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Learning From the Crisis: Multi-layered Resilience Against Migration, Pandemic and Climate Crisis

Krizden ders çıkarmak: Göç, Pandemi ve İklim Değişikliği Karşısında Çok Katmanlı Rezilyans Farkındalığı

Çopuroğlu Özge[1]

Öz

Bu çalışma göç, son zamanlarda pandemi ve iklim krizi gibi çok katmanlı şoklar karşısında farklı disiplinler tarafından konu edilen "çok katmanlı esneklik" kavramının genel çerçevesine ilişkin bir derleme araştırmasını içermektedir. Çalışmanın ilk bölümünde literatürde ön plana çıkmış olan araştırmalar üzerinden kavrama dair farklı yaklaşımları, ilişkili diğer kavramları ve rezilyansın farklı disiplinlere konu ediliş boyutunu ele almaya çalışacağız. İkinci bölümde kavramın siyasal ve sosyal bilimlere konu ediliş süreci ele alınacaktır. Son bölümde ise toplumsal açıdan rezilyansın, çok aktörlü dünya düzeninde artırılmasını sağlayacak farkındalık noktalarını tartışmaya açmaya çalışacağız.

Çalışmanın sonuç bölümünde ise kavramın toplumsal boyutta henüz pratik olarak entegre edilememiş bir kavram olduğunun eleştirisi yapılmıştır. Özellikle daha önceki dönemlerde planlama disiplinindeki klasik yaklaşımların, küresel ve yerel ölçekte karşılaştığı toplumsal boyutu yeterince dikkate almadığı; dolayısıyla yöntemsel açıdan yetersiz kaldığı noktalarda, sosyal bilimlerin planlamaya kaynaklık etmesinin yerinde bir adım olacağı düşünülmektedir. Bu noktada çalışma pandemi sürecinden edinilen derslerin göç ve iklim kriziyle baş etmede önemli fırsatlar sunduğuna vurgu yaparak, davranış ve düşünce alışkanlıklarımızda yapacağımız pratik değişikliklerle ve uluslararası işbirliğinin artmasıyla kırılganlıklarımızdan kurtulup daha dirençli ve esnek toplumlar ve şehirler yaratabileceğimiz inancını savunmaktadır.

Anahtar kelimeler: Göç, Pandemi, İklim Krizi, Toplumsal Kırılganlıklar, Çok Katmanlı Esneklik.

ABSTRACT

This article includes review research on the general framework of the concept of "multi-layered resilience", which has recently been the subject of different disciplines in the face of multi-layered shocks such as migration, pandemic and climate crisis. In the first part of the article, we will try to address different approaches to the concept, other related concepts and the extent to which resilience is the subject of different disciplines through the research that has come to the fore in the literature. In the second part, the process of the concept being subjected to political and social sciences will be discussed. In the last part, we will try to discuss the points of awareness that will increase social resilience in a multi-actor world order.

In the conclusion, it is criticized that the concept has not yet been practically integrated in the social dimension. It is thought that it would be an appropriate step for social sciences to be a resource for planning, especially at points where the classical approaches in the planning discipline in previous periods did not sufficiently consider the social dimension it encountered on a global and local scale; therefore, methodologically insufficient. At this point, the article emphasizes that the lessons taken from the pandemic process offer important opportunities in coping with the migration and climate crisis, and advocates the belief that we can get rid of our vulnerabilities and create more resilient and resilient societies and cities with practical changes in our behaviors and habits of thought and increased international cooperation.

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INTRODUCTION:

While international mass migration and the Syrian refugee crisis have radically changed the demographic, social, economic, cultural and economic structures not only in our country but all over the world, the impending climate crisis and the threat of global warming have also brought about the need to reconsider issues such as infrastructure, service delivery, planning and raising social awareness in the multi-actor system, both national roof administrations and municipalities at the local level. However, when the traditional tools and ways of thinking that we have used to date to plan the space we live in in a more livable way are insufficient in the changing structure of the multi-actor world, the resources we have at our disposal in the face of all these problems are limited, so we also need the knowledge, skills, abilities, and implementation tools to produce and manage more innovative solutions.

