

Climate Justice at the Local Level: The Case of Turkey

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Abstract

Climate change is an issue of social justice, as it affects different social groups in the urban space differently. Yet, while formulating climate action plans, local governments often disregard the relationship between climate change and justice. By using content analysis, this article explores climate change action plans of Turkish municipalities from the perspective of climate justice. It concludes that action plans of Turkish municipalities do not consider climate change as a problem of justice despite the emerging or exacerbated inequalities in the urban space caused by climate change.

Keywords

Climate Change; Climate Justice; Local Governments; Municipalities; Urban Climate Justice

Introduction¹

Climate change, as one of the most significant global environmental problems, has several consequences at the local level. Cities and climate change have a symbiotic relationship with each other, as the former contribute to the rising levels of greenhouse gas (GHG) emissions due to the high concentration of production and consumption within specific areas. According to UN-Habitat (2011), cities are responsible for 60% to 70% of total GHG emissions. Moreover, urban population is projected to reach 66% of the world population by 2050 (United Nations 2014), causing a further increase in GHG emissions in urban areas if our consumption and production habits do not change. At the same time, cities are the most vulnerable to severe outcomes of climate change such as extreme weather events, drought and sea-level rise, which have impacts on human health, food security, housing, employment and cultures (Revi et al. 2014). As such, climate change has significant effects on the socio-economic structures of urban areas and increases the vulnerability of cities. Vulnerability may vary according to two main and interconnected factors. The first factor is the structure of cities, such as the level of development, quality of infrastructure services, and institutional capacity at the local level. The second factor is the socio-economic conditions of city dwellers, including distribution of income, poverty rates, gender inequality and adequate health services for people with disabilities and the elderly. Hence, climate change is an issue that has the potential to deepen social inequalities within and between urban areas. As a result, climate injustices that emerge in urban areas have been framed as “urban climate justice” in the literature (Steele et al. 2015; Bulkeley et al. 2013).

In order to counteract climate change, local governments have pursued actions in the two main policy areas of climate change, namely mitigation and adaptation. While the objective of mitigation policies is to reduce GHG emissions, adaptation policies endeavour to adapt to the changing conditions caused by climate change. Through mitigation and adaptation plans, local governments have taken measures against the effects of climate change since the 1990s. International climate change negotiations, such as the Paris Agreement and COP21 Decisions, also underline the importance of actions of local and subnational governments (ICLEI 2016). By using content analysis, this article explores the climate change action plans of Turkish municipalities from the perspective of climate justice and aims to fill the gap in the existing literature on climate justice. It concludes that although

¹ An earlier draft “Urban Climate Justice in the Local Climate Change Policies: The Case of Turkey” was submitted as a working paper to the IAPSS World Congress 2019 and this article is developed from my master thesis entitled “Urban Climate Justice in the Local Climate Change Policies: The Cases of Bursa, Izmir, Karşıyaka and Nilüfer” which was supervised by Semra Cerit Mazlum in Marmara University, Turkey.

climate change has caused or exacerbated inequalities in urban areas in Turkey, action plans of Turkish municipalities do not perceive climate change as a problem of social justice.

In the first part of the article, I present a literature review of existing research on inequalities caused by climate change in urban areas and the theories of urban climate justice. In the second part, I examine the documents that delegate power and responsibilities to local governments by the central government in Turkey, in order to understand the context in which municipalities implement climate change policies. Finally, I assess the mitigation and adaptation policies to demonstrate the differences between them with an emphasis on climate justice.

Inequality of climate change in urban areas

Urban climate justice is a concept describing the emerging or exacerbated inequalities in urban areas caused by climate change. Coincidentally, those who contribute the least to climate change are generally most affected by its negative consequences both at local and global levels.

There are a few studies investigating the relationship between vulnerable groups and climate policies in cities. A recent study conducted in twenty U.S. cities shows that areas populated by the most disadvantaged and vulnerable groups are the most affected by the urban heat island effect (Mitchell 2017) which means that the average temperature of cities is higher than its surroundings due to the changes in the land use in urban areas (Stone and Rodgers 2001). In New Orleans, increased invoices due to rising electricity prices adversely affected the low-income groups (Stein 2018). Another study uncovers how in Birmingham, fuel poverty could not be overcome by adaptation policies, and building affordable housing in Vancouver brought about the displacement of low and middle-income groups because of structural factors (McKendry 2015). Overall, many studies indicate that climate change-related adaptation and mitigation policies can have unintended consequences on different groups and reproduce societal inequalities. Therefore, these repercussions must be considered in the process of policymaking and implementation.

The difference in vulnerability to climate change between low- and high-income groups is insignificant in urban areas where health and safety standards are provided, land use planning is done considering the risks in the region and where infrastructure and services are centrally regulated. However, low-income groups living in low- and middle-income countries are vulnerable to climate change as a result of inadequate infrastructure, health services and secure housing (IPCC 2012; Revi et al. 2014).

Vulnerability to climate change is not only related to the income level. Another factor that increases this vulnerability is the gender roles in society. Beyond income level, gender also has an impact on vulnerability to climate change. For example, women living in rural areas are more vulnerable to climate change because they are directly dependent on natural resources of the land they work on. Moreover, due to their gender roles as care-givers, women living in urban areas are disproportionately forced to cope with adverse health conditions exacerbated by the negative effects of climate change, such as vector infectious diseases and malaria caused by the urban heat island effect and water shortages in drought-affected areas (Terry 2009, 2-3).

