increase the risk of flooding, salinization, and the destruction of natural resources and ecosystems.

The effects of climate change are substantial and destructive, having caused and still causing significant ecological, political, economic, and social instability throughout the world. The direct effects of climate change include floods and disasters, droughts, cold and heat waves, and unpredictable weather conditions and events, which lead to (short- or long-term) insecurity of income/livelihood, human and material losses, limited natural resources, water and energy shortage, damage to infrastructure, altered biodiversity, human health effects, migrations, and the loss of (agricultural) land and cultural and natural heritage. For instance, it is estimated that: the sea level rise could lead to food shortages (due to disturbances in normal agricultural cycles and threats to agricultural land); longer-lasting droughts will lead to water shortages; sea temperature rise will result in coral reef extinction; and fluctuating precipitation patterns are likely to intensify the political competition for water, food, and energy resources [6].

Globally, it could be claimed that human safety is the most important social impact of climate change. Reduced food safety and access to drinking water will increase mortality rates and malnutrition. Likewise, safety entails the social issues of health and wellbeing connected to climate change, particularly because climate change is likely to increase poverty in many parts of the world [7]. Such estimates for climate change go beyond the purely scientific and technical considerations and propel it straight into the program of sustainable development for the 21st century [8].

The nature and scope of climate change impacts pose the main threat to the most vulnerable social groups and the most poverty-stricken countries. It is generally accepted that those who are more marginalized and vulnerable will experience the biggest negative impacts of climate change [9], as they have the least capacity to prepare and adapt. Even though the significance and necessity of studying and monitoring extreme weather events were recognized in the late 20th century, resulting in the establishment of the IPCC, the gender-related aspects of climate change were only recognized during the 2000s.

Posing a serious global threat, climate change requires a prompt global response. There are two ways to deal with climate change – mitigation and adaptation. Mitigation involves directly addressing the contributory factors, while adaptation refers to the building of capacities to respond to climate change impacts.

The following section discusses the gender perspective of climate change, with the aim of highlighting the importance of studying the relationship between gender and climate change, the strong connection between gender inequality and the increased vulnerability of women to climate change, and the ability of women to respond and adapt to climate change. The subsequent section describes the Serbian efforts to adapt to climate change. Special emphasis is given to the gender perspective in relation to climate change in Serbia so as to identify the existing deficiencies and call attention to areas that require special examination for the purpose of adopting a climate change policy and programs that give the aspect of gender proper consideration.

#### 2. GENDER PERSPECTIVE OF CLIMATE CHANGE

Climate change negatively impacts the lives of both women and men, but it generally affects women more, due to limited access to recovery, rehabilitation, and restoration. Major contributory factors for women's vulnerability include economic, social, environmental, political, physical, emotional, and other factors [10]. Economic vulnerability seriously affects women by encumbering their ability to find employment in the formal and non-formal sectors, where they are insufficiently compensated and have limited access to resources. Social vulnerability refers to the change of social patterns and conditions, whereby women are faced with a variety of social issues within the society. Environmental vulnerability affects women's mobility in search of food, due to altered surroundings and environmental degradation. Political vulnerability prevents women from being properly represented in decision-making and restricts their access to political power and representation. Physical vulnerability implies that the majority of women are psychologically affected during disasters, which negatively affects their body, e.g. through pain, miscarriage, sleep disorders, physical damage, gynaecological issues, etc. Emotional vulnerability affects their ability to face a variety of emotional issues during natural disasters, issues such as fear, anxiety, disbelief, anger, frustration, denial, annoyance, and the like [11]. Even though women are generally more vulnerable, there are differences among them, primarily depending on whether they live in urban or rural areas, in highly developed or underdeveloped countries, and on the perception of women's place and role in their particular culture.

### 2.1. "Vulnerability" of women and climate change

The Human Development Report showed that the less favourable position of women, exemplified by limited access to resources and by absence from decision making, makes them extremely vulnerable to the effects of climate change, which means that climate change can increase the existing inequalities [12]. Simultaneously, the IPCC defines vulnerability as a function of the exposure, sensitivity, and adaptability of a system [13]. Although the term is usually used to better understand the vulnerability of a system, for instance of a country, it can to a certain extent also be used to better understand gender vulnerability to climate change.