Despite the fact that cities are exposed to different levels of risk and that some risks are the result of a historical background, even though they seem to belong to the present, recent research shows that risks are measurable, partially predictable and detectable at some level. At this point, with an awareness based on the resilience model and the conscious implementation of long-term development, any settlement and society can become more resilient, more resilient to the shocks and stresses it is exposed to. This point is not only the domain of urban planning, but has also become a research topic of importance for other disciplines such as political science and sociology. A city is a scene of social networks and social roles, just as the word “polis” was in Ancient Greece. It refers not only to a new economic organization and a changed physical environment, but also to a new social order that affects human behavior and thoughts (Sezal, 1992, p. 23). Therefore, the pandemic process that we are going through, especially the mass migration movement that has recently affected our country after the 2011 Syrian civil war, has affected the city not only in the urban planning and urban planning orbit, but also in the social dimension and has irreversibly affected it. In addition to all these processes, changes and deterioration in the balance of our ecosystem are increasing more than ever. Population growth and the rapid consumption of natural resources, which are the main reasons for this, have exposed ecosystems, especially in urban areas, to uncertain processes. This has triggered the imminent climate crisis, and our world is in danger of becoming more fragile than ever before in the face of multi-layered shocks. While the migration and pandemic process has encouraged local governments to produce social aid and emergency solutions, the already limited natural resource management has demanded the dynamic involvement of all layers in urban areas that host population density. For this reason, it has become necessary to focus more than ever on the relationship between people, environment, and governance at the urban scale and to intervene to ensure human welfare for future generations. Especially since the 2000s, the idea of “sustainability” has taken its place in urban research. With this idea, solutions that will make cities more livable and ensure continuity have started to be sought and new development policies that can cope with chronic stresses and acute shocks in urban areas have started to be produced. In this direction, the necessity of interdisciplinary cooperation and the consideration of social analysis in political and social sciences by other disciplines has emerged. How to ensure social adaptation to changes has transcended the social sciences and has become a fundamental problematic of all disciplines.

It is accepted that the climate system has changed with the Industrial Revolution for anthropological reasons. Studies have predicted that due to climate change, sea level rise, decrease in natural resources, destruction of clean water resources, decrease in biological diversity, and destruction of settlement areas are predicted. Therefore, as a result of rapidly developing and changing dynamics,

the ground was prepared for the emergence of the society model theorized by Beck as "risk society"(Beck & Adam, 2000, pp. 11–29). As the process of transition from industrial society to risk society, the sudden progress and developments of the industrial society have led to misapplications to meet instant needs and have been the beginning of unexperienced risks. The changes that have occurred have led to social tensions to a great extent and have created different problems in the social and political dimension.

1.Multi-layered resilience in the face of multi-layered shocks

According to the Intergovernmental Panel on Climate Change (IPCC), the land masses of the Maldives and many island states in the Pacific will be under water (IPCC Report, 2022). In addition, the Stern Review Report states that due to climate change, 150-200 million people will be forced to leave their homes by 2050, resulting in international migration, violations of basic human rights, conflict and threats to international peace and security (Stern Review Report, 2022). While most people are currently displaced within their own countries, international migration has started from island states that are under the threat of extinction as a result of rising sea levels. On the other hand, an average global temperature increase of more than 1.5 or 2°C is projected to create risks for which the global economy is not yet prepared (Ekşi, 2016, pp. 10–11). Moreover, if this problem that we are facing is ignored for another year or two, the calculations become more daunting. In short, while our attention is primarily on defeating the coronavirus and fixing the economy, saving lives and livelihoods, it is crucial that we make better economic and environmental resilience part of our future recovery plans now. Recently, researchers working on the superposition of threats such as climate change, migration and pandemics have introduced the concept of multilayered resilience in the face of multilayered shocks (Brigit Obrist et al., 2010, p. 284). Just a few months before the current pandemic crisis, the debate on climate change and its socioeconomic impacts, as well as common actions to be taken, had actually gained great momentum. With the pandemic crisis suddenly on the agenda, climate change and sustainability issues have become even more important to mitigate the effects of the pandemic. Because while climate action defines the next decade as critical, mindful measures such as climate-resilient infrastructure investments and the transition to a lower-carbon future can make cities more livable for us while increasing economic and environmental resilience. While the overlap of all these issues may push us into a pessimistic sense of blockage, the coronavirus crisis and mass migration movements contain important lessons that can help us address new possible disaster scenarios that seem likely in the future, especially climate change, if we manage to learn from them and center our recovery plans on building better environmental resilience.

One of the concepts that has been on the agenda of urban studies but also social and political debates in recent years is the concept of "resilience". This concept was first discussed at the World Summit on Sustainable Development held in Johannesburg in 2002 in the context of its relationship with global climate change(United Nations, 2002). With the discussions at this summit, it was seen that the concepts of sustainability and resilience similarly include the aim of taking measures and being prepared for anticipated risks. The concepts of sustainability and resilience were used in conjunction with goals related to the use and management of resources. Resilience is on the agenda of political science as a vital system feature, as it aims to make policy by considering natural and social sciences in their mutual relations and to establish interdisciplinary communicative links. As defined Tierney, Resilience is a property of physical and social systems that enables them to reduce the probability of disaster-induced loss of functionality, respond appropriately when damage and disruption occur, and recover in a timely manner. Resilience can be further conceptualized as consisting of four dimensions: robustness, redundancy, resourcefulness, and rapidity. It can be further seen as consisting of technical, organizational, social, and economic elements (Tierney, 2003, pp.1–8).