According to Hardoy and Pandiella (2009), some questions should be raised to understand vulnerability to climate change in urban areas. The options for low-income groups for housing remain quite limited in the absence of affordable housing in the cities. Therefore, it is important to ask the question: which residential areas are more exposed to climate change impacts? Subsequently, low-income groups are forced into residential areas where the effects of extreme weather events are more destructive. Therefore, 'who lives in areas where the direct and indirect effects of climate change are more hazardous?' should be the second question. Third, who lacks the knowledge, capacity and opportunity to take measures against the impacts of climate change? The answer of the third question emphasizes not only the lack of capacity of the population, but also the inadequate guidance from local governments (Hardoy and Pandiella 2009). These questions help to identify disadvantaged groups who are vulnerable to climate change, such as low-income groups, children, elderly people, women and people with disabilities.

Theoretical framework

The main objective of this section is to define urban climate justice through the main theoretical approaches. Yet, it is important to highlight that while there has been an increasing number of studies on global climate justice since the beginning of 1990s, they are still relatively few in number (Bulkeley et al. 2014). Using the prevailing theories on justice of notable scholars such as Rawls (1971), Sen (1999), Young (1990) and Lefebvre (2015), we can identify six approaches to urban climate justice in the existing literature, namely distributive and procedural justice, the capabilities approach, procedural justice in local climate adaptation, justice as recognition, spatial justice, and the eco-cultural political approach.

Adger et al. (2006) explain climate justice through both procedural and distributive justice, using the theory of John Rawls as the foundation of their approach. Accordingly,

adaptation to climate change requires both procedural justice, meaning the road to justice, and justice in distribution. While procedural justice is necessary for participation in the policy-making processes, distribution of burdens and benefits of climate change requires distributive justice. As such, procedural and distributive justice are interdependent on climate change policies (Adger et al. 2006). Therefore, at the local level, the elements of both procedural and distributive justice are important for the development of climate-just cities.

Adopting the capabilities approach, Sen (2009, 18-19) argues that policies that increase basic capacities and opportunities for social justice are more egalitarian than others. Using Sen's approach to justice, Moser and Satterthwaite (2008) have developed a "pro-poor adaptation to climate change". They also note the fact that the population density is higher in low- and middle-income countries. Moreover, the vast majority of the population in low and middle-income countries lives in coastal areas that are vulnerable to the impacts of sea level rise and extreme weather events. Furthermore, low- and middle-income countries lack the capacity to adequately adapt to climate change because of deficiencies in infrastructure and constraints on public administration. Therefore, the capacities of low- and middle-income societies should be increased to reduce their vulnerabilities in urban areas. Dodman and Satterthwaite (2009) argue that local and subnational governments can increase the adaptation capacity of urban areas by improving their administrative system and by providing housing and basic infrastructure services for vulnerable groups.

Bringing together the distributive justice and capabilities approach, Holland (2017) recommends adopting the procedural justice approach in local climate adaptation. He argues that the reasons for vulnerability can be understood through the analysis of the political power of vulnerable groups who are most exposed to climate change, as well as examination of the policy-making process of climate change. Only through such an analysis can vulnerabilities be understood. There are two obstacles to decreasing the vulnerabilities of certain groups to climate change. The first one is the influence of experts in decision-making processes because technical experts evaluate climate change as solely a technical issue, disregarding the justice dimension. The second obstacle is the conflict of interest arising from financial loss of certain stakeholders, such as polluting companies, due to climate change policies. By acting on these two fundamental barriers, the influence of vulnerable groups on the policy-making process can be increased (Holland, 2017).

Bulkeley et al. (2014) add the dimension of recognition to the distributive and procedural justice in urban climate justice. Climate justice on the international level is often discussed from the perspective of the distributive and procedural justice. However, the

question of rights and responsibilities in relation to climate change cannot be debated from the perspective of distributive and procedural justice only, given the socio-economic and structural characteristics of urban areas that vary within themselves and between the nation states. Therefore, there is a necessity to analyse urban climate justice separately from climate justice at the international level. For this reason, Bulkeley et al. (2014) argue that the approach of traditional international politics to climate justice, which is based on distribution and procedures, should be amplified at the local level with the notion of justice as recognition. The implementation of climate change policies requires a deliberative analysis because of the unequal distribution of burden and benefits of climate change across urban areas. In other words, in climate change policies at the local level, the cultural injustices that have already existed in cities should be taken into account in order to ensure the rights of oppressed groups such as the working class, women and ethnic minorities (Bulkeley et al. 2014).

Another approach to urban climate justice is the spatial justice approach based on the claim of Lefebvre's 'the right to city' (2015). According to this approach, adaptation to climate change is essentially spatial. This means that, as opposed to the capitalist understanding of justice, resources such as jobs, income, political power, social services and healthy environment should be equally distributed in urban areas. However, these resources are currently concentrated among the urban elites and the unequal access to resources is reproduced through the structure of production processes. Research on environmental justice shows that pollutants and hazardous facilities are often established in areas inhabited by low-income families and/or ethnic minorities (Shi et al. 2016). In addition, urban planning policies in low- and middle-income countries cannot be implemented due to rapid population growth and the needs of the expanding urban area cannot be met due to lack of financial resources (Reckien et al. 2018). Therefore, while eco-friendly urban planning – which is essential in the face of climate change – in many cases cannot be adequately implemented in low- and middle-income countries, in high-income countries, refurbishing houses to make them more energy-efficient and reduce emissions is increasing housing prices, thereby causing 'eco-gentrification' (Reckien et al. 2018). As such, the effects of climate change and climate policies are not equally distributed in urban areas. For this reason, urban climate justice is the right to the city (Cohen 2018). Accordingly, inclusion of the citizen in both the policy-making processes and the policy implementation processes are necessary for overcoming injustices. Likewise, in order to bring equality and justice, the environmental justice movement has been focusing on vulnerable groups who suffer the

most from the effects of climate change, yet do not often have a voice in the policy-making processes in urban areas (Taylor 2000).