The vulnerability of a country to climate change is commonly measured using quantifiable data that express the biophysical vulnerability of an environment. However, less is known about the social components of vulnerability, as they are more complex and less readily quantifiable. Social vulnerability is also a consequence of social inequality. Even though this is a fairly recent approach, there is a general agreement regarding the factors contributing to social vulnerability due to climate change: (1) lack of access to resources, including information, knowledge, and technology; (2) limited access to political power and representation; (3) social capital, including social networks and connections; (4) beliefs and customs; (5) building stock and age; (6) frail and physically limited individuals; and (7) type and density of infrastructure and lifelines [14, p. 245]. The authors state that gender, race, age, and socio-economic status are the most widely accepted characteristics of social vulnerability. However, other factors, although less discussed, such as the built environment, are also very important because they can influence the exposure to climate change as well as its effects, which include numerous natural hazards [Ibid].

By emphasising the multidimensionality of the term 'social vulnerability', Cutter et al. suggest that women are those who are more vulnerable to climate change, since they "can have a more difficult time during recovery than men, often due to sector-specific employment, lower wages, and family care responsibilities" [14, p. 246]. For example, a woman from rural Africa will have a different degree of vulnerability to floods than a woman in the rural parts of South-eastern Europe [see: 15, 16, 17].

Several studies have shown that mortality rates due to disasters are higher for women than for men, which can also be the result of socially defined differences in vulnerability between women and men. After the Asian tsunami in 2004, Oxfam determined that women accounted for over 70% of the victims in some Indonesian villages and certain parts of India. In Bangladesh, almost 140,000 people died in a cyclone in 1991, 90% of whom were women and girls [18, 19]. The best-known study on gender and disasters [20] used the data from 141 countries to discover that female victims are prevalent in natural disasters, specifically younger women in poorer communities, because of the genderbased discrimination to which they are exposed.

This means that women's vulnerability during emergencies is higher, while their capacities (information channels, physical strength and skills, tools and equipment, etc.) are reduced. Additionally, women's vulnerability is gender-based, which means that it is caused by gender stereotypes, norms, and roles. The inequalities are rooted in the position of men and women at the structural level, but are also visible at the individual level during emergencies. Gender plays an important role in the course of recovery from a natural emergency or another direct effect of climate change, as well as with regard to the possibility of adapting to climate change and other indirect effects of climate change.

Thus, according to the UNHCR, 80% of the world's migrants are women and children, which affects the opportunities for education of girls and boys. Gender patterns and relations are the most prominent in the following areas: participation in decision making; ownership and management of natural resources; ownership and management of economic and other resources (time, money, knowledge, skills); division of jobs and unpaid housekeeping, and care economy.

Women are responsible for food preparation, and their survival depends on their knowledge and skills. Likewise, in agriculture, the majority of women's economic activities is associated with the processing of fruits and vegetables. Women have far fewer assets to invest in agriculture, e.g. in irrigation and drainage systems.

It is also true that women and men have different needs, strategies, and possibilities for adaptation and recovery. Women are important both as an adaptation resource and as a resource for strengthening the resilience of communities, because they possess the knowledge and skills that are required for adaptation and recovery. In climate change adaptation, it is important that women, as well as men, be prepared, equipped, and informed about the effects of climate change, and that the research and preparation of adaptation measures include the interests, needs, and capacities of both women and men [21].

Gender equality implies the absence of discrimination based on sex/gender. It also implies equal rights in the social, economic, and political life, the respect for the human rights of women and men, and the possibility for them to fully develop their potentials and interests regardless of gender stereotypes and roles and to live in a free and supportive environment.

Gender equality refers to equal participation in all spheres of public and private life and to equal distribution of power and responsibilities between women and men. It is a part of a broader concept of human, specifically women's, rights, anti-discrimination, and overall equality. The starting point is that women and men have different (gender) roles, which are adopted through socialization, and that their roles dominantly shape everyday life, including the option for employment, participation in decision making, use of time, (lifelong) learning, safety, needs, and use of services in the local community. Gender roles also influence the position of women and men in society by shaping their interests, skills that they are expected to acquire and possess, division of household work, division of labour in the job market, and division of educational profiles into "men's and women's".