The discussions on multilayered resilience, which have been put forward by an interdisciplinary approach that focuses not only on political science but also on sociology and urban planning, aim to draw attention to increasing urban and social resilience by raising the awareness of public and civil society in the world we live in in the face of multilayered shocks. Along with these developments, several concepts have been the subject of studies and started to be used as a basis to guide practices. One of these prominent concepts is the concept of "resilience", which has been encountered in many studies (Folke, 2006)(Adger, 2006)(Pelling, 2003). The word resilience is a scientific word that was first introduced into English by Frances Bacon in the 17th century and describes the ability of an object to return to its original state after some forms of pressure. Today, it is considered in relation to the impact of natural or man-made hazards on geographical or spatial distributions such as health, infrastructure, social systems, environmental and ecological systems, and human settlements (Lewis, 2020, p.3).

The concept, which has been on the agenda since the 70s in the context of environmental sciences, has developed in the process and has become the focus of interdisciplinary interest today. The concept of resilience, which has been researched by different disciplines, is among the dominant concepts of recent times, especially in the context of migration and climate change. On the other hand, many studies on the concept emphasize the importance of its social dimension and evaluate its relational links with other dimensions(Adger, 2000)(Tierney, 2003)(Bruneau et al., 2003)(Gunderson, 2000)(Brigit Obrist et al., 2010)(Keck & Sakdapolrak, 2013)(Daniel P. Aldrich & Meyer, 2015)(Gibberd, 2017).

While technological and economic developments are advancing, our main problem is how to deal with the problems created by this progress. In fact, the process of modernization itself becomes "subject and problem" (Beck, 2019, p. 22) .The emerging risks are temporally and spatially far-reaching and affect all life forms. Moreover, since these risks are new, they have unknown and unpredictable consequences. Risks are therefore incalculable and unpreventable. These characteristics both make it difficult to envision the future and make the expertise needed to address risks impossible. Therefore, in the risk society process, what should not be done can be determined rather than what can be done. Moreover, in the risk society, "there is also the danger of the state of emergency becoming the normal state" (Beck, 2019, p. 29). According to Beck, the risk society has emerged with the unconscious and uncontrolled transformation of the changes and advances in the industrial society into practice. In other words, through modernization, industrial society itself has transformed into a risk society by crossing certain ecological thresholds (Beck & Adam, 2000, pp. 14–16). The ecological thresholds mentioned here are the thresholds that change the balance of natural life, such as the unconscious use and destruction of natural areas with the increase in production, technological applications in industrial areas and the damage to some species because of waste. Beck also brings to the agenda that nature should not be considered independent from human beings in the context of risk society. He states that society and nature should be evaluated and managed in a mutual relationship, as ecological changes caused by human uses affect the cycle in nature and natural risks (Beck, 2019, p. 122).

Therefore, according to Beck, the destruction of nature can turn into different categories of threats for people on a global scale. This indicates that all social subsystems should be considered together with nature. Environmental problems are not problems of the world around us, but - in terms of their origins and consequences - outright social problems; they are problems of human beings, of their history, their living conditions, their relations with the world and reality, their economic, cultural and political situation (Ibid. p.123). Giddens states that as a result of modernity, the intensity, scope and sources of risks have increased; the current society's outlook on the future is pessimistic. The possibility of nuclear war, ecological destruction, unstoppable population explosion, the collapse of global economic exchange and other latent global catastrophes create a discouraging horizon of danger for everyone

(Giddens, 2016, p. 124). The transformation of nature through human knowledge, technological advances and increased production increase, the diversity of ecological hazards and may render expertise in predicting global risks inadequate. However, the risk predictions necessary to produce these forms of intervention become more impossible as ecological destruction increases and social interactions become globalized (Ibid. pp.166-167). In addition to the technical dimension of the issue, which focuses on the infrastructural strengthening of municipalities, the social dimension is also important for building resilience. Because society's attitude towards global changes and risks is decisive in managing these processes and the social dimension of the concept of resilience is of critical importance. In this respect, holistic policies are tried to be produced with the concept; new approaches are sought not only on how to cope with risks and instant disasters, but also on how to prevent them.