Overall, climate change, as a global problem, increases existing inequalities both between the North and the South and between social groups living in cities. Policy areas of local governments such as infrastructure, transportation and energy determine the level of vulnerability of citizens to the impacts of climate change. Such policies are likely to create socio-economic and socio-spatial inequalities if the unequal distribution of burdens and benefits of environmental processes are not addressed and the lack of participation of vulnerable groups in the policy-making processes persist. For these reasons, multi-layer and participatory policy-making processes that include all groups in the society and includes different institutions of state/private sector/non-governmental organizations/communities are necessary to achieve urban climate justice.

Methodology

By examining whether Turkish municipalities consider the justice dimension of climate change in their policies, I analyze their climate/sustainable energy action plans. I argue that the municipalities in Turkey disregard the justice dimension in their action plans, as they mostly aim to develop mitigation policies. My hypothesis is that although climate change has created or exacerbated inequalities in urban areas, the action plans of municipalities in Turkey do not frame climate change as a problem of social/climate justice.

After developing the conceptual framework of the study and analyzing the powers and responsibilities of local governments in Turkey, I conducted content analysis of municipal climate action plans, which unpacks the framework of policies since content analysis enables to go beyond merely counting the number of times specific words appear in the text (Hsieh and Shannon 2005). The study covered all municipalities in Turkey with climate/sustainable energy action plans. At the time of the research, the number of municipalities with action plans was fifteen. I selected official and announced plans, as they represent the unified actions of municipalities to climate change. As such, other activities of municipalities on climate change are excluded from the scope of the study. I examined action plans by manual coding with the keywords employed from the conceptual framework of urban climate justice which I have delved into in the theoretical framework part of the study. Then, I explored the words within their contexts and tried to examine thoroughly whether the words are related to urban climate justice. Accordingly, I used content analysis as a qualitative method.

The words chosen for the content analysis are divided into two categories. The first category is “concepts directly related to climate justice” in which I search for the following words: ‘justice’, ‘vulnerability’, ‘equality’, ‘inequality’ and ‘human rights’. The second category is “subcategories related to climate justice” containing the words ‘participation’, ‘woman’, ‘child’, ‘elderly’, ‘disabled’, ‘unimpeded’, ‘disadvantaged’, ‘poor’, ‘poverty’, ‘low income’ and ‘level of income’. I prefer to use subcategories because some municipalities do not use explicitly the words related to climate justice, but their policies nevertheless aim to overcome inequalities in society.

Due to time constraints, I was not able to conduct interviews with administrators and elected officials in local governments. This is the main limitation of this study, as I will not be able to analyze the details of policymaking and policy implementation processes, which are crucial for climate justice.

The case of Turkey

Local governments implement climate policies in accordance with their powers and responsibilities established by the legal system. Municipalities in Turkey operationalize their powers and responsibilities such as waste management, transportation and zoning to implement climate change policies (Republic of Turkey 2005; Republic of Turkey, 2004: 8902-8905). In addition, metropolitan municipalities in Turkey are required by law to protect the environment for sustainable development (Republic of Turkey 2004, 8902-8905). For these reasons, the main agents of environmental management in Turkey are the municipalities (Orhan 2013, 601-616). However, the laws pertaining to climate change make no direct reference to the powers and responsibilities of local governments. Therefore, municipalities in Turkey use their discretion and voluntarily attempt to decrease the effects of climate change through the initiative of bureaucrats working in the environmental protection departments, stretching their powers and responsibilities to introduce adaptation and mitigation policies.

Municipalities in Turkey are the latecomers in action against climate change compared to the local governments in the United States and the European Union, for example, the Covenant of Mayors launched in 2008 by the European Commission for local climate action (Covenant of Mayors n.d.). Their hesitation to implement climate policies stem from the policies of the central government (Turhan et al. 2016) that I will elaborate later. There are a number of studies revealing the importance of the guidance of local governments by the central government. For instance, a study conducted in Sweden (Storbjörk 2007) uncovers how local government officials are unclear about the extent of their power and

responsibilities in combating climate change. According to this study, the municipalities are in need of information provided by the central government on the effects of climate change. Therefore, guidance by central governments helps local governments to take substantial action on climate change (Storbjörk 2007). However, the policy documents of the central government in Turkey are limited to the delegation of power and responsibility directly to local governments in relation to climate change.

The roadmap to combat climate change for cities and municipalities in Turkey are drawn in the Development Plans (Republic of Turkey 2000; Republic of Turkey 2006; Republic of Turkey 2013), the Strategy of Climate Change 2010-2020 (Republic of Turkey Ministry of Environment and Urbanization 2012a), the Climate Change Adaptation Strategy and Action Plan (Republic of Turkey Ministry of Environment and Urbanization 2012b) and the Urban Development Strategy and Action Plan 2010-2023 (2010). These documents do not precisely define the role of local governments and lack measurable and observable indicators. This may indicate that the central government disregards the power and responsibility of local governments in climate action. The central government's negligence is also evident in the Intended Nationally Determined Contribution of Turkey (INDC). Turkey's actions identified in the INDC are classified under the sectors of energy, transport, buildings and urban transformation, agriculture, waste and forestry (Republic of Turkey 2015). Although many of the contributions require action at the local level, the INDC does not empower or include the municipalities.