#### 2.2. Gender equality and climate change

Gender equality is one of the Sustainable Development Goals, defined in the documents of both the EU and the UN, some of which (e.g. Convention on the Elimination of All Forms of Discrimination against Women – CEDAW2, adopted in 1979 and put into force in 1982) are legally binding. The importance and role of women in environmental protection were emphasized at numerous conferences devoted to women and further social development (sustainable development) and, within this context, to climate change, (e.g. Nairobi, 1985; Rio de Janeiro, 1992; Beijing, 1995; Johannesburg, 2002; Rio de Janeiro, 2012), as well as through Millennium Development Goals (2005) and Sustainable Development Goals Report, published in January 2016. Additionally, considering that climate change is of concern for the entire humankind, the Paris Climate Accords (2015) stress gender-responsive behaviour in tackling climate change.

In addition to being one of the biggest challenges in environmental protection and modern development, climate change can significantly influence the existing inequalities, including gender inequality, and also negatively impact the programs for gender equality, improvement of women's position, and reduction of poverty and social exclusion. The impact of climate change is aided by decisions, programs, and policies that exclude or disregard the development of economic activities of women that are less harmful to the environment, the needs and views of women in urban planning, and the organization of public transport. On the other hand, if the development attuned to the principles of environmental protection, which requires new knowledge, skills, information, and technology, does not include women and vulnerable groups, the existing inequalities will only reproduce and increase.

That is why the introduction of the gender perspective in the response to climate change has been recognized as necessary and mandatory at the international level, primarily by the UN. This means that policies and programs regarding agriculture, green economy, urban planning, construction, public transport, energy industry, and so on should not only help neutralize the factors influencing climate change but also include the gender perspective. Likewise, programs and policies of response, prevention, and adaptation to the effects of climate change (such as droughts, floods, UV radiation, etc.) should be equally efficient both for women and men. At the Climate Change Conference in Marrakech (COP 22), signatories of the UNFCCC agreed on the necessity of integrating the gender perspective into all measures and activities. At the 2017 Climate Change Conference in Bonn (COP 23), the parties adopted the Gender Action Plan to mainstream gender equality into all climate-related action.

Prevention or mitigation of climate change primarily refers to the reduction or prevention of greenhouse gas emissions and sustainable use of natural resources. It involves the use of new technologies and renewable energy sources, the use of more energy-efficient equipment, and the change of energy management and consumption. The measures range from complex, such as urban planning of entire cities or the construction of underground rail, to small-scale, such as the replacement of an electric cooker or the construction of pedestrian and/or cyclist paths. Each intervention includes a gender perspective, but the choice of solutions to be promoted, financed, and implemented will often depend on how much the gender patterns and needs of women and men are taken into account [22, 23].

Unlike climate change prevention and the activities to reduce emissions, adaptation to climate change means reducing the vulnerability of natural resources and people to the current and expected climate change, or reducing the (potential) damage and finding and utilising new options. Prevention of the effects of climate change involves policies in the fields of economy, forestry, agriculture, urban planning, construction, energy industry, and management of water and other natural resources, which need to include the gender perspective.

### 3. SERBIAN EFFORTS IN RESPONSE TO CLIMATE CHANGE

#### 3.1. Climate Change in the Republic of Serbia

Climate change, which can nowadays be clearly detected from the abundance of climatological and meteorological data collected over many years, is primarily characterized by temperature increase, but also by changes in precipitation regimes, their annual distributions and distributions by intensity, as well as by the higher incidence of extreme weather events and periods. Such changes unequivocally impact the environment, the

economy, and human health and safety. Analysis of the SPEI6 index for August has shown that the trend of higher incidence of drought began during the 1980s and that the highest trend of increasing drought incidence from the late 19th century onwards occurred only during the last several decades [24].

The analysis of observed climate change in Serbia has shown an increasing trend in temperature rise over time. According to the data from the Republic Hydrometeorological Service of Serbia, 2019 was the warmest year in Serbia with the mean air temperature of 12.3°C from 1951 to date (Figure 1).