2.Urban and social resilience and resilience model

Adger explains resilience in the context of environment-society relations by linking it to the concepts of "vulnerability" and "criticality". He explains social vulnerability as "the exposure of communities and individuals to stress as a result of the effects of environmental change" .He states that the phenomenon called stress is "situations that require adaptation to the changing physical environment, disrupt the livelihoods of individuals/communities and lead to loss of security". It is stated that social resilience can be measured at the societal level, not at the individual level, and is therefore related to the social capital of societies. The social capital mentioned here includes the integrative features of social organizations such as trust norms and communication networks (Adger, 2000, pp. 348–350). According to Adger, the direct dependence of communities on ecosystems affects social resilience. Ecosystems determine the ability of communities to cope with food security shocks and other risks. Resilience can be enhanced by certain characteristics as it is shaken by large shifts in market and environmental systems.

Diversity in ecosystems is important in this context, as well as the sensitivity of institutional systems governing social systems. Therefore, resilience in both ecological and social contexts is an important phenomenon for sustainable development and resource utilization. This phenomenon is related to economic, demographic and institutional variables at spatial and temporal scales (*Stern Review Report:The Economics of Climate Change*, 2022). On the other hand, the commodification of the labor force that occurs with the increase in production, the dissolution of the family structure and individualization lead to the separation of social relations from the traditional structure. The idea that interactions and interventions across scales make risk assessments of the social structure more difficult, and therefore the road map for what to do becomes increasingly complex, is supported (Giddens, 2016, p. 174). In this direction, a situation emerges in which the risks that may be encountered in the future cannot be foreseen and nature is constantly destroyed by the habit of consumption.

Carpenter et al. state that resilience, defined as the best way to cope with unexpected situations, depends on "socially preferred ecosystem states, social resilience to change, and the degree of adaptability to unexpected changes in ecosystem services". Adaptive capacity in social systems is closely related to "learning" (Carpenter et al., 2001, p. 779). If the City Councils, which have recently been working hard to be established, are planned and functionalized to serve this purpose, it is thought that urban resistance will be transformed in a more coherent and durable way with increased awareness from the bottom up. In addition to this, it is thought that it is important to examine the concept of Active Citizenship politically and socially and to make it functional. Naturally, this is a controversial point in countries where the participation of civil society is relative, but it is expected that such initiatives will not be blocked since issues such as migration, pandemic and climate change have a supra-political priority. The active citizenship approach is expected to support the assimilation

of the political culture of the society by all layers of the society, as well as to suspend the fragilities within the social structure to some extent, creating an important opportunity for coexistence and social cohesion.

Active citizenship is embodied in the EUCA's inclusive definition as follows: “Active citizenship means people getting involved in their communities and democracy at all levels from local to national and global”. Individually, an active citizen promotes the quality of life in a community through both political and non-political process developing a combination of knowledge, skills, values and motivation to work to make a difference in the society (EUCA, 2016). The concept of active citizenship, just like the concept of resilience, was brought to the agenda of our country by the Reslog project, financed by the Swedish Salar fund, after the 2011 Syrian migration. The Reslog project, which works in partnership with local governments to minimize social vulnerabilities, focuses on issues such as social cohesion and the possibility of living together, and actively works to raise awareness at the local level(Reslog, 2021, p. 16).

In the literature, some social characteristics, particularly poverty, is cited as a cause of vulnerability. The inability to access resources, which is called social exclusion, is emphasized as one of the main problems especially in urban areas, especially in centers that receive intensive migration (Çakır, 2002, p. 84). At this point, it is necessary to support these groups with certain policies within the scope of social inclusion. The fact that all segments of the society have access to basic needs is a situation that will contribute to resilience. Therefore, there is a need for more inclusive and new practices rather than the practices that have been in place so far to reduce social vulnerabilities. New steps should be taken to integrate vulnerable groups into society and turn social risks into opportunities. It is known that not everyone in society, even within the same household, can be resilient at the same level. Accordingly, some groups within society may be defined as more vulnerable for different reasons. These reasons may be related to economic status, demographic structure, health or education status, ethnicity, gender, spatial characteristics, etc. At this point, new perspectives should be developed with a forward-looking and holistic prevention goal instead of temporary, instant solutions.