The limited role given to local governments can be explained by two factors. The first factor is Turkey's position in the global climate change policies. Turkey has demanded to be removed from the Annex I Countries which are industrialized countries in 1992 and "countries with economic transition" (UNFCCC, n.d.) on the grounds that it was not as industrialized as the other Annex I Countries in 1990 and its historical responsibility was the lowest (Cerit Mazlum 2009, 56). Furthermore, the special circumstances of Turkey have affected its national climate politics. For example, according to Turkey's INDC, Turkey pledged to cut GHG emissions by up to 21% by 2030 compared to a business-as-usual scenario (Republic of Turkey 2015). In other words, Turkey does not have an absolute reduction target. Moreover, in Turkey there is yet no national-level climate change legislation in place. As such, local governments do not set ambitious reduction targets in the absence of regulations giving them power and responsibility on climate change.

The second factor contributing to the limited role given to local governments in Turkey is the centralization of metropolitan municipalities because of amendments to local

government legislation. As a result, power and responsibility has been concentrated in the hands of 30 metropolitan municipalities while the power and responsibility of 519 metropolitan district municipalities has been limited (Arikboğa 2018). This type of centralization within local governance, focusing on metropolitan municipalities only, was carried out in the name of decentralization. In line with the amendments, in the 2019 budget for Ministry of Environment and Urbanization, it is stated, “In order to enhance the capacity of local governments to combat climate change, the Ministry has initiated the preparation of local climate action plans in 30 metropolitan municipalities” (Ministry of Environment 2018, 12). The statement of the Ministry uncovers the concentration of power in the metropolitan municipalities and it opposes the principle of subsidiarity. Yet, at the time of this research, none of the metropolitan municipalities have prepared climate action plans with the direction of the Ministry. Therefore, the limited role of local governments on climate change in Turkey can be explained by the country’s national climate change politics and its tendency towards centralization.

The central government’s negligence of local governments causes a crucial problem: the lack of capacity, both in terms of human and financial resources. Preparing and implementing action plans is in fact a burden on the budgets of municipalities. Therefore, instead of using their own human resources, the municipalities in Turkey tend to receive consultancy on the action plans as the laws enable them to spend their budget on consultancy (Republic of Turkey 2004, 8912; Republic of Turkey 2005, 9490-1). However, the limited number of consultancy firms that prepare action plans for local governments in Turkey creates a serious problem. As a matter of course, the inventories should be prepared specific to each action. Nonetheless, when read closely, one can observe that the guiding principles and actions are copied and pasted between documents. Although the main mitigation and adaptation policies are generally common, it would not be possible to overcome emerging and exacerbated inequalities unless the policies are constructed with due consideration for each city’s unique problems and socio-economic structure. Such observations suggest that municipalities in Turkey do not consider climate change as a problem of justice. However, it is worth noting that climate change policy is a learning process and the municipalities often tend to revise their documents. For this reason, such problems can be overcome in time with the development of new regulations that empower municipalities in the policy area of climate change.

Action plans and urban climate justice

Municipalities play an important role in combating the effects of climate change. Therefore, the reflection of environmental justice, climate justice and urban climate justice in the action plans developed by municipalities is an indication of whether climate change is recognized as a justice problem. The elements that are indicative of climate change being considered as a justice issue in the action plans include recognition and inclusion of different groups in the policy-making and policy implementation processes, equal distribution of the burdens and benefits of climate change policies to society and direct reference to justice and equality as a principle. In the case of Turkey, the indicative elements vary between the adaptation and mitigation plans. Therefore, I studied the mitigation and action plans separately.

Action plans for climate change mitigation

Fifteen municipalities in Turkey have climate or sustainable action plans and sixteen municipalities have signed the Covenant of Mayors initiated by the European Commission. This is an initiative to implement climate-related objectives of European Union at the local level (Covenant of Mayors, n.d.). Only three municipalities have not signed the Covenant of Mayors, despite aiming to reduce emissions through an action plan. Therefore, there is a tendency to implement climate change policies in Turkey by affiliation with a transnational network. In addition, the municipalities in Turkey tend to implement mitigation policies in order to reduce emissions. Only four of them have adaptation action plans.

The action plans prepared to reduce emissions resemble other action plans submitted to the Covenant of Mayors. Table 1 (see Appendix), which is inspired by the table named “common mitigation measures in climate action plans” in the Evaluation Report of IPCC (2014, 92), demonstrates the mitigation policies of local governments in Turkey. Accordingly, the municipalities use their power and have responsibilities mainly in eight sectors: a) buildings and built environment, b) transportation, c) waste, d) energy supply, e) awareness campaigns and trainings, f) urban land use, g) industry, and h) agriculture animal husbandry and forestry.