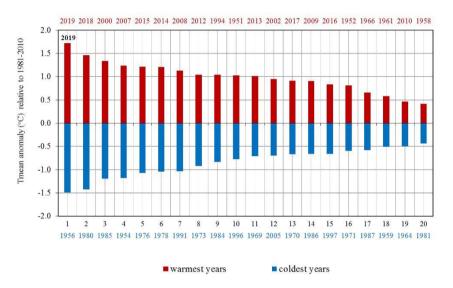


Fig. 1 Ranking of thirteen warmest and coldest years in Serbia between 1959 and 2019 (Source: Republic Hydrometeorological Service of Serbia, Annual Bulletin for Serbia, 2019, p. 2)

It is expected that the temperature in Serbia will continue to rise by the end of this century up to the values that are on average 3 to 5°C higher than the temperatures in the mid-20th century. According to a scenario that predicts the stabilization of greenhouse gases by 2040 (RCP4.5), the temperature will rise by 2°C, and according to a scenario that predicts a constant increase of greenhouse gases (RCP8.5), the temperature will by 4.3°C by the end of this century compared to the 1986-2005 reference period. Such changes destabilize the climate system even further and progressively facilitate the climate conditions that are favourable for extreme heat waves, intense drought periods, and increase in precipitation by over 10%, decrease in the number of frost days, increase in the number of summer and tropical days, as well as more frequent extreme precipitation events of the decrease [24].

#### 3.2. Serbian efforts in response to climate change

The key international documents based on which Serbia became involved in the fight against climate change are the UNFCCC, adopted at the UN Rio de Janeiro conference in

1992 and the Kyoto Protocol from 1997. The UNFCCC encourages developed industrial countries to act toward the stabilization of greenhouse gas concentrations so as to prevent the negative anthropogenic impact on the climate. Unlike the Convention, the Kyoto Protocol (Annex I) mandates these countries to reduce harmful gas emissions.

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Serbia ratified the UNFCCC in 2001, the Kyoto Protocol in 2008, and the Paris Climate Agreement in 2017. As a non-highly-developed industrial country, but a developing country, Serbia assumed the obligation to monitor climate change in its territory and to submit reports on the activities to combat and adapt to climate change.

In accordance with the ratified documents and its efforts to become an EU member, Serbia began to develop legal and institutional capacities for the fight against and adaptation to climate change. From 2004 to date, a set of laws and sub-legal acts pertaining to environmental protection have been adopted, directly or indirectly referring to climate change and serving to ratify relevant international documents. Some of these include the following: Law on Environmental Protection, 2004: Law on Environmental Impact Assessment, 2004: Law on Waste Management, 2009; Law on Chemicals, 2009; Law on Waters, 2010; Law on Air Protection, 2009; Law on Ratification of the Framework Convention on Climate Change, 1997; Law on Ratification of the Kyoto Protocol to the UN Framework Convention on Climate Change, 2007; Law on Ratification of the Paris Agreement, 2017), as well as strategic documents directly or indirectly pertaining to climate change (National Strategy for the Incorporation of the Republic of Serbia into the Clean Development Mechanism (CDM) under the Kyoto Protocol for the fields of waste management, agriculture, and forestry, 2010; National Program for Environmental Protection, National Environmental Approximation Strategy for the Republic of Serbia). However, the Law on Climate Change (2021) has only been adopted recently, with a two-year deadline to implement the Programme for Climate Change Adaptation. Even though the initiative to develop the Strategy to Combat Climate Change with an action plan was launched in 2014, the Strategy is yet to be implemented.

Thus far, Serbia has adopted the First Report of the Republic of Serbia under the UNFCCC (2010), the First Biennial Update Report (2016), and the First National Report (2017). The Serbian Government adopted the Report on the Establishment of Institutional Arrangements for the Implementation of Monitoring, Reporting, and Verification (MRV) of Climate Change, as well as the Climate Change Communication Strategy (2015).

In 2014, the Serbian Government founded the National Climate Change Committee to monitor the state, development, and implementation of the national climate change policy, sectoral, policies, and other planning documents. The Committee is also mandated to oversee the fulfilment of Serbia's international obligations concerning climate change, to propose measures for climate change mitigation and adaptation, and to issue proposals on how to accomplish the goals of the fight against climate change.

According to the Law on Ministries (2020), the field of climate change falls under the purview of two ministries – the Ministry of Environmental Protection and the Ministry of Mining and Energy – in conjunction with the Republic Hydrometeorological Service of Serbia. The Environmental Protection Agency, which is responsible for the development

of the national greenhouse gas inventory, also plays an important role in tackling climate change. Nevertheless, the issue of climate change is a complex one, resulting in economic, social, health, and other effects, which is why it cannot be handled by the two ministries only, but rather warrants intersectoral cooperation.