Folke, conducted a research titled “Resilience: The Emergence of a Perspective for Social-Ecological Systems Analyses” in this perspective. In this research, resilience is measured not by “the ability of the system to maintain its function by absorbing shocks” but by the processes of “transformation, reorganization and development”, that is, by the ability to “adapt”, unlike the way it is focused on in many studies (Folke, 2006, p. 253). Resilience is associated with the analysis of socio-ecological systems. It is emphasized that resilient flexible socio-ecological systems have the potential to create an opportunity for innovation, change and development in the event of upheaval, that is, they require the ability to “learn to manage with change” (Folke, 2006, p. 255). At this point, it should not be forgotten that social dynamics in resilience will emerge with experience. In other words, the possibility that risky groups, which are defined as the most vulnerable parts of society, may perhaps give the most resilient flexible responses to an event should be taken into consideration. Therefore, the grouping to be made here is based on the literature; each vulnerability should be considered as characteristics that can actually turn into opportunities and have advantages in themselves.

While some of the research on social resilience focuses on general chronic stresses, other research focuses on more defined stresses at different scales. These can be grouped as studies focusing on natural hazards and disasters such as floods, tsunamis and volcanic eruptions; 'natural resource management, resource scarcity and environmental variability' such as water scarcity and climate change; and “social change and development” such as migration, infrastructural development and economic crises". All these studies have used societal resilience as a guiding concept and interpreted

it based on the conceptual development of resilience rather than a specialized understanding of the societal dimension (Keck & Sakdapolrak, 2013, p. 8). Climate change is the main source of many risks that occur at different layers on a global scale. Especially in urban areas where dense populations live together, there are changes that make its impact felt more. These changes have direct or indirect effects on many points such as food, income, migration, health, and lifestyle. Natural events of unprecedented severity and high temperatures caused by climate change pose a risk to human life. In addition to direct losses caused by extreme changes in weather events, indirect effects such as epidemics, loss of species, air and water pollution, and increased risk of heart attacks can also be listed. The first similarity between climate risk, migration and pandemics is that all three represent physical shocks that have socio-economic impacts. In contrast, financial shocks (market crashes, currency depreciation, etc.) emerge from within the financial system and can usually be corrected by rebuilding confidence in the system. So our common experience in both the public and private sectors in recent times has been more centered around financial shocks. On the other hand, physical shocks such as the climate crisis and pandemics can only be resolved by understanding, addressing and correcting the underlying physical causes. Therefore, the current pandemic allows us to understand in advance what shocks may occur simultaneously with the climate crisis. According to many studies, climate change also has an impact on migration. For example, rising temperatures create favorable conditions for the spread of some infectious diseases such as malaria, while disappearing habitats may force various animal species to migrate, increasing the likelihood of pathogens spreading (Mordecai et al., 2022, pp. 1–5). However, factors that reduce environmental risks can also help reduce the risk of pandemics. For example, optimizing our consumption to reduce our demands on nature, shortening and localizing supply chains, replacing animal protein with plant protein, and reducing air pollution.

In order to ensure multiple resilience in the face of multiple shocks, especially mass migration, and to support quality coexistence for locals and migrants, municipalities need to continue their role as service providers, while at the same time creating an enabling environment to produce joint actions with other stakeholders in the city through their approaches and services, and to create the ground for stakeholders to develop and implement actions, to be a catalyst, and to make them feasible (Reslog, 2021, p. 14). The adaptation model required for multiple resilience can only be produced in such an enabling environment.

Second, addressing migration and climate risk requires essentially the same shift: From a focus on short-term performance to a focus on long-term resilience. The coronavirus pandemic and the current crisis show how failure to build resilience can have serious consequences. In conclusion, for climate change, as with mass migration, the costs of a global crisis greatly exceed the costs of preventing it. A global public health crisis, which will be compounded by a global public health crisis, presents discrete, directly recognizable dangers that we must address in order to survive and that we will soon face. Dense populations in urban areas are at high risk of the economic and social impacts of climate change as a result of the destruction of nature and overbuilding. Moreover, the disruptions in agricultural production caused by climate change continue to attract the rural population to urban areas and the population density in urban areas is constantly increasing. In this context, if the negative impacts that occur in this context cannot be eliminated, there may be a decrease in the quality of life - especially for the poor - and there may be negative consequences in many aspects such as work productivity or psychological state. “Climate change worldwide will trigger chronic poverty of disadvantaged groups and create inequality of opportunity” (*İstanbul İklim Değişikliği Eylem Planı*, 2022, p. 18). Risks arising from climate change, on the other hand, manifest themselves gradually over time, because they consist of hazards that are gradual and accumulate over time. Therefore we often measure the impacts of migration in weeks, months and years, while climate change is measured in decades and centuries. This means that if we face a global climate crisis, the impacts could be much longer and more

devastating than we are currently experiencing. On the other hand, food production and supply processes are also affected by droughts or extreme rainfall caused by climate change. These changes not only affect the quantity and quality of food produced, but also complicate the transfer and distribution of products. This situation leads to an increase in food prices in the economic dimension, limiting people's adequate and healthy access to basic foods. Therefore, it may cause food security problems in social terms. It can also lead to economic difficulties for producers and cause livelihood difficulties; these concerns make it difficult for certain groups in society to participate and integrate into social life. There may also be an increase in migration due to the risk of insecurity.