In different countries, local governments carry out different kinds of policy tools related to climate change within the framework of their powers and responsibilities. These tools are classified under different categories in the literature. According to the classification by Bulkeley and Kern (2006), there are four main policy tools in local climate change policies, namely self-governing, by provision, by authority and through enabling. The municipalities in Turkey implement climate change policies using all of the four tools. Through self-

governing, they aim to reduce their own emissions with policies such as energy efficient planning in the municipal buildings and replacement of municipal vehicles by electric vehicles. By using the tool of ‘by provision’, municipalities reduce emissions arising from services that are under their control such as transportation and waste management. The third tool ‘by authority’ helps municipalities to implement climate change policies through their traditional form of authorization, i.e. regulatory instruments. Finally, with the awareness campaigns and trainings, they guide citizens, civil society, private sector and other public institutions.

Table 2 (see Appendix) shows the frequency of the words related to climate justice in the mitigation plans of municipalities. As it can be seen from the Table 2, the word ‘justice’ was not used in any of the documents, and other concepts directly related to climate justice, i.e. ‘vulnerability’, ‘equality’, ‘inequality’ and ‘human rights’, are rarely used in the action plans. Only one municipality uses the word ‘equality’ as it is a general principle to guide policies and four municipalities use the word ‘resilient’ to mention the role of local governments in making the city resilient to climate change. Other words were used neither in the context of urban climate justice nor as a guiding principle. However, the words under the subcategories related to climate justice are mentioned at least once in the action plans.

As shown in Table 2, ‘participation’ is the most commonly used word in the mitigation plans of the municipalities in Turkey. All municipalities either held meetings or organized workshops with the participation of stakeholders before preparing their action plans. However, participants of the meetings and workshops came mostly from other public institutions, municipalities, trade associations, universities and civil society organizations. The participation of individual citizens who are not directly affiliated with any institutions, such as women, people with disabilities, low-income families and children, and the participation of members of the municipal council is low. Moreover, in all of the action plans, the sectors and the subject matters discussed for the action plans were determined by the administrators in municipalities and by consultancy firms. For these reasons, although the most commonly used word in the action plans is ‘participation’, it can be concluded that most Turkish municipalities currently do not have inclusive policy-making processes.

While the term ‘poor’ is used ten times in the action plans of four municipalities in total and it is mentioned in the context of urban climate justice in three of them, the municipalities using the word ‘poverty’ do not contextualize it as a guiding principle or an action. The three municipality underline the inequalities exacerbated by climate change but only one out of three takes substantial action against it, aiming to overcome inequalities

resulting from fuel poverty (Gaziantep Metropolitan Municipality 2016). In relation to the words 'poor' and 'poverty', the term 'low-income' is used in the same context by the same municipalities.

The municipalities use the words 'woman', 'child', 'elderly', 'disabled' and 'unimpeded' as targeted groups for raising awareness about climate change or increasing resilience to climate change.

In general, it is clear that the action plans do not mention the concepts of environmental justice, climate justice or urban climate justice and the aim of overcoming injustices resulting from climate change in the action plans is not defined explicitly in the action plans. Only a few of the mitigation plans such as by Gaziantep Metropolitan Municipality (2011), Nilüfer Municipality (2016), Çankaya Municipality (2017) and Antalya Metropolitan Municipality (2014) use the words related to climate justice. It can be argued that, although the action plans of municipalities do not explicitly integrate the idea of climate justice, they aim to include the dimension of procedural justice of urban climate justice through workshops and meetings.

Action plans for adaptation to climate change

There are only four municipalities in Turkey with both mitigation and adaptation action plans (Bursa Metropolitan Municipality 2017; İstanbul Metropolitan Municipality 2018; Kadıköy Municipality 2018; Karşıyaka Municipality 2018). These municipalities are focusing mostly on the urban heat island effect, public health, biodiversity, green zones and raising resilience in energy, waste management, transportation, infrastructure, buildings and industry in their adaptation plans. In addition, two of them aim to raise institutional capacity for an integrated action plan expanding all the departments of the municipality.

Although there is no direct reference to environmental justice and climate justice in the adaptation plans of the municipalities, as can be seen in Table 3 (see Appendix), the number of words related to urban climate justice is higher than the numbers in the mitigation plans. Furthermore, the relationship between climate change and its unequal effects on society has been established directly and it is clearly accepted that the consequences of climate change have not been affecting every individual in society at the same level. It is a result of the fact that the aim of the action plans for adaptation to climate change is making cities resilient to climate change. For example, the action plan of Bursa Metropolitan Municipality remarks that there is a need for agreements that try to overcome environmental injustices (2017, 70).

Amongst the terms directly related to climate justice, ‘resilience’ and ‘vulnerability’ are used at least once by all of these four municipalities. Except for the action plan of Karşıyaka Municipality (2018), the main strategy of the three municipalities is to make the cities resilient. For instance, the motto of Bursa Metropolitan Municipality is “to be a livable, healthy and resilient city” (2017: 105). However, the only municipality that inserts this main strategy into its actions by mentioning it explicitly is the Istanbul Metropolitan Municipality (2018).

Although Istanbul Metropolitan Municipality (2018) is also the one that uses the term ‘vulnerability’ the most in its action plan (65 times), the context in which the term is used in the document doesn’t differ from the other municipalities. Therefore, The Istanbul Metropolitan Municipality’s action plan includes more detailed actions and policy areas and sectors compared to other municipalities. All four municipalities highlight that climate change causes vulnerabilities in society, and they all aim to reduce them.