As mentioned above, Serbia ratified the Paris Agreement, but the environmental and climate change policies are yet to properly include the gender perspective in connection to climate change, while the mitigation and adaptation measures do not consider gender as a relevant factor for the definition and proposal of concrete measures. This claim is corroborated by the following documents: the First National Plan of Adaptation to Changed Climatic Conditions for the Republic of Serbia – Draught (2015); the Biennial Update Report of the Republic of Serbia under the UNFCCC (2016); and the Second Report of the Republic of Serbia under the UNFCCC (2017), as well as publications Climate change and Health (2016), published as part of the project "Second Report of the Republic of Serbia under the UNFCCC", Crop Warming - How to Respond? Climate Change Impacts on Serbian Agriculture (2015), The Guide through Sustainable Urban Mobility (2015), and Climate Change Impacts on Serbian Agriculture (2019). The documents completely neglected the dependence of women on their natural surroundings, especially in rural areas, associated with their work of collecting water and firewood and their work in agriculture, which is vulnerable to climate change according to the global and national reports. Some studies reveal that women are more prone to support measures that would limit the use of private motor vehicles, thus supporting the efforts to reduce greenhouse gas emissions. In addition, women are more willing to alter their behaviour to help conserve energy, to buy products with a low carbon footprint, to introduce new practices into agricultural production, and to reject high-risk technologies, such as nuclear energy [25, 26].

In terms of the obligations regarding gender equality, it is necessary to ensure the gender perspective using both the national strategic and the legal framework. Among other things, this implies implementing the equal opportunity policy, defined in Article 15 of the Serbian Constitution, enforcing the Law on Gender Equality, implementing the National Strategy for Gender Equality (2016-2020) and the Law on the Prohibition of Discrimination (2010), and resorting to gender-responsive budgeting. Therefore, it is of paramount importance to devote efforts to establish a framework with key dimensions, indicators, and data sources for the monitoring of gender equality regarding climate change [27].

Women in Serbia have or at least can have a critical impact on reducing climate change. Owing to the various gender stereotypes and roles, or gender regimes, the women are those who predominantly walk or use public transportation, which could help reduce climate change, albeit while highlighting gender inequalities. Women less frequently use bicycles, because the patriarchal public space behavioural patterns dictate that this would be inappropriate and because they do not feel safe riding a bicycle. In rural areas, women are in a particularly inconvenient position. In addition to being minority owners of arable areas, because they often renounce their inheritance in favour of other male family members (son, grandson, or brother), they are also treated as the help and are thus seldom able to affect any major decisions concerning the household. Since the rural areas are the most impoverished and women are traditionally tasked with preparing food, they could be considered responsible for air pollution by using wood stoves to cook food. Yet, this is another example of gender inequality, as women are much more prepared to change their behaviour and way of life [28, 29].

Considering that women handle cooking, waste disposal, and horticulture inside and outside the house on top of raising the children, it is necessary to properly analyse the place and role of women in the fight against climate change. Information dissemination and education, environmental campaigns, gender-sensitive planning and budgeting are only some of the steps that need to be taken to combat climate change. There are numerous possibilities of getting women more involved in the fight against climate change. For instance, it has been proven that climate change affects crop yield per hectare, regardless of the ownership status, which is why it is vital to inform the women about the necessity of growing crop varieties that are resistant to climate change, to impart to them the importance of using biomass for CO-2 emission reduction, to present them with the possibilities and methods of organic waste composting, and so on, all accompanied with gender-sensitive budgeting and incentives.

Proper consideration of the place and role of women in the fight against climate change requires the following: "Inclusion of women in task forces and decision-making processes at the international, national, and local level; Gender analysis of the effects of projects and programs; Development and monitoring of gender-sensitive indicators for implementation and its effects; Consultations with women and men; Provision of equal opportunity for employment and other forms of engaging women. Some of the programs can also involve the collection of data on the impacts of climate change on the local population, especially in the rural areas and related to agriculture, or the investigation of energy poverty and the availability of energy-efficient and renewable energy sources to women and men" [30, p. 34].

The created framework for gender-sensitivity monitoring related to climate change covers seven areas: "(1) Access to resources; (2) Participation in decision making and climate change policies; (3) Economy and work; (4) Consumption and livelihoods; (5) Education; (6) Health; (7) Climate change knowledge, attitudes and behaviour" [27]. According to the authors, the proposed areas and the indicators for each of them require further discussion, because this is an intersectoral and multisectoral issue rather than an issue of climate change policy only.