Departing from all these determinations, in the context of social impacts, it is necessary to be prepared for the risks and damages caused by climate change in the management dimension in terms of infrastructure, health services, protection and social assistance. At this point, it is necessary to anticipate the situations that may arise and develop mitigation, prevention or combat plans. In financial terms, good planning and management of these processes is critical for quality of life and welfare. As can be seen, the multifaceted impacts of climate change involve social losses, risks and challenges. Therefore, climate change and its impacts have an important share in the increase in social vulnerabilities. Settlements with different natural structures should also be taken into consideration as areas that need to be evaluated on the relationship between space and social vulnerability. In particular, certain natural disasters caused by climate change may pose extra risks for mountainous areas or coastal settlements. Because the problems caused by these changes may make some settlements more disadvantageous due to their natural structure. “Climate change has negative impacts on the ecosystem, population, economy, built environment and infrastructure of coastal settlements” (Gökçe et al., 2018, p. 119). Natural risks and disasters such as sea level rise, increased floods and droughts, and stronger storm events affect settlements with certain spatial characteristics due to natural structure more and may make the social structure here more vulnerable.

As a first measure to reduce vulnerability and increase social and urban resilience, the current temporary arrangements through digital solutions can continue after the lockdown ends, reducing transportation demand and associated emissions. Secondly, supply chains can go back to their home countries to reduce Scope 3 emissions that they do not emit directly or that are not for the production of the energy they purchase but are in the value chain. In addition, people may start to find it more important to rely on scientific expertise to address systemic problems. There may also be a greater demand for governments to take a preventive and coordinating role in tackling such risks, although this is not certain to happen. But with all this, some sacrifices may also have to be made to achieve this transformation. For example, low prices for high carbon emitters may increase their use and delay energy transitions. Moreover, given compelling economic needs and immediate shocks, governments and people may find it difficult to include climate as a priority in their recovery. In addition, investors may defer capital for lower-carbon solutions due to reduced wealth. Therefore, the need for global cooperation may become more visible and more universally embraced, as international cooperation and binding agreements are expected to act as incentives and unifiers.

3. What steps can be taken at national level to increase resilience?

To reduce our demand on the environment, we need to create mindset and behavioral shifts (such as working from home) that are likely to continue after this crisis and make them sustainable. In this context, all actors play a critical role in tackling the climate crisis. Individuals, companies, governments, and civil society should use this moment to raise awareness of the impacts of the climate crisis that will create major and long-lasting disruptions. This includes the realization that physical shocks can have large and non-linear effects on economic systems and can therefore be extremely costly. In

addition, low interest rates could accelerate the transition to new sustainable and resilient infrastructures that will lead to job creation in the near term.

At the national level, it is first necessary to develop the ability to model climate risk and assess the economic impacts we will face with the climate crisis. As stated in McKinsey report, this makes it more feasible to design recovery programs, update historical models used for infrastructure planning, and use climate stress testing in financing programs. Secondly, some of the vast resources used for economic recovery need to be allocated to building resilience to climate change and mitigating its impacts. McKinsey report says that it includes investments in renewable energy infrastructure and decarbonizing heavy industries. Such investments are envisioned to both reduce risks and create new resources for economic growth. Third, there is a need to re-evaluate existing support programs that are contributing to the acceleration of climate change. Finally, strengthening national and international cohesion and cooperation on sustainability in the new multi-actor world order is of particular importance(Brodie Boland et al., 2021).

In addition, the private sector also has an important role to play in the fight against multi-layered shocks. First, companies need to seize this period of change and stop using carbon-intensive resources. Second, a systemic and cyclical approach needs to be adopted to build resilience. This means building the ability to better understand the quality and quantity of corporate vulnerabilities to different scenarios, especially unexpected physical events. It is not hard to imagine a pandemic occurring simultaneously with other events such as floods or fires in some regions. It is therefore important to model and prepare for situations where multiple hazards will converge. Likewise, public institutions need to give more consideration to the concept of resilience.

As companies try new things out of necessity, they are creating new opportunities to make their operations more resilient and more sustainable. This could include shorter supply chains, more energy-efficient manufacturing, using video conferencing instead of business travel, and increased digitalization in sales and marketing. Some of these practices will be feasible and economical to continue after the pandemic and can also become important components of company-level sustainability transformation.