For the purposes of this paper, it is important to consider the definition of vulnerable groups in the action plans. All municipalities define children, elderly people and patients as vulnerable groups, and Bursa Metropolitan Municipality and Kadıköy Municipality define the poor as vulnerable (2018). Karşıyaka Municipality (2018) and Istanbul Metropolitan Municipality (2018) also include pregnant women in their classification. The only municipality categorizing women and people with disabilities as a vulnerable group is the Karşıyaka Municipality (2018). However, this municipality does not envision climate change-related actions that are directly related to women. Therefore, the action plans of the municipalities remain gender-blind and they do not take into account the effects of climate change on women.

Many local and subnational governments in the United States, Europe and Latin America directly mention environmental justice and climate justice in their action plans, including Minneapolis (Minneapolis City Coordinator 2013), New York (City of New York 2015), Athens (City of Athens 2017) and Mexico City (Mexico City 2014). For example, the action plan prepared by the government of New York entitled “One New York: The Plan for a Strong and Just City” (City of New York 2015) emphasizes equality and justice stating that environment and justice cannot be considered separately (City of New York 2015, 164). Athens has plans to combat inequalities exacerbated by climate change, such as providing employment and housing for vulnerable groups (City of Athens 2017). In the case of Turkey, according to their plans for adaptation to climate change, the municipalities do seem to consider the consequences of climate change as an issue of justice. However, they do not explicitly mention climate justice in these action plans. The attempts to reduce vulnerabilities

is a common feature of all adaptation plans in the case of Turkey. However, it will be challenging to introduce the concept of urban climate justice in the near future, given the municipalities' pre-established subject matters and exclusionary workshops.

Conclusion

Urban climate justice and discussions on inequalities caused by climate change at the local level require a multidimensional analysis. Beyond the emphasis on distributive justice, urban climate justice has been elaborated from different perspectives in policy debates and literature to reflect the various effects of climate change in cities. It must be considered at the local level how to distribute the burdens and benefits of climate change policies equally, how the decision-making processes are structured, and who is involved and recognized in these processes.

The most prominent actor of climate change policies in urban areas is the local government. The local governments are crucial actors in the global climate action, as they implement decisions made in international negotiations. In order to overcome climate injustices, preparation and implementation processes are important in taking substantial action against climate change. It is necessary to determine the capacities and needs of vulnerable groups in climate actions and include their experiences and opinions in the development and implementation of such actions. Therefore, action plans and policies initiated by local governments that include these aspects can pave the way for climate-just cities.

The case of Turkey shows that, although the municipalities do not explicitly consider climate change as a social justice issue, their action plans for mitigation and adaptation to climate change differ in terms of emphasis on inequalities and vulnerabilities exacerbated by climate change. As for the mitigation plans, although a few municipalities mention the effects of climate change on different income groups and sectors, they are not translated into practical actions.

Adaptation to climate change requires consideration of vulnerabilities to climate change and the evaluation of climate-related injustices in the adaptation plans. This tendency is seen in the action plans for adaptation to climate change of the municipalities in Turkey: they all make vulnerability assessments by defining vulnerable groups and plan to take action to build up their resilience. However, there is no direct reference to overcome injustices exacerbated by climate change.

Lastly, climate action requires distinct policies depending on the social, economic and geographic structure of the cities. For this reason, local action is crucial for overcoming

climate injustices. However, given the legal constraints and scarce human and financial resources, Turkish municipalities tend to outsource the preparation of the action plans to consultancy firms, which are very few in number in Turkey. As a result, the action plans of municipalities are almost identical to each other, and even certain numerical targets are the same between municipalities with different socio-economic structures, geographical characteristics and populations. However, climate change policy is a gradual learning process and there is a tendency among municipalities to renew their action plans. Through raising awareness and increasing the power and responsibilities of local governments delegated by the central government, it can be predicted that the action plans by Turkish municipalities will be developed with due consideration for each city's unique problems and socio-economic structures.