#### 4. CONCLUDING REMARKS

Climate change is not exclusively a matter of environmental protection, but rather of several different sectors, such as energy industry, agriculture, transport, construction, economy (green economy), and others. It is feasible and necessary to integrate the gender perspective into all pertinent policies, which would allow for the equality of women and men, as a principle, to be considered when making decisions or creating policies in all stages and by everyone involved. Thus, every project, strategy, or law should incorporate the gender assessment in order to establish the potential impact on both women and men, but also to establish how gender equality and the position of women (and of men if determined less favourable) can be improved in a given field and through a given intervention.

Over the last three decades, numerous international instruments have been developed to help achieve gender equality, prevent discrimination towards women and girls, and steer development towards sustainability, which comprises equality and inclusion. The set of international documents includes declarations, conventions, platforms, action plans, resolutions, and agreements. Since states are simultaneously members of international bodies, the documents adopted by these bodies guide the actions of the states, while most of the documents become legally binding and integrated into the national legal systems through ratification. This also applies to activities and goals concerning climate change, where goals and guidelines are globally defined and the states should work on achieving them in accordance with their national frameworks, priorities, and contexts. The gender perspective should be ensured in the preparation, implementation, monitoring, and evaluation of national action plans in all the key segments, including decision making, fundraising, access to funds and technologies, and the like [31]. The relevant document for gender perspective in response to climate change pertains to (1) women's rights and gender equality, (2) climate change and environmental protection, and specifically to (3) gender perspectives in response to climate change and environmental protection.

The key tools for introducing the gender perspective include gender statistics, gender analysis, and gender-responsive budgeting, even though other tools can be utilized in each stage of policy creation and implementation. The following are the most important actions to be taken: to collect and analyse data classified by gender; to consult women and men, users, and representatives of civil society regarding the problems and their solutions; to formulate measures and activities that will ensure women's participation, especially as program users and decision makers; to predict gender-sensitive indicators; and to implement gender-responsive budgeting.

In addition to the development of legal and strategic frameworks, guidelines, and tools, integration of gender perspective into climate change adaptation policies requires those who design, create, and implement the policies to broaden their knowledge and understanding of the gender perspectives of climate change, specifically why gender equality is important in the first place, how gender/sex and climate change are connected, and what the introduction of the gender perspective actually means in practice. Failure to do so would reduce the introduction of gender perspective into environmental policies and programs to mere 'counting', i.e. quantitative distribution of women and men.

When planning the climate change mitigation and adaptation measures in terms of gender equality, Serbia should focus more on the following actions: sorting of the relevant climate change data according to gender; analysis of the effects of climate change on women; permanent education of state employees on the significance of the gender perspective of climate change; inclusion of more women into the adaptation plan design; and campaigns to inform women about the effects of climate change and the adaptation measures.

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## RODNA PERSPEKTIVA KLIMATSKIH PROMENA U REPUBLICI SRBIJI

Klimatske promene predstavljaju jedan od najvećih problema sa kojima se suočava savremeno čovečanstvo. Republika Srbija kao i ostale države sveta suočava se sa posledicama klimatskih promena. Kao neke od manifestacija klimatskih promena uočene su sledeće posledice: porast prosečne godišnje temperature, sušni, kao i periodi sa obilnim padavinama koji su doveli do poplava.

Dosađašnja istraživanja su pokazala da uticaji i efekti klimatskih promena nisu rodno neutralni. Smatra se da klimatske promene više pogađaju žene, te da su ranjivije na klimatske promene. Kao uzroci, osim siromaštva, navode se i rodno diferencirane interakcije sa okolinom, rodno diferencirane uloge u domaćinstvu i zajednici, rodne nejednakosti u pristupu društvenim i fizičkim dobrima, rodne razlike u obrazovanju, zdravlju, prihodu i vremenu.

U radu se ukazuje na značaj propitivanja rodne dimenzije klimatskih promena i rodne dimenzije klimatskih promena u Republici Srbiji kako bi se identifikovali postojeći nedostaci i istakla područja koja bi, ako se dalje istraže, mogla doprineti pravednijim politikama i programima vezanim za klimatske promene u Republici Srbiji.

Ključne reči: klimatske promene, Republika Srbija, rodna osetljivost, adaptacija na klimatske promene, politika