And finally, civil society needs to raise awareness and provide the cultural education necessary for transformation. While S.M.Lipset emphasizes economic development, urbanization, education and institutionalization as prerequisites for political development, he places special emphasis on the internalization of political culture by all layers of society and its institutionalization independent of individuals in order to internalize certain values in a society(Lipset, 1986, p. 95). Social institutions are also identified as one of the key actors in building resilience, as they shape resource allocation and use and access to resources at the household level (Brigit Obrist et al., 2010, p. 283). Therefore, the capacity and organizational capability required for social resilience can be built through social capital and learning processes.

The dissolution of the social structure with globalization and individualization leads to a diversification and increase in social vulnerabilities. Consequently, disadvantaged groups of society become more vulnerable, leading to a decrease in social resilience. The complexity arises from the contradiction between the effects of global changes on the social structure and the qualities required for building resilience. The initiative of civil society and raising awareness will help to increase urban resilience. At this point, it is normal for countries to have different political cultures and levels of political participation, but it is also possible to develop a supra-political awareness and cooperation in the face of urgent problems.

CONCLUSION:

Changes and transformations fed by the globalization process come to the agenda with various concepts and are the subject of research by different disciplines. There are intensive studies shaped by these concepts, especially as they have gained a place in basic areas such as climate change, disaster management and economic crises. The concept of "resilience" has recently been analyzed by many disciplines.

In this study, in the line between political science and planning, the concept of resilience, which is on the agenda for both disciplines and needs to be understood, is discussed. In this context, it is aimed to open up for discussion a perspective on how the implementation dimension of resilience in cities, where new perspectives are developed with changing trends, replaces the awareness of working in relation to disaster management.

As stated before, the inadequacy of addressing shocks such as migration, pandemic and climate crisis independently of each other has been demonstrated, and it has been tried to reveal that the lessons that can be learned from the pandemic should be taken as an “opportunity” in terms of increasing resilience in the face of possible future urban problems, and that initiatives should be taken both at the national roof and at the level of local governments. Even if the concept of resilience has a complex structure and carries an uncertainty about the general framework, it is seen that its social dimension is critical and that it should be built as a model of development and continuity. It has been underlined that the cooperation of national framework policies, private sector and civil society is essential for the formation of multiple resilience experience and increasing the resilience of cities in the face of multi-layered shocks that have occurred and are likely to occur in succession, and it has been tried to reveal that addressing the issue based on international cooperation and global agreements is also important in terms of ensuring continuity.

The responsibility of technical and social sciences, especially the fact that the dynamics in urban areas give rise to common problems of all disciplines, has led to the necessity of interdisciplinary cooperation. It should be emphasized that all disciplines should have a say in the policies to be developed for the future in urban areas, which are the center of global risks. In this direction, it can be argued that the participation of civil society, which has a key role in the development of urban areas, needs a method innovation that will cover social dynamics and participatory processes more, especially by changing the traditional perspective that has narrowed the scope of civil society in our country and even substituted it with economism. Phenomena in the structure of modern society, such as individualization and depersonalization, especially for individuals living in metropolitanized urban areas, contradict phenomena such as participation, collective movements, social communication networks, etc. required by resilient flexible planning in the social dimension. In this context, it can be said that the perspective on the political sphere should be changed and the expectation from politics should not be based on removing all the failures in the system. Instead, it is necessary to be involved in decision-making mechanisms and processes at all stages and to be active in producing solutions through this method.

In all layers of resilience, the challenge of accessing the necessary data can also be mentioned. Especially in the social dimension, it is important to generate data at all scales due to the impact of local dynamics. The fact that the changes taking place are new and uncertain for all humanity should lead to the rapid acceptance and research of some concepts. At this point, especially the production of unique and clear concepts that are transferred from local to global and the evaluation of data in line with social dynamics will be the right method. However, in dealing with local problems, it is necessary

to take into account not only the components within the current country, but also the establishment and sustainability of cooperation at the international level and the binding nature of international agreements.

Compliance with Ethical Standard

Conflict of Interests: There is no conflict of interest between the authors or any third-party individuals or institutions.

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REFERENCES:

Active Citizenship: Citizens make the future of the country. But what makes active a citizen? (2016). European University College Association. https://www.euca.eu/activecitizenship

Adger, W. N. (2000). Social and ecological resilience: Are they related? Progress in Human Geograpy, 24, 347–364.

Adger, W. N. (2006). Vulnerability. Global Environmental Change, 16(3), 268–281. https://doi.org/10.1016/j.gloenvcha.2006.02.006

Beck, U. (2019). Risk Toplumu: Başka Bir Modernliğe Doğru. İthaki Yayınları.