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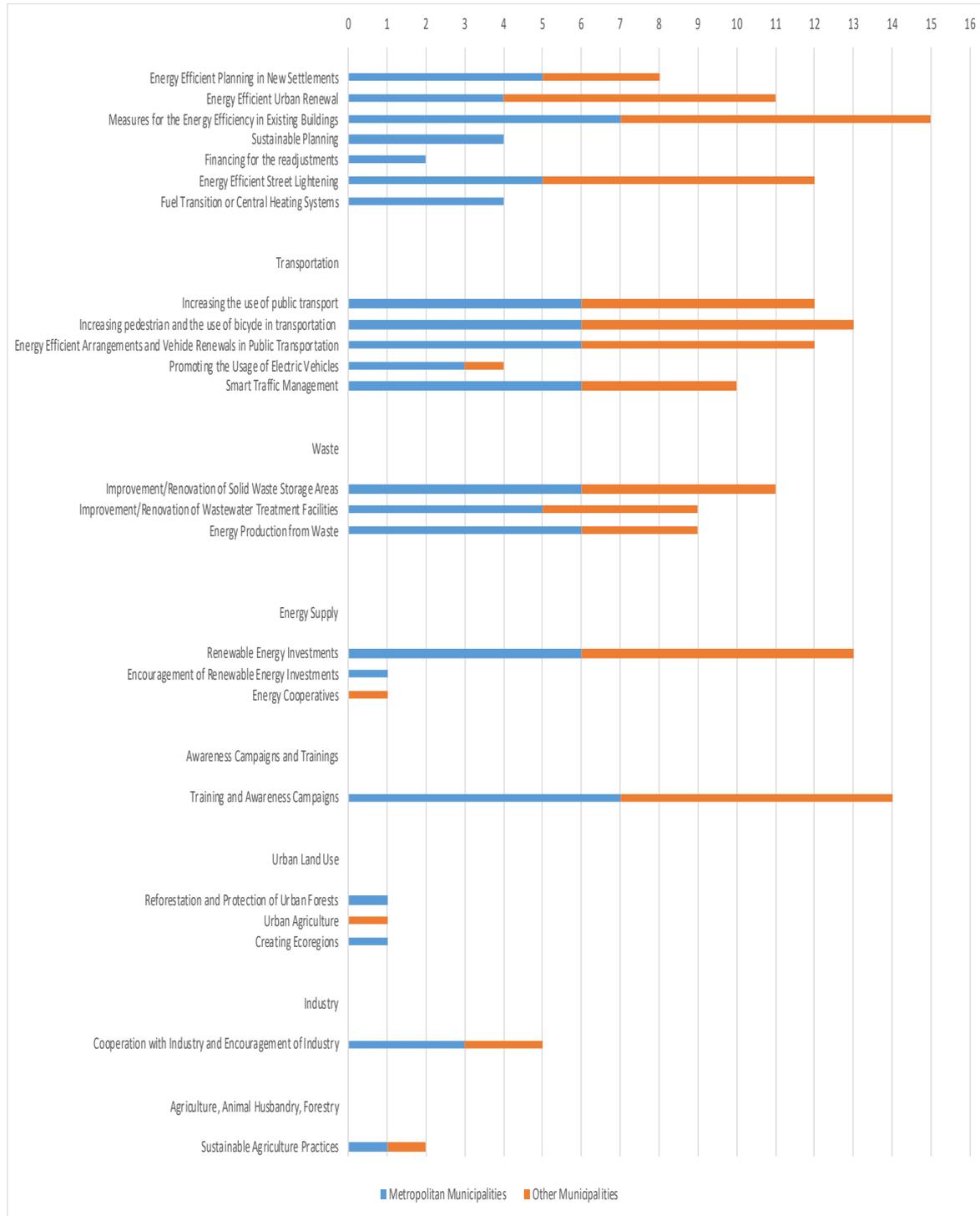
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Appendix

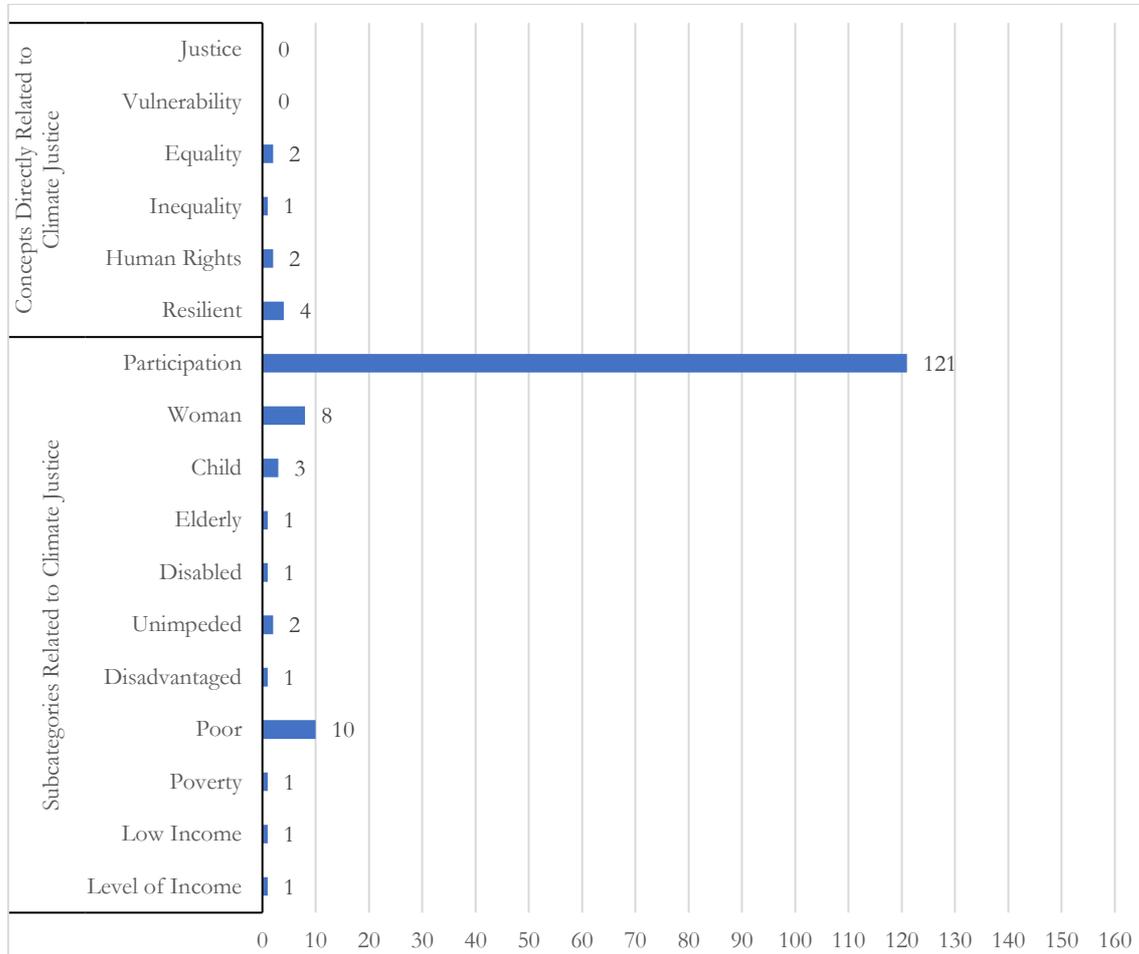
Table 1: Mitigation policies of local governments in Turkey