Beck, U., & Adam, B. (2000). The Risk Society and Beyond Critical Issues for Social Theory. Sage Publications Inc.

Brigit Obrist, Constanze Pfeiffer, & Henley, B. (2010). Multi-Layered Social Resilience: A New Approach in Mitigation Research. Progress in Development Studies, 10(4), 283–293. https://doi.org/DOI: 10.1177/146499340901000402

Brodie Boland, Elizabeth Charchenko, Knupfer, S., & Sahdev, S. (2021). How cities can adapt to climate change? McKinsey and Company. https://www.mckinsey.com/capabilities/sustainability/our-insights/how-cities-can-adapt-to-climate-change

Bruneau, M., Stephanie E. Chang, Ronald T. Eguchi, & Lee, G. C. (2003). A Framework to Quantitatively Assess and Enhance the Seismic Resilience of Communities. Earthquake Spectra, 19, 733–752. https://doi.org/10.1193/1.1623497

Çakır, Ö. (2002). Sosyal Dışlanma. Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 4(3).

Carpenter, S., Walker, B., Anderies, M. J., & Abel, N. (2001). From Methaphor to Measurement: Resilience of What to What? Ecosystems, 4, 765–781. https://doi.org/10.1007/s10021-001-0045-9

Daniel P. Aldrich, & Meyer, M. A. (2015). Social Capital and Community Resilience. American Behavioral Scientist, 59(2), 254–269. https://doi.org/10.1177/0002764214550299

Ekşi, N. (2016). İklim Mültecileri. Göç Araştırmaları Dergisi, 2(2), 10–58.

Folke, C. (2006). Resilience: The emergence of a perspective for social–ecological systems analyses. Global Environmental Change, 16(3), 253–267. https://doi.org/10.1016/j.gloenvcha.2006.04.002

Gibberd, J. (2017). Social Resilience in Urban Areas. 11st Built Environment Conference, Durban.

Giddens, A. (2016). Modernliğin Sonuçları. Ayrıntı Yayınları.

Gökçe, D., Betül Pancar, & Türk, A. (2018). İklim Değişikliğine Karşı Mekânsal Kırılganlığın ve Uyum Kapasitesinin Belirlenmesi: Alanya Örneği. Mehmet Akif Ersoy Üniversitesi Fen Bilimleri Enstitüsü Dergisi, 9(2), 119–128. https://doi.org/10.29048/makufebed.403337

Gunderson, L. H. (2000). Ecological Resilience—In Theory and Application. Annual Review of Ecology and Systematics, 31, 425–439.

İstanbul İklim Değişikliği Eylem Planı (pp. 1–59). (2022). İstanbul Büyükşehir Belediyesi. https://cevre.ibb.istanbul/wp-content/uploads/2022/01/ist_iklim_degisikligi_eylem_plani.pdf

Keck, M., & Sakdapolrak, P. (2013). What is Social Resilience?Lessons Learned and Ways Forward. Erdkunde/ University of Bonn, 67(1), 5–19. https://doi.org/10.3112/erdkunde.2013.01.02

Lewis, D. (2020). Rezilyans Kavramı: Ortaya Çıkışı, Evrimi ve Uygulanabilirliği, Bir Kentsel Rezilyans Kılavuzu. SKL International.

Lipset, S. M. (1986). Siyasal İnsan. Teori Yayınları.

Mordecai, E., Cullen, M., Maldonado, Y., & Seetah, K. (2022). Global Health Needs Modernized Containment Strategies to Prepare for the Next Pandemic. Frontiers in Public Health, 10, 1–5. https://doi.org/10.3389/fpubh.2022.834451

Pelling, M. (2003). The vulnerability of cities; natural disasters and social resilience. Earthscan.

RESLOG. (2021). Birlikte Yaşam İçin Elverişli Ortam ve Aktif Hemşehrilik Kavram, Metot ve Pratik (SKL International AB, Vol. 4).

Sezal, İ. (1992). Kentleşme (Alternatif Üniversite Serisi). Ağaç Yayınları.

Tierney, K. (2003). Conceptualizing and Measuring Organizational and Community Resilience: Lessons from the Emergency Response Following the September 11, 2001 Attack on the World Trade Center. Conceptualizing and Measuring Organizational and Community Resilience: Lessons from the Emergency Response Following the September 11, 2001 Attack on the World Trade Center, 1–8. https://udspace.udel.edu/server/api/core/bitstreams/0c290331-74a5-4893-9986-d0614bd26c54/content

United Nations. (2002). Report of the World Summit on Sustainable Development.

https://documentsddsny.un.org/doc/UNDOC/GEN/N02/636/93/PDF/N0263693.pdf?