This table was prepared using the action plans of Antalya Metropolitan Municipality (2014), Bornova Municipality (2013), Çankaya Municipality (2017), İzmir Metropolitan Municipality (2016), Kahramanmaraş Metropolitan Municipality (2017), Maltepe Municipality (2016),

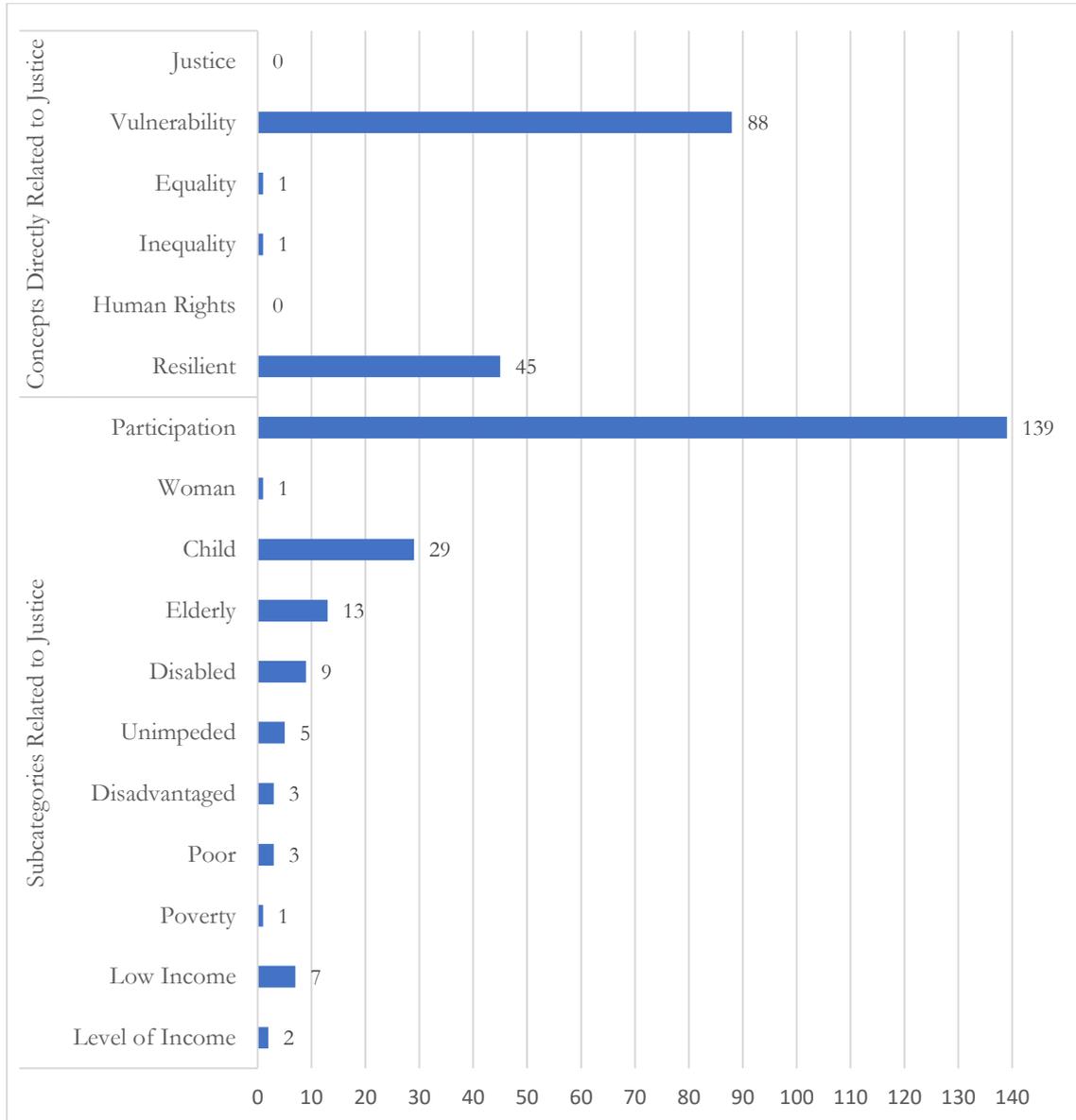
Muğla Metropolitan Municipality (2013), Nilüfer Municipality (2016), Seferihisar Municipality (2013), Tepebaşı Municipality (2014).

Table 2: The frequency of the words related to climate justice in the mitigation plans of municipalities.



This table was prepared using the action plans of Antalya Metropolitan Municipality (2014), Bornova Municipality (2013) Çankaya Municipality (2017), İzmir Metropolitan Municipality (2016), Kahramanmaraş Metropolitan Municipality (2017), Maltepe Municipality (2016), Muğla Metropolitan Municipality (2013), Nilüfer Municipality (2016), Seferihisar Municipality (2013), Tepebaşı Municipality (2014).

Table 3: The frequency of the words related to climate justice in the adaptation plans of municipalities.



This table was prepared using the action plans of Bursa Metropolitan Municipality (2017), Kadıköy Municipality (2018), Karşıyaka Municipality (2018), İstanbul Metropolitan Municipality (2